constantly referred to during the hearing. We remain mindful that this is not a hearing of those proposals and also that there is nothing to prevent NEIL, or any future landowner or land developer, from proceeding with a completely different proposal for the land. But a focus of the hearing was the implications of the designation on NEIL's land use proposals and we traverse the issues raised in the course of our decision.

Background to the designation

[18] The designation appears to have its genesis in some comments made by the Environment Court in respect of PC32, particularly in relation to a joint witness statement prepared on 22 August 2011 which reads, in part:

The witnesses agree that in any consideration of the transportation and engineering implications of the alternatives of the Medallion Drive extension versus the upgrading of the existing alignment of Fairview Avenue, that the Medallion Drive extension is an option that is preferred. This is because it provides improved network connectivity and efficiency and achieves greater separation of the intersection and State Highway 1 interchange.

[19] In those proceedings the Court noted:

Subsequently Mr Lanning filed a memorandum advising that Auckland Transport now had funding in place to enable it to proceed with the notice of requirement, and also that it intended to commence parallel discussions with the landowner regarding acquisition of the land required, rather than await completion of the NOR process.

- [20] Of critical importance to our evaluation of the issues is the aerial extent of the designation sought.³ That was originally notified as annexed hereto as "A" and shows the designation of an area of some 7,881m² on the NEIL land. The proposed alignment of the road and its positioning is of some importance given the subsequent plans produced to this Court during the hearing.
- [21] The designation matter was heard before (then) Commissioner D Kirkpatrick, a commissioner appointed by the Auckland Council, who concluded that the NOR should be confirmed as notified by Auckland Transport, with the recommendation that there be minor alterations to several of the conditions.
- [22] Subsequently Auckland Transport resolved to adopt the Commissioner's recommendation confirming the notified designation and conditions subject to further minor alteration of several of those conditions. Annexed hereto and marked "B" is a

³ Common bundle of documents, page 164

map showing the actual area to be designated adopted by Auckland Transport.⁴ This was produced to the Commissioner towards the closing of the hearing on the designation. That map is not attached to the Commissioner's decision and it is unclear whether he was aware of the extent of the difference between the area on that map and that attached to the original notice.

[23] Annexed to the Auckland Transport decision is a diagram (Annexed hereto as "C") showing areas to be removed from the designation (shown in orange), and additional areas to be included in the designation (shown in blue).⁵ What was not clear, and certainly was not discussed by the Commissioner, is that those blue areas were in fact not part of the notified NOR, and represented new areas of land to be included within the designation.

[24] The Commissioner discusses changes to the Designation Plan at paragraph 14 of his decision.

AT produced an amended plan of the NOR, moving its alignment up to 6m to the south and consequently adjusting the areas of land for construction purposes on either side of the proposed alignment. This Plan also reduced the area of affected land at 21 Fairview Avenue.

[25] However, the differences are not immediately apparent. It is not until one undertakes a very close comparison of the two designation plans "A" and "B" that one is able to ascertain that there is in fact a strip of land on the eastern side of the corridor on NEIL's land that is added to the designation. Overall there is a net increase in designated land of some 238m² from that notified, which we understand to be the net effect of the areas removed and those added. More importantly it has no apparent reduction in effect on the eastern side, but an increase in the impacts on any building opportunities on the western side.

[26] Counsel addressed the Court on this matter and raised it as a jurisdictional matter as to whether a NOR can be modified in circumstances where the Commissioner and Auckland Transport have simply confirmed the notified notice of requirement. For reasons that will become clear during the course of this decision, the matter in the end is of no particular moment but does highlight the importance of clarifying the exact areas sought to be covered by designations. This lack of information was troubling throughout the hearing, with the Court still having no exact dimensions in respect of the proposed designation.

⁴ Common bundle of documents, page 356

⁵ Common bundle of documents, page 357

Context of designation

[27] The objectives of the NOR are:

- to facilitate future growth in the residential areas north of Oteha Valley Road;
- to increase capacity of the transport links between Oteha/Pinehill and Fairview Heights/Northcross;
- to provide a link which optimises the efficiency of existing intersections at SH1, Medallion Drive and Rising Parade with future traffic growth;
- to provide a link which addresses the existing safety issues for traffic accessing Oteha Valley Road from Fairview Avenue; and
- to improve walking and cycling connections between Medallion Drive and Fairview Avenue across Oteha Valley Road.

[28] The designation seeks essentially to provide a roading corridor consisting of two lanes over the majority of the length through the NEIL property each 4.2m wide; a 3m combined cycleway/footpath on the eastern side and a 1.8m footpath on the western side. The formed roadway would therefore be 8.4m wide with a further 4.8m required for cycleway/footpaths, making a total of 13.2m. To this was added a verge of 0.8m on each side of the road between the road and the footpath and a berm (or amenity strip) of some 3m on the outside of the footpath. All of this combines to give a total width of 20.8m. Over a length from the Medallion Drive intersection with Oteha Valley Road the designation plans include a third lane 3.9m to allow left and right stacking or queuing for the peak morning traffic heading south. This additional 3.9m gives a total width of just under 25m (24.7). The width of amenity berms was a subject of dispute at 3m on each side. Without them, the roading corridor is between 15 and 19m.

Land outside the roading corridor

[29] However, the proposed designation area extends well beyond this on each side of the road. We were told that the extended areas may be required for construction purposes. The width of the extra area varies significantly, including batter slopes of 3:1 on both sides of the corridor to tie in with the original ground level.

- [30] We were told that it is intended by Auckland Transport for the land beyond the finished extent of the road corridor to be surrendered to NEIL once the road has been constructed. A major concern of the appellant in respect of this part of the designation is that it effectively prevents the developer from developing this part of the land until the road is constructed. The designation would require the developer to obtain permission for works outside the road corridor but within the designation under s176 of the RMA, and there was no guarantee that approval would be forthcoming.
- [31] The argument of the Auckland Council in this regard is somewhat more subtle. It says that in principle it does not object to the NEIL works being done on the designated land, but:
 - (a) that NEIL cannot prevent or hinder the designation works; and
 - (b) that it cannot know whether the NEIL development proposal will prevent or hinder the designation work until such time as design is finalised.

Given that it is seeking a lapse period of ten years, that could essentially constrain construction and the development of this part of the NEIL land for the next decade or until the final design of the road has been completed.

- [32] Furthermore, despite lengthy attempts by Auckland Transport and NEIL to agree on the vertical alignment of the road, the alignment supplied to the Court as part of supplementary evidence produced after the closing of the applicant's case and after the opening for NEIL brought the area to be designated and its effect sharply into focus, not just for the Court but also the parties. That shows that a vertical alignment for the road can be adopted that gets close to or matches the existing ground level over the majority of its length, thereby minimising cuts.⁶ We attach that design as Annexure "D".
- [33] The effect of the broader designation area being sought by Auckland Transport is that it prevents or constrains large building platforms on the NEIL site that encroach on the designation outside the roading corridor.
- [34] Currently the situation is that NEIL has been refused consent for the East-West Towers part of its development, and the proposed development east of the corridor is subject to concerns about the impact of the buildings on the designation. Despite this, we were told the parties largely have reached agreement in respect of land use consent

⁶¹Common bundle of documents, Exhibit M

conditions for the eastern part. More importantly, until the road is constructed or Fairview Avenue is upgraded the wider Fairview Catchment cannot be fully developed.

Chronology

- [35] In order to establish the context in which this NOR matter has been determined it is important to understand the inter-relationship of the development issues, including roading, roading funding, and the constraint over development in the Fairview Catchment (excluding the NEIL site) that currently exists. Over the last ten to twelve years there have been changes not only in terms of the territorial authority responsible for the resource consents for the land use development, but also in respect of the standards required in terms of riparian margins, accessibility and the like.
- [36] We considered attaching a chronology of key actions and documents provided to us before and during the course of the hearing, however we recognise that many of these documents were produced in relation to the appeal of the land use consents, which has yet to be heard. We concluded that such a chronology was not necessary.
- [37] Mr John R Farquhar, who manages NEIL, the company responsible for developing the site and the applicant for resource consents for the site, referred to extensive correspondence and said that he tried between 2005 and 2013 to accommodate the Medallion Drive link as the path of least resistance in seeking to obtain land use consent. (Mr Farquhar is also the director and beneficial owner of Heritage Land Limited which owns 56 Fairview Avenue (purchased in 2001) and 129 Oteha Valley Road (purchased in 2006)).
- [38] We acknowledge that the history of this matter has been less than impressive and it is extremely unfortunate that matters could not have been resolved much earlier. There was a great deal of finger pointing during the hearing as to where the blame could and should be apportioned, referencing particular documents. However, we do not find the background to the matter to warrant recital of the detail of that history. We also remain mindful of the Commissioner's reasons for declining the first land use consent application for the East-West Towers, which extended beyond transport considerations.
- [39] However, we do take Mr Casey's point, this being that Mr Farquhar should not now be penalised for going along with the demands of the various regulators and transport agencies (North Shore City and then Auckland Transport and Auckland

Council) that a road corridor be included in the proposals for land use consent. Accordingly, we set aside the fact that there were various iterations of the land use proposals illustrating the road corridor as a reason for confirming the designation.

The Court's role in the designation

- [40] The appeal is pursuant to s 174 of the Act and section 174(4) enables the Court to cancel, confirm, confirm and modify and/or impose conditions. Section 171(1) applies, and subsection (1) is directly relevant for consideration of this appeal. This reads:
 - S171(1) When considering a requirement and any submissions received the territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement having particular regards to:
 - (a) the relevant provisions of a national policy statement, New Zealand Coastal Policy Statement or regional policy statement or proposed regional policy statement and a plan or proposed plan;
 - (b) whether adequate consideration has been given to alternative sites, routes or methods of undertaking work if:
 - (i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or
 - (ii) it is likely that the work will have a significant adverse effect on the environment; and
 - (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought;
 - (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.

Subject to Part 2

[41] Clearly, the consideration of the NOR by this Court is subject to Part 2 and whether the designation achieves the purpose of the Act as set out particularly in s 5. Sections 6, 7 and 8 also assist in the interpretation of the purpose of the Act. Accordingly, we understand that the overall test to be applied is that it must achieve the purpose of the Act as that is defined in s 5. In doing so the Court must consider the effects on the environment, and have particular regard to the matters set out in s 171(1)(a), (b), (c) and (d). It can be seen from these provisions that the power we have to modify the proposal or impose conditions can have an impact on the designation by reducing effects on the environment. There is clearly an interrelationship between the various matters under s 171(1)(a), (b), (c) and (d) and the effects on the environment to be considered.

[42] Importantly, the Court's power to control effects on the environment only rises in circumstances where it confirms the notice of requirement. It must at least confirm a modified requirement to enable it to impose conditions.

What is the environment on which the effects are judged?

- [43] Section 171 uses the words effects on the environment compared to s 104, which refers to any actual or potential effects on the environment. We cannot see any distinction between the wording. Both deal with effects under s 3, which defines effects in the widest terms. It includes positive and negative effects. Environment is also defined in s 2 in the widest terms, and includes communities and people, social, economic, aesthetic and cultural conditions. The environment includes that which lawfully exists and that which can be established.
- [44] Of particular difficulty in this case are aspects of the NOR requiring discretionary actions by Auckland Transport to achieve intended results. For example, granting a designation may enable the outcomes anticipated, however Auckland Transport clearly have the power to not implement the designation and allow it to lapse. All the experts agreed the effect of not having improvements to the roading would be significant. Even with a designation it is possible that Auckland Council might decide on other roading improvement works it could perform without requiring a designation, such as improvements within the existing Fairview Avenue roading corridor, which could render the designation unnecessary.
- [45] Even with a designation, Auckland Transport must undertake other activities not included in the designation before full benefits can be realised. These include signalising the Oteha Valley Road/Medallion Drive intersection. The traffic experts appear to have worked on the assumption that traffic lights would be installed at Medallion Drive/ Oteha Valley Road, or at the Fairview Avenue/Oteha Valley Road intersection if the improvements were undertaken to that road. These improvements are not part of the designation sought, and would be subject to funding and design decisions by Auckland Transport over which this Court has no control.
- [46] We have also concluded that it would be unwise for the Court to conclude that improvements to Fairview Avenue would be part of the existing environment, even if they could be undertaken on a permitted basis, as there is no certainty that such improvements would proceed even if the NOR for the Medallion Drive extension was refused. Similarly, we do not think we can conclude that the existing Medallion

Drive/Oteha Valley Road roundabout will be signalised, given that signalisation is not covered by the designation and relies upon other decisions by Auckland Transport.

- [47] We have concluded that we should take into account the potential for NEIL to develop its land, at least to the discretionary activity limits, especially as NEIL is not affected by the development constraints set out in the Court's decision for PC32. Although it appears that a number of non-complying developments may have been granted consent within the areas subject to PC32 constraints, we were not given any details of those consents, and we cannot assume that development will occur on a non-complying basis within the wider catchment.
- [48] It was clear to us, and accepted by all witnesses, that there is a need for an improvement to the Fairview Catchment roading. This has been evident for a significant period. The Court noted in 2011 that the access was in urgent need of upgrade and the situation has only worsened since that time. Traffic numbers have increased through this area since that time, and are likely to increase further. A recent example is the Hung development, in which the Auckland Council concluded that the cumulative effects on traffic from this development were negligible.
- [49] The NEIL existing environment also includes the motorway immediately to the west of the site, and the fact that the motorway's north and south on and off ramps are readily accessible from Oteha Valley Road. Beyond this there is the wider transport network available through the transport hub less than 1 kilometre from the site, and the Albany shopping centre situated within 1½ kilometres. Oteha Valley Road is also a major arterial road providing access both east and west, and access to East Coast Bays Road, Medallion Drive, and the Albany town centre via McClymonts Avenue.

Effects on NEIL

- [50] In this case a major allegation is the disenabling effect of the designation on the use of the NEIL land for intensive residential development.
- [51] When we come to the application of the provisions of s 171(1)(a)-(d) we have concluded that this follows a format similar to section 104 of the Act, which lists these matters to inform the assessment required in respect of effects and under Part 2. As the High Court said in *NZTA* v Architecture Centre Inc (Basin Reserve), 7 no

⁷ [2015] NZEnvC 375, p [1]-[3] and p [62]-[78] HC

extra weight is to be attributed to the matters under s 171(1)(a) to (d) and the strength of an individual matter will depend on the evidence and importance in respect of a particular case. We can, however, ascertain from the various criteria that where there is an effect on private land, greater scrutiny is required, as noted in the *Queenstown Airport*⁸ case.

- [52] In respect of reasonable necessity, although this has a meaning between desirable and essential, again it is a question of practical import in the circumstances of the case as discussed in the *Basin Reserve* case.⁹
- [53] In relation to alternatives, this formed a significant element of the appellant's argument. It was suggested that in the circumstances of this case there had been only a cursory consideration of alternatives. For current purposes we have concluded that, even if the consideration of alternatives is unsatisfactory or arbitrary, this is not, of itself, a bar to the requirement being confirmed.
- [54] We acknowledge that the effects of the development on private land are effects on the environment as defined. Similarly we acknowledge that, through the power to modify and impose conditions, the Court has the potential to ameliorate those effects so that that effect reaches a satisfactory or acceptable effect having regard to the exercise of evaluation under Part 2 of the Act.
- [55] We intend to approach these matters by working through:
 - (a) whether there has been an adequate consideration of alternatives;
 - (b) is there a reasonable necessity for the works;
 - (c) other related matters, including the conduct of the parties;
 - (d) the Plan provisions that apply; and
 - (e) assessing the matter under Part 2.
- [56] In doing this we recognise the need under s 290A to have special regard to the Commissioner's decision, and we will discuss aspects of this in due course. Suffice to say similar arguments were raised before the Commissioner.

⁸ Queenstown Airport Corporation Ltd v Queenstown Lakes District Council [2013] NZHC 2347 ⁹ [2015] NZEnvC 375, p [28]-[32]

[57] When the Court comes to exercising its power under Part 2 of the Act we note in particular that the question of whether or not the notice of requirement meets the purpose of the Act can only be judged after the Court has assessed whether there are modifications and/or conditions that could be imposed which might reduce adverse effects to an acceptable level.

The approach alternatives

[58] In the *Basin Reserve*¹⁰ case the High Court commences discussion of alternatives at paragraph [97]. We note that at paragraph [98] the High Court holds that ss 171(1)(a)-(d) are subject to Part 2.

[59] Section 171(1)(b) of the Act requires that alternative sites, routes and methods are required to be considered when either the consent authority does not hold the land, or there are significant adverse effects. In this case, the authority does not hold the land, or at least the majority of it, which is in the hands of NEIL. Accordingly, the test is applicable.

[60] Adopting the words of Whata J in the *Queenstown Airport* ¹¹ case there is a requirement to establish an appropriate range of alternatives and properly consider them. Whata J at paragraph [121] noted:

The section [171(a)(b)] presupposes that where private land will be affected by a designation, adequate consideration of alternative sites not involving private land must be undertaken by the requiring authority. Furthermore, the measure of adequacy will depend on the extent of the land affected by the designation. The greater the impact on private land, the more careful the assessment of alternative sites not affecting private land will be.

[61] In *Basin Reserve*¹² the High Court concluded that a similar approach should be adopted in relation to adverse effects. Looking at the decisions side by side, we have reached the conclusion that the question of a proportional response to the impact of the designation is appropriate. This is especially so when the designation has a greater impact under national documents, as in *King Salmon*, or in relation to private land, as in the *Queenstown Airport* case, or in relation to adverse effects on heritage as in the *Basin Reserve* case.

¹⁰ [2015] NZRMA 375

¹¹ [2013] NZHC 2347 at p [97]

¹² As above

¹³ Environmental Defence Society v The New Zealand King Salmon Company Ltd (SC) [2014]
NZRMA 195

[62] The word adequate is discussed in *Te Runanga o Atiwhaka Rongotai v Kapiti*Coast District Council: 14

...adequate is a perfectly simple word and we have no doubt has been deliberately used in this context. It does not mean meticulous; it does not mean exhaustive; it means sufficient or satisfactory.

[63] This proportionate response now required means that the question of sufficiency is one to be judged by regard to the identified impacts, whether in planning terms or otherwise, including in terms of impact on private land or adverse effects. As the High Court said in the *Basin Reserve* case:¹⁵

... it is simply common sense that what will amount to sufficient consideration of alternative sites will be influenced to some degree by the extent of the consequences of the scenarios in s 171(1)(b)(i) and (ii)...

Alternatives considered

[64] The NEIL case was that the consideration of alternatives had been cursory and not adequate, and also that it involved pre-determination of the Medallion extension as the preferred option. Mr Casey extensively cross-examined Auckland Transport witnesses in respect of the contract for setting project objectives and identifying and evaluating alternatives and their effects, the work done on the alternatives prior to the issue of the NOR and the work done since that time. Mr Casey also focussed on and questioned the decision-making process within Auckland Transport. We now consider these points.

[65] Mr Casey spent considerable time cross-examining witnesses and questioning whether the process and decision-making leading to, and the notice of requirement itself, had involved anyone with an appropriate level of seniority within Auckland Transport or the Board. We accept that the RMA does not specify any particular level within a requiring authority organisation that these responsibilities need to be undertaken by.

[66] We accept Mr Lanning's submission that Auckland Transport is a body corporate under s 38(2)(a) of the Local Government (Auckland Council) Act 2009 (**LGACA**). As a body corporate it necessarily has to act, including making decision, through individuals with authority to act on its behalf – from the Board on down. The Act has powers to delegate, and then to sub-delegate in s 54(1) and (3) LGACA.

¹⁵ Paragraph [140]

^{14 2002 8} ELRNZ 265 at [153]

- [67] We also accept Mr Lanning's submission that the evidence shows that Auckland Transport, acting through officers of appropriate expertise and seniority, and with expert assistance from outside the organisation and particularly external consultants, undertook the necessary actions, notwithstanding our conclusions on the adequacy of the consideration of alternatives.
- [68] The question of whether the individuals exercising that authority held the necessary delegation is still moot. Witnesses for Auckland Transport focussed on current structure rather than that which applied at the time. However, the resolutions and activities have the apparent authority of Auckland Transport, and we conclude the actions should be assumed as legitimate under delegation for the purpose of this appeal. A declaration as to the legality of the designation process in terms of delegation is a matter for the High Court.
- [69] Auckland Transport commissioned Beca to undertake the work leading to the NOR and we were provided with a copy of the contract for services.
- [70] The Notice of Requirement attached the Options Evaluation Report November 2012 (prepared by Beca), with Fairview Avenue being one of those. The work first had a long list of options and that was refined to a short list of 7 options, as follows:
 - Option 1 − Do Minimum
 - Option 2 Do Minimum Plus Construct two lane bridge; retain existing Fairview/Oteha Valley Road intersection
 - Option 3 Do Minimum Plus Construct two lane bridge: upgrade Fairview/Oteha Valley Road Extension
 - Option 4 Short Link Across NEIL land with a roundabout at Fairview Avenue Intersection
 - Option 5 Short Link Across NEIL lane with a T-intersection at Fairview Avenue Intersection
 - Option 6 Short Link Across NEIL land with Fairview Avenue realigned to provide more direct link to retirement village
 - Option 7 Long Link Across Fairview Avenue land to provide more direct linear link into Fairview Avenue.
- [71] For the evaluation of the short list key assessment areas with underpinning criteria were selected Land Use, Urban Design and Social (7 criteria),

Transportation (5 criteria), Environmental (5 criteria) and Economic (2 criteria). The evaluation scoring system was 3 (supports criteria), 2 (limited or neutral support of the criteria, 1 not supportive of criteria, and a red flag was noted as a 'show stopper' for the option to progress.

- [72] So-called internal and stakeholders' workshops, which involved Beca and its project team, various people and areas within Auckland Transport, and at times NZTA and Auckland Council, were held to undertake and then confirm the evaluation.
- [73] The outcome was an overall recommended option as the preferred outcome in terms of the project objectives and the evaluation criteria, a new short link option extending Medallion Drive and involving constructing a T-intersection (option 5) at the Medallion Drive/Fairview Avenue intersection and upgrading the existing roundabout at the Oteha Valley Road/Medallion Drive intersection to a signalised intersection.
- [74] The report contained an aerial plan of the proposed designation footprint, an indicative alignment, and an indicative operational road corridor following construction which was the basis of the NOR.

Concerns with alternative evaluation

- [75] Mr Casey's cross-examination and the evidence of Mr Paul Thomas, planner for NEIL, and Mr Brett Harries, traffic expert for NEIL, was directed at highlighting deficiencies in the evaluation of alternatives which meant that the small differences between the Fairview Avenue and Medallion extension options were magnified. In particular, these concerned:
 - the selection (and application) of the factors in the multivariate option evaluation framework and analysis,
 - the scoring system,
 - the weighting of the factors in the multivariate analysis.

We accept that there were shortcomings in the evaluation of alternatives on these matters.

[76] There is no doubt that Auckland Transport recognised at an early stage the potential for an upgrade of Fairview Avenue. It was identified as a viable alternative that met the objectives and purposes of the notice of requirement. We conclude that it is clear from the evidence given that the NOR always involved the installation of a signalled intersection to replace the current Medallion Drive/Oteha Valley Road roundabout, and was compared with Fairview without signalisation.

[77] Assumptions were also made that the signalisation at Fairview Avenue would have a significant adverse impact on traffic flows.

[78] We conclude that there was a failure to fairly consider NEIL's position, including a failure to properly consult prior to proceeding with the NOR. Auckland Transport wrote by email to Mr Farquhar on 4 August 2012, inviting a response to the proposal. Mr Farquhar apparently replied that he did not live in Auckland or would not be available on that specific date, but offered several alternative dates. The response to that, forwarded on 4 September, was that the Council was not able to attend on those dates, and that the process was over and he could attend public open days. Given that the designation was to be placed over NEIL's land, this was most unsatisfactory.

[79] A focus of Mr Casey's cross-examination of Mr Stephen Burris and Mr David Nelson from Auckland Transport, and Ms Catherine Richards a planner (Beca consultant) for Auckland Transport, was on the involvement of Auckland Transport and its decision making in the process. We accept that there were also some shortcomings with the approach taken to the evaluation of alternatives within Auckland Transport.

[80] Furthermore, our consideration of the report to the Auckland Transport dVac Committee¹⁶ (the Auckland Transport Committee that apparently made the decision on the NOR), demonstrates:

- (a) that the adequacy of the Fairview Avenue alternative option was not considered in any detail in that report, including whether the costings were similar or lower than the Medallion Drive extension;
- (b) it was asserted that consultation with landowners had occurred when this was patently not correct;

Decision Value Assurance Committee, which apparently made the designation decision

- (c) the NOR traffic modelling was undertaken on the basis that there were no access roads or connections to it, notwithstanding that it was shown as a local or local arterial road;
- (d) the Auckland Transport dVac Committee was not advised that there was a major development planned for the NEIL site, nor the details of that plan, nor the fact that the parties had largely reached agreement in respect of the other two land use consents even though it was clear that the purpose for the haste with which the notification took place was due to the upcoming Court hearing on a NEIL land use consent.
- [81] We have concluded that there was inadequate written background information provided to the Committee at this stage. Nor are we satisfied that the committee, or the person actually making the decision, Mr Sean Baker, had the full information relating to the development potential of this site, and the potential for signalisation of the Fairview Avenue intersection.
- [82] An assumption appears to have been made that Fairview Avenue, being some 120m closer to the motorway than Medallion Drive, would create greater traffic impacts. At that time, however, no modelling had been undertaken to support this assumption.
- [83] The question is whether these shortcomings meant there was inadequate consideration of alternatives, and in particular on the upgrading of Fairview Avenue.

Can adequacy be considered over a period of time?

- [84] Subsequent to the lodging of the appeal, further work was done on the Fairview Avenue option (now called Option 3B) and evaluating the differences between this option and the Medallion Drive extension option.
- [85] Prior to the hearing, Auckland Transport undertook a re-design of the Fairview Avenue option for what we were told was a needed comparison of *like with like*. Mr Casey was critical of the basis for this work, portraying it as a ploy to increase the relative costs and downplay the benefits of the Fairview Avenue option.
- [86] As this Court has said on many occasions, the process under the RMA can be an iterative one. Circumstances change, and in the three years since the decision on the NOR was made by Auckland Transport considerable additional modelling and

information has become available. This has been used to evaluate many of the issues not addressed by Auckland Transport at the time of notification of the NOR.

[87] From our own site inspection, we observed that the area to the north of Oteha Valley Road has continued to be developed to the stage that it is now largely medium intensity residential, at least to the east of the motorway. Traffic has continued to build, with an estimated 3,000 vehicles per day currently using Fairview Avenue. Given that Fairview Avenue has a one-lane bridge near to the intersection with Oteha Valley Road, we suspect that this road is already getting near to capacity.

[88] The NEIL land will introduce something in the order of another 450-500 homes that will also require traffic access. The question of timeliness becomes relevant, and it is clear that Auckland Council and Auckland Transport have now been seeking to address this matter for well over ten years. There have been various statements made over that period as to the immediacy of acquiring the NEIL land and constructing the new road.

[89] More recent modelling has demonstrated that a signalised Fairview Avenue/ Oteha Valley Road intersection, and double-laning of the existing single lane bridge with other improvement works, will produce a design which, overall, in performance is closely equivalent to the Medallion extension under the NOR.

[90] This modelling has also demonstrated that the Fairview Avenue intersection will provide a high level of service – in some cases C, D and E compared with the Oteha Valley/Medallion Drive signalisation, which can achieve an F or an F+ (the lowest level of service possible). We were told that the modelling runs can vary and that there is potential for oscillation in the outcomes of modelling depending on the assumptions used. One of the primary assumptions affecting the performance of the Fairview Avenue/Oteha Valley Road intersection is synchronising of its traffic lights with those at the motorway off ramp. This does not appear to have been provided for in earlier modelling, for reasons that were unexplained to the Court. Given the proximity of this intersection to the motorway, there is clearly the potential (with another set of lights a further 60m away) for signalisation to enable *green waves* in a particular direction at peaks, ie onto the motorway south during the morning peak, and from the off ramp north onto Oteha Valley Road during the afternoon/evening peak.

[91] Given that this modelling of Fairview Avenue had not been undertaken prior to the notification of the NOR, critical assumptions on which Auckland Transport appear to have made their decision on the NOR would not now hold up.

Benefits and costs of alternatives

- [92] The question of costs and benefits also relates to the question of adequacy of consideration of alternatives. At the time of the NOR being confirmed, costs of the Medallion Drive extension had been estimated by Auckland Transport to be similar to or slightly lower than those of a Fairview Avenue upgrade. By the commencement of our hearing, the position appeared to be that the Medallion Drive extension alternative had been costed at around \$14m and a Fairview Avenue upgrade at \$8m. Further evidence suggested considerable additional cost if a pumping station required its re-siting for road widening near the Fairview Avenue bridge. What is clear from the estimates is that the significant difference between the two costs is that the cost of acquiring the NEIL land is included in the costings for the Medallion Drive alternative. Given that the proposed designation area involves just under a hectare of land that could potentially be available for medium to high intensity residential use, the Court can immediately see the problems with providing an adequate or proper assessment of its value. A key aspect of NEIL's case is that, without the NOR and designation in place, NEIL could relocate or redesign the East-West Towers (the consents had been declined in an earlier hearing because of a lack of open space and shading of a neighbouring property (among other reasons)), or by being able to incorporate the proposed NOR land into any development.
- [93] Clearly, in evaluating the alternatives one question is whether or not the benefits of each alternative have been sufficiently considered. The effect on NEIL can either be seen as a benefit to NEIL if the Fairview Avenue alternative was adopted, or a cost to NEIL if the Medallion Drive alternative was adopted. The fundamental proposition for NEIL is that there had been a failure to consider it under either head.
- [94] We think this interpretation goes too far in stating the position in respect of the evaluation. However we do accept that the evaluation was insufficient in addressing only the effect of the NEIL property as though it was a cost to Auckland Transport of acquiring the land. In our view, the values of this land, in terms of effects, and benefits and costs, are represented in more ephemeral issues such as:
 - (a) the NOR creates a separation of two pieces of land;

- (b) how pedestrian access is provided, not only from and to this site, but through the site;
- (c) the question of how the NOR addresses the continuity of public access along the stream is not addressed; although a connection to the east is shown (we were told at its current inversion site the bridge could not have a walkway underneath it), no alternative as to how people would travel further down the stream to the west is given; nor has any methodology for crossing Medallion Drive to continue further to the west on the northern side of Oteha Valley Road been given;
- (d) this might be addressed by signalisation, but we are unclear on that issue and there wasn't any substantive evidence on the point. In fact, there seems to have been an assumption that people would cross the road to the east of the Medallion Drive/Oteha Valley Road intersection, and that there would be some form of bus stop both in front of the commercial shops to the north, and opposite that to the south.

[95] In saying this we do not suggest that these matters are insurmountable, but rather that there was little, if any, evidence of their consideration in the evaluation of alternatives.

NEIL development without the NOR

[96] During the hearing evidence was produced for NEIL showing that an alternative layout for the NEIL development had been offered by NEIL in 2013.¹⁷ This is annexed as "E", showing access into the NEIL site from the Medallion Drive roundabout, crossing the stream and then moving to the east and connecting up with the internal roadwork of the site. This would allow some site permeability, even though there are likely to be some traffic calming measures through the site, ie stop signs, crossings etc.

[97] This proposal suggested that Fairview Avenue would be upgraded, and one assumes signalised, at the Oteha Valley Road intersection. No modelling has been produced by either party relating to that option, but it is relatively clear that it could enable traffic from the site to move either down Fairview Avenue or through the Medallion Drive roundabout. NEIL considered that any roads on their site would be

¹⁷ Common bundle of documents, Exhibit L (attached to letter)

private roads, but little consideration seems to have been given to vehicular access to or from the site as opposed to pedestrian and cycle access for such a development.

[98] Traffic from further north might also permeate through this site but we had no details on this. In that regard it seems that if people were travelling directly south, ie further along Medallion Drive or to the school, they may very well permeate through the development and exit straight onto Medallion Drive through the roundabout. Alternatively, they could travel down Fairview Avenue, turn left and then exit right from the roundabout onto Medallion Drive. That would turn on whether the internal NEIL roads (or parts of these) were public.

[99] Those choices would be driven by personal preference, traffic safety and congestion issues. Such a NEIL development without the NOR would also enable people travelling to the NEIL site, or further north, to make a choice to either turn left on Fairview Avenue or travel on to the roundabout, which choices would again be driven by congestion and destination. None of the witnesses for Auckland Transport appeared to be aware of this option, even though it was provided to Auckland Transport in 2013.

Joint witness statements and related appeals

[100] This Court was handed a folder consisting of some 29 joint witness statements, covering a whole range of issues in relation to both the NOR and the development itself. We suspect there may be other joint witness statements which are relevant only to the NEIL East-West Towers project, or to land use aspects which have not been included in the bundle. This folder appears to include joint witness statements prepared from 2011, and we understand there was significant work done by the parties prior to that date referred to in two other bundles of documents.

[101] Behind these joint witness statements a significant amount of work has been done in respect of considering various planning and roading aspects of the development and the alignment of the proposed Medallion Drive extension. Not surprisingly, this work appears to have taken on a life of its own, and matters have somewhat devolved from the core issues in which this Court is involved.

[102] The starting point is a joint witness statement prepared on 22 August 2011 quoted by Judge Harland in her 2011 decision at paragraphs [28]-[32] which stated:

[28] The trigger rule, which was introduced in the decision version of PC32, sought to implement the upgrade policy, and related objectives and policies, in the specific context of the parts of Areas A and B that were considered to be within the Fairview Avenue catchment.

[29] It was agreed by all of the parties that road improvements need to be completed before further subdivision to smaller lots is enabled in the area identified as the Fairview Catchment. Although several options for road improvements were evaluated, the four transportation experts agreed that the Medallion Drive Extension was the preferred option from a traffic management perspective. This was because it provides improved network connectivity and efficiency, and it achieves greater separation from the Oteha Valley Road/SH1 Interchange.

[30] The Plan objectives and policies are quite clear that any road upgrading required to mitigate adverse effects of additional traffic is to be completed before, or concurrent with, any additional development rights being realised. However in this particular case there is considerable uncertainty surrounding several aspects of the road works required to provide for the additional subdivision potential in those parts of Areas A and B.

[31] The Medallion Drive Extension is shown as a "preferred road" on the Planning Map in the District Plan. The status of this notation is unclear and at best, can be described as indicative. Although Mr Lanning submitted that there was a linkage between the dotted lines on the map and the assessment criteria for any resource consent (subdivision), Mr Reidy said that the preferred road did not impact on the property in terms of any rule. ¹⁹

[32] The Medallion Drive Extension road works affect NEIL's land, which is outside of the PC32 area. These works will most likely be public works for which the Council will have responsibility as they are to service a wider area than just NEIL's land.

[103] The matter was put to the Environment Court again in 2012,²⁰ but in relation to the Towers concept on the east of the NEIL land in a much more truncated way. At paragraph [4] the Court noted:

For some years and certainly since this proposal has been alive, there has been a proposal to extend Medallion Drive across NEIL's site to Fairview Avenue in the west and the overall design of the development allows for an extension of Medallion Drive across the site immediately to the north of the proposed towers. For reasons that are not entirely clear, the proposal has made very slow progress and unsurprisingly NEIL had become rather frustrated with it, but we were advised at the hearing that a notice of requirement has now been issued for the extension by Auckland Transport, and that it confirms at least broadly with the development's design for it.

¹⁹ Mr Reidy, Transcript, page 97, lines 13 and 14

²⁰ Get reference

¹⁸ Joint Statement of the Transportation Engineering Witnesses, 22 August 2012, paragraph 8, signed by Messrs I Clark, B Harries, B Hall and A Bell.

[104] To understand the context of these comments by the Court, there are several factual matters which only became evident as our hearing progressed.

- 1. The NOR was adopted by the Auckland Transport relevant dVac committee on 2 November 2012, but was not notified until February 2013.
- 2. The hearing before Judge Thompson commenced on 12-13 November 2012 and it is unclear whether any details of the designation were made available either to the Court or the other parties.
- 3. In relation to the comments made by Judge Harland, one must have regard to paragraph [32] of that decision, cited earlier.

[105] Paragraph [32] of the *Thurlow* decision then cites a number of issues:

- (a) and (b) amounting to the fact that there was no provision in the Longterm Plan for the construction of the extension, or any related land purchase. The memorandum was filed on 30 August.
- at paragraph (c) the Court notes that on 19 December 2011, after the hearing but prior to the issue of the decision, Mr Lanning filed a memorandum advising that Auckland Council now have funding in place to enable it to proceed with the notice of requirement, and also that it intended to commence parallel discussions with the landowner regarding acquisition of the land required rather than await completion of the NOR process.
- subsequently Mr Lanning advised there had been a delay in appointing a consultant, but that they expect to have a contract by the end of February 2012; and
- on 10 February Mr Maassen (for NEIL Homes) advised that NEIL had not been approached to negotiate the terms of acquisition to any part of its land or road.

Failure to progress resolution

[106] It is important, in the context of this decision to note that assertions (as had been made earlier at the PC32 hearing) were made before this Court that there are now funds available to enable land purchase; however as at the date of the hearing of this matter no offer to purchase the land had been made.

[107] In *Thurlow Consulting*²¹ the Court notes that as early as December 2011, Mr Lanning advised the Court that Auckland Transport (interalia):

...intended to commence parallel discussions with the landowner regarding acquisition of the land required, rather than await completion of the NOC process.

[108] The Court records that it had not done so by February 2012.²²

[109] In this hearing, Mr Farquhar again advised that there has been no approach by Auckland Transport to acquire the land over the past four year period.

[110] Mr Lanning repeated the assertion that funding was available, but offered no evidence or assertion that Auckland Transport had made any effort to negotiate a purchase.

[111] In his final submissions, Mr Lanning stated:²³

Non-compulsory acquisition in the absence of land use approval is unlikely to meet Auckland Transport's obligations to operate in a financially responsible manner.

- [112] If Auckland Transport have no intention to acquire the land until after the NOR process, this is not what they told the Court in 2011 and at this hearing.
- [113] Similarly, in relation to the road design assertions were made that:²⁴

Auckland Transport does not oppose the building being located within the designation footprint as it is understood that they will not be located within the final link alignment.

- [114] Notwithstanding this statement, Auckland Transport was dilatory in undertaking the works necessary on the alignment, and this was only produced to the Court late in the evidence exchange.
- [115] This lack of progress had led to significant frustration by Environment Commissioner Oliver appointed to undertake the various mediations, and led to Commissioner Oliver for the Environment Court noting her displeasure at Auckland

²¹ Above at paragraph [32](c)

²² Above at paragraph [32](e)

²³ Final Submissions, 6.21(b)

²⁴ Auckland Transport Memorandum to the Court dated 19 June 2015 at [5]

Transport's refusal to supply revised design that would take into account the relative levels of the two properties.

- [116] Commissioner Oliver's report on an expert conference held on 2 October 2015 also records that all experts agreed that a technical design solution could be achieved, but there had been a failure by Auckland Transport ahead of the conference to undertake the relevant work to investigate the feasibility of raising the level of the proposed NOR between Oteha Valley Road and Fairview Avenue.
- [117] These matters are indicative of the background to the slow progress on the matters at issue between the parties, as amplified by Ms Amanda Coats, project manager for NEIL, in her evidence and cross-examination. We could go on but it is sufficient to now recognise that by the time of our hearing matters had moved on considerably, with a revised vertical alignment to accommodate NEIL's concerns about the level distances between the road and their land development proposals to the east.
- [118] We note that Annexure **D**, which was produced by Mr Burris after the close of Auckland Transport's case, showed a new vertical alignment raising the finished road level proposed NOR close to the existing ground levels, particularly between chainage 100 to 120. That Annexure, originally produced in November 2015, was an attachment to the evidence of Mr Robert Mason, civil engineer and a consultant for Auckland Transport, filed with his rebuttal.
- [119] Given that this was a core issue for potential resolution of this matter, it is surprising to us that Auckland Transport took no real effort until just prior to this hearing to move these issues forward. That is particularly so when Mr Lanning submitted, and several witnesses accepted, that the Medallion Drive extension is a small project for Auckland Transport.
- [120] The Medallion Drive extension, when complete, could have facilitated the opening up of a substantial area of the Fairview Catchment, including the NEIL site, for development. Even after 2011, if Auckland Transport had entered into negotiations with NEIL and reached an agreement in respect of the construction through the NEIL property, including within the designation footprint (but outside the active roading corridor) for the NEIL development, then this roading designation could have been finalised and the development on the NEIL site could have been

started. Not only this, it would have given the opportunity to open up the Fairview Catchment for further development, which has been held up by these delays.

[121] We are satisfied on the balance of the evidence before us that if the corridor could have been narrowed to that necessary for the road, and/or a reasonable agreement reached to allow NEIL to construct its buildings within the designation footprint, but outside the roading corridor, this matter could have been resolved by private agreement and with the acquisition of the land by Auckland Transport.

[122] The failure to do so highlights a major breach in the implementation of the Auckland Regional Policy Statement and the Auckland Plan, and indicates a significant failure by Auckland Transport to enable the construction of infrastructure and allow the intensification of Fairview Catchment and the NEIL property.

[123] This disconnect between the objectives and policies of the regional and district planning documents, and implementation by Auckland Transport to allow for intensification of the city, is a recurring theme which we shall revisit a number of times through the course of this decision.

Modifications

[124] We conclude that there are important principles in our approach to the designation that should inform the modification of the designation for the Medallion Drive extension. These principles are:

- Designation of all the land required to undertake the work not only allows the work to be treated in an integrated manner but authorises its land use activities in terms of the District Plan.
- A vertical alignment for the road which should not impede development of the adjoining NEIL land.
- The extension of Medallion Drive should provide for carriageways, pedestrian and cycling facilities, reasonable berms with associated space for services and lighting.
- The extent of the designation should be the minimum necessary to allow for the construction of the Medallion Drive extension so as to maximise the area of land available for residential development, open space etc on the NEIL land.

- The construction of the extension should generally be contained as far as is practicable within the operational road corridor where it crosses the NEIL land.
- The extent of land at the south end of the extension already in the ownership of the Auckland Council in the vicinity of the bridge has several benefits, including for construction of the bridge and potentially to accommodate the storage of construction equipment and materials.
- The bridge should be built to a height and design that allows for pedestrian/cycling access under the bridge and along the stream bank.
- The riparian margins within an area of approximately 20m at the side of the stream require sensitive treatment.
- The area required under the designation for the construction of the Medallion Drive extension/Fairview Avenue roundabout needs particular attention to address both operational and construction needs.
- Conditions should be developed and be attached to the designation with respect to these principles to ensure the above.

We now consider what this means for the designation.

Effect of vertical profile of the road on land requirements

- [125] As emerged during the hearing, we conclude that a vertical profile for the road as shown in Annexure **D** or better, which is close to the existing ground level will minimise the extent of the retaining walls that will be required. That should be subject to a condition.
- [126] In this context, it seems clear to us that the area to be designated should be minimised to an area sufficient to accommodate the operational road corridor and a narrow construction area on either side. In that regard we need to have a slightly closer look at the road corridor itself, and what width that would entail.
- [127] We have concluded that the operational 3-lane roading corridor could be accommodated within a width of 22m, which would allow for three lanes; two of 4.2m width and one at 3.9m to a total of 12.3m; 3m and 1.8m footpaths (4.8m) two 0.8m verges (1.6m) and leaving land available for two 1.65m berms (3.3m) on each side. Where only two road lanes are required the designation width could be reduced, or wider berms provided.

[128] To get an understanding of the type of roading expected, we would have expected the witnesses to have made some comparison with Medallion Drive south of Oteha Valley Road given it is an extension of that road. From our visual inspection and without taking any measurements, including the berms, the road corridor in that area appears to be around 20m wide. Some sections incorporate an extra slip lane.

[129] We conclude that the extent of the operational road corridor be reduced but stop short of specifying the exact dimensions of the design elements within the corridor, other than requiring that there be a pedestrian footpath on one side and a shared footpath/cycle path on the other. From the analysis we have set out above we consider that a corridor width of 22m would provide sufficient flexibility and future proofing for transport needs. In relation to Fairview Avenue, Mr Mason said it should be noted that the footpath and berm area on the eastern side of Fairview Avenue has been removed, as a result of mediation with NEIL, to reduce the impact on the NEIL land. However, there is still a need for works to accommodate the roundabout. These are likely to involve a fan shape but do not need to encroach on any proposed building platforms. Further work for intersection road works needs to be done to show the designation here.

Bridge area

- [130] When we looked at the proposed plans for the Medallion Drive bridge we note that its width is approximately 17m because there are no berms. However it does require abutments on both sides of the stream and associated earthworks. We acknowledge also that there needs to be sufficient room to allow for the construction of the wing walls.
- [131] Bridge works on the southern side of the stream can be accommodated on the land already owned by the Council adjacent to Oteha Valley Road. As we have already noted, that land also appears to have the capacity to store materials, equipment and machinery for the entire project. Given that Auckland Council is not seeking any modification to the designation in relation to its properties, this land can clearly be utilised for construction and then any surplus re-dedicated as required.
- [132] The designation of the land already owned by Auckland Council to the south of the stream should be confirmed as there are many reasons for roading works to be authorised and accommodated on this land, including for construction purposes.

[133] An issue for the bridge then is the transition from this width adjacent to the stream to the corridor north of the stream. Mr Mason told us there was an opportunity to reduce the large splayed area in the designation while still allowing sufficient room for a contractor to build the bridge and the abutments. This requires specific attention of the design team to provide an area which is adequate but not unnecessary.

[134] Quite simply, if agreements cannot be reached between the parties we can see no problem to creating retaining walls – this has been done south on Medallion Drive and elsewhere through this district. We noted for example that the motorway itself has post retainers in excess of 4m high after the abutments to its bridge over Oteha Valley Road. There is nothing exceptional about this type of construction in this area and it is repeated many times locally. Thus the road could be constructed even if this meant retaining at the edges to meet existing ground level.

Comment on alignment levels

[135] We accept that the logical proposition is that NEIL and Auckland Transport should work together to develop a common earthworking strategy to reach common levels in respect of their respective properties and provide for common erosion controls. We are satisfied that it is possible to construct the road within the corridor restraints constraints. None of the Auckland Transport engineers suggested otherwise. We are unable to understand why 3:1 batter slopes would be required beyond the edges of the road; they are certainly not required by NEIL and in the absence of any sensible agreement retaining walls could be put in place which would look the same as the many others throughout this local area.

Reasonably necessary

[136] We have used this elliptical approach matter to try and bring some order to the evaluation required under s 171. The question of reasonably necessity itself turns upon the extent of works, and thus we have felt it necessary to reach some conclusion as to the extent of the designation that might be appropriate before considering whether the designation is reasonably necessary.

[137] The answer to that question will vary significantly depending on whether the extent of the NOR is sought as notified or for the modified corridor that we have discussed. Given the shortcomings in the evaluation of alternatives and the failure to reach agreement on acquisition it is difficult to establish that the entire designation

area is reasonably necessary. *Reasonably necessary* falls between desirable and essential. Where acquisition of private land is concerned the degree of necessity is scrutinised more rigorously.

- [138] We conclude that the entire designation area as sought is not necessary. It would defeat a purpose of the designation and impede the construction of intensive housing on the NEIL land.
- [139] On the other hand, it follows that the need for a road to service new development to the north is plain and has been for some considerable period of time. We recognise that, in the absence of this designation, it would always be possible for Auckland Transport to improve Fairview Avenue to provide a better connection to Oteha Valley Road. However, that is not an outcome that this Court can compel. The designation of land for a roading corridor does not mean that the road will be constructed, but it gives a much clearer signal that development is appropriate. We will discuss its potential impact on development later in this decision.
- [140] When we come to consider the question of whether it is reasonably necessary we, like Commissioner Kirkpatrick in making the recommendation at first instance on the NOR, and the Court on the PC32 decision, are drawn back to the joint witness statement prepared by the traffic experts in August 2011.
- [141] In the context of that history and those statements we conclude that there is a reasonable necessity for the designation of a road corridor to the extent it is necessary for the road's construction.
- [142] In that regard we have discussed a corridor somewhat narrower than the designation confirmed by the Commissioner, and more limited, but still generous in the context of roading development for Medallion Drive south of Oteha Valley Road. Such a modified designation would avoid or reduce the impact on the NEIL land use proposals currently before the Court for the land to the east of the corridor. Such a NOR would also enable reasonable development of land to the west of the corridor.
- [143] As we will discuss later, the failure to uphold the designation may have an unintended impact upon the NEIL development in giving rise to new traffic considerations in respect of the NEIL land use consent appeal currently due to be heard by this Court. In that regard the Auckland Council has signalled that it will be raising traffic impact issues if there is no NOR.

[144] In summary, we have concluded that a reduced roading designation is reasonably necessary to achieve the purpose of the designation.

Other effects

[145] As we have noted, there are significant effects both from the granting of a designation and from refusing it. In this regard a major consideration for this Court is to enable the development of the land within the Fairview Catchment including the land on the NEIL site. Provided it was limited to the more confined corridor we have identified, it is our understanding that the designation would not impact on the buildings that have been designed for the NEIL site. If the road was to be removed it could give rise to new issues about parking and access that may in fact prevent or hinder NEIL from continuing with their development as currently planned. We also note the importance of allowing development within the Fairview Catchment generally. We take into account that there is a need for intensive housing near major road corridors and transportation centres and that this site, and the Fairview Catchment generally, would provide an opportunity to construct housing in appropriate areas close to major infrastructural facilities.

[146] We also note that currently Fairview Avenue is accessed by a single lane bridge close to a 90° turn, a legacy of the rural character of the area. We note that traffic issues were of concern to the Court in 2011, and those had been exacerbated by 2016 when this case was heard. That is a potentially significant adverse effect of not providing certainty about roading in this area.

[147] Accordingly we conclude that, with a modified corridor as we have discussed, the effects on the environment of granting the designation are likely to be beneficial overall to the Fairview Catchment, and would accommodate the existing NEIL proposal.

Planning documents

[148] Relevant provisions of planning documents (National Policy Statements, Regional Policy Statements, regional and district plans) are also matters which must be had regard to when considering the effects on the environment of allowing the requirement. Mr Lanning submitted that the NOR was in line with the planning documents. Mr Casey submitted that there is little in the relevant plans that warrant particular discussion, other than to reiterate that the inclusion of the preferred road in

the District Plan over NEIL land does not provide any support for the NOR. He submitted that the preferred road notation in the District Plan has no clear justification, nor does it have any legal effect on the site (as was confirmed in the Court's decision on PC32), which would warrant giving it any weight in these proceedings.

[149] An assessment of the project against relevant planning documents was undertaken in section 10 of the Assessment of Environmental Effects to the NOR. Ms Catherine Richards, the planner for Auckland Transport, gave evidence on what she considers to be the key planning provisions of relevance. There are no National Policy Statements and the requirements of the National Environmental Standard: Contaminated Soils are to be considered as part of detailed design and through the consenting phase, including the outline plan.

[150] However, Mr Thomas the planning witness for NEIL did give some evidence on the planning documents. By the time of the hearing, matters that were in contention between the two planning witnesses appeared to be more confined.

Regional Policy Statement

[151] Chapter 2 Strategic Direction and Chapter 4 Transport contain important 'policy' direction.

2.6.8 Strategic Policies - Urban design

- 1. The design of Future Urban Areas and the management and promotion of change in existing urban areas is to occur so that:
 - (i) There is a diversity of urban environments (including building types and densities) and living choices for individuals and communities:
 - (ii) Buildings, public spaces and road corridors contribute to a vibrant, liveable and attractive environment with a sense of place; ...
 - (iv) Urban environments have a logical permeable and safe structure of connected routes for all modes of transport, including walking and cycling;
 - (v) Public transport, roading, cycling and walking networks are integrated with each other and the land uses they serve:
 - (vi) Roads (including new roads) and road improvements within higher density areas should be designed to provide a pleasant environment for cyclists, pedestrians and residents and minimise adverse effects on urban amenities;

2.6.11 Strategic Policies - Land Use and Transport Integration

- 1. Land Use and Transport shall be integrated throughout the region to ensure that:
 - (i) within urban areas land use patterns provide communities with improved access to a range of services and activities and opportunities to work locally;

- (ii) within urban areas new urban development and subdivision provides for improved connectivity for all transport modes including walking and cycling;
- (ii) within urban areas new development and redevelopment provides for safe and attractive walking and cycling environments; ...
- [152] There are objectives and policies related to transport with a similar focus but there was no suggestion that the proposed Medallion Drive extension cut across them. We accept that the proposed road link facilitates the region's growth by enabling the development of greenfield areas. Mr Thomas accepted that the adverse effects of urban growth on the transport infrastructure need to be managed and a planned integrated approach to land use and transportation taken. That often means additional or upgraded transport infrastructure is required. He considered that taking a broad, integrated look at what is the most sustainable solution for Auckland in relation to this land and in his opinion that was not to put a public road through it.
- [153] Mr Thomas agreed we should be looking for an outcome that creates a logical, permeable and safe structure of connected routes.
- [154] We were told that it is proposed that the development of the NEIL land have no public roading through it. Instead, the only public access across the site would be a pedestrian/cycling route secured by an easement. If resource consent is granted and not implemented, this access would not be provided.
- [155] Mr Thomas considered what NEIL proposed was a higher quality walking and cycling link through the NEIL site than the Medallion Drive extension. He saw more value in the use of this link for the local access to school function of pedestrian cycling than a 3m shared path down the Medallion Drive extension. We consider that unlikely given vehicle accesses including to buildings and the crossing of internal roads, even if in a low speed environment. Mr Ian Clark, a transport witness for Auckland Transport, considered the route to be less satisfactory for cycling.
- [156] In contrast Medallion Drive will provide a safe, legible and fully pedestrian and cycling route. It will add to existing pedestrian and cycle facilities in the area as Fairview Avenue will be still available for pedestrians and cyclists.
- [157] Mr Thomas also argued a link along Medallion Drive is not part of a proposed cycle network of that part of the city depicted in an external document on the Auckland Transport website despite policies in the RPS which refer to in general

terms improving facilities for cyclists. He said that there is no proposal to provide a shared path the full length of Fairview Avenue.

- [158] Mr Thomas accepted that Fairview Avenue was not built to service the urban development of the area and there is a legibility issue of flow with having to do a dog leg north on north-south movement and a perception of a clearer north-south linkage with the Medallion Drive extension.
- [159] We conclude that the proposed Medallion Drive extension accords with the relevant provisions of the Regional Policy Statement.

Regional Plans

[160] Matters under the Auckland Council Regional Plan: Air, Land and Water and the Auckland Regional Plan: Sediment Control will be dealt with by resource consents for the Project in the future.

District Plan

[161] In reading the operative Auckland Council District Plan: North Shore section there is a strong policy emphasis on achieving an integrated approach to planning for growth. In particular, policy 10 in section 6.4 of the District Plan which states:

Integrated planning of growth to match the needs of the community and the capacity of infrastructure needs to be used in a way that protects environmental values, and avoids the adverse effects of growth that will arise if land use, community and infrastructure planning (including planning for regionally and nationally significant infrastructure) that contributes to the growth concept in the Auckland Regional Growth Strategy and land use transportation integration, is not co-ordinated and sequenced correctly. Infrastructure planning and new growth need to be carried out and sequenced in a timely and efficient manner if the desired urban form is to be achieved and if infrastructure is to be efficiently provided, operated, maintained and upgraded.

[162] We conclude that the Medallion Drive extension will address the needs of the community and the capacity of infrastructure in a way that integrates with the NEIL proposed development and is consistent with the long term planning of the Albany Structure Plan area. The Medallion Drive extension will facilitate growth in the residential areas north of Oteha Valley Road. It will address existing and forecast traffic effects generated by urban (predominantly residential) growth. The road link

has been planned to address the transport effects of land use growth in the structure plan area to 2031.

[163] We recognise that perfect coordination of public infrastructure works with private land development is frequently difficult given differing imperatives and constraints applying to the parties involved. As the case for NEIL pointed out, the development of the land involved has a long, complex and challenging history. However, we conclude that the confirmation of the modified NOR, with the conditions including a five year lapse term as proposed in the decision, would provide strong direction and encouragement to Auckland Transport and achieve that policy.

Proposed Auckland Unitary Plan (PAUP)

- [164] Mr Thomas gave evidence that there is no proposal for a road link consistent with the NOR in the PAUP. Some interim guidance has been issued from the Independent Hearings Panel. However, his main point was that while that there is little in the way of guidance that is relevant to this matter other than an endorsement that it is appropriate to enable higher densities around centres and corridors or close to public transport routes, social facilities or employment opportunities. He considered that this location achieves all those requirements, and this lends weight to the lost opportunity for additional intensive residential activities if the land is taken for roading.
- [165] Mr Thomas also referred to Policies 10 and 11 and suggested that these policies seek a *balance* (although this word was not used in either policy) between placemaking and transport movement and accessibility, and place weight on the failure to resolve a positive design interface with the adjacent development and also on upgrading the existing road corridor as opposed to a new corridor. The modifications and conditions we propose to the designation mean that both policies would be achieved.
- [166] In any case we need give the notified provisions of the PAUP little attention given the stage the PAUP has reached, with submissions being heard and decisions yet to issue.

Overall conclusion on plan provisions

[167] It is clear that the planning documents as a whole support intensification of residential development on the NEIL land and within the Fairview Catchment. They

also enable, and in fact require, adequate infrastructural facilities including transportation. The Plan itself is silent as to whether that is provided by an improvement to Fairview Avenue or by an extension to Medallion Drive. Nevertheless, Medallion Drive would be consistent with those principles, provided it does not interfere with the intensification of residential development.

[168] The core question that this Court has asked itself is whether there is a solution which achieves both these key intents, namely:

- (a) setting a corridor to allow the road to be constructed;
- (b) establishing controls, if necessary, on the outer boundary where the parties can't reach agreement;
- (c) ensuring sufficient room to enable the construction of the road and ancillary works; and
- (d) encouraging the parties to find agreement so that the works can be developed in common.

[169] In reaching the conclusions we have about a reduced designation width, we consider these intents can be met.

Lapse period

[170] In that regard we come to the question of the lapse period. Auckland Transport sought a lapse period of ten years. We consider their reasoning for this to be contradictory. On the one hand they were saying that there was a necessity for the works and on the other that they did not want to construct the works for the next ten years. Given Mr Lanning advising the Court that funding had been provided for the purchase of the land, and they now had a fund available to meet the cost of the construction of the road, we found the suggestion of a ten year lapse period unsustainable. On the other hand, NEIL sought a lapse period in the order of 6 months or a year. Given the necessity to try and acquire the land and then give necessary notices under the Public Works Act, finalise design, let contracts and enable construction, we consider those periods are too short.

[171] The default period in the Act is five years. We have concluded that, with the narrowed corridor, and conditions that specify vertical levels for the road that allow integration with proposed adjoining land uses, the potential impacts upon NEIL

construction should be limited. There is clearly a mutual benefit to adopting a common earthworks and design policy and approach, but we cannot require this. NEIL could continue with the construction of its development, if approved, without awaiting the completion of the roading by Auckland Transport. It is clear that the roading is urgent and should have been attended to some years ago.

[172] In the circumstances of this case we have concluded that, with the narrower designation, the standard period of five years is appropriate, being that term recognised by Parliament as being an appropriate period for a party to invoke a designation.

The commissioner's decision under s 290A

[173] We have discussed various portions of the Commissioner's decision through this document. Although we consider a modified designation is generally appropriate we note that the Commissioner did not engage in significant discussion about the extent of the designation given his conclusions that the parties would reach an agreement as to the necessary earthworks along the boundary between the NEIL development and the road.

[174] It is clear that that has not occurred. In general terms, therefore, we have agreed with the concept of a designation but not with either its extent or the period for which it is settled. We consider that there needs to be demonstrated reasons to depart from the five year set out in the statute rather than just an assumption that the parties will require more time. Given the potential impact of such extra time, not only on the NEIL property but on the Fairview Catchment generally, we have reached a very different conclusion as to the lapse period.

Part 2 of the Act

[175] It is clear that the Act seeks to enable people and communities to provide for their wellbeing. In particular in this case that includes sufficient land for residential use and appropriate infrastructure including roading. The NEIL site is clearly ideal for intensive residential development, being:

- (a) close to a public transport hub;
- (b) encouraging cycling and walking;

- (c) close to local schools, public transport, retail areas including the new retail on Oteha Valley Road, and community facilities;
- (d) adjacent to arterial roads;
- (e) close to the town centre;
- (f) close to the motorway.

[176] To enable development on the NEIL site and to the north of Oteha Valley Road, there needs to be improved access for people and traffic.

[177] While the consideration of alternatives in respect of Fairview Avenue had shortcomings, by the time of the hearing further work had been done, and traffic expert conferencing had agreed that Fairview Avenue is roughly equivalent to the Medallion Drive extension in traffic engineering terms. There was some disagreement about what the cost implications of the two alternatives would be given these depend very much on the land to be acquired (for the Medallion Drive extension) and the extent of the works needed for the Fairview Avenue upgrade, including the design of the bridge, numbers of lanes, pedestrian and cycling provision, and whether the relocation of the water supply pumping station might be involved.

[178] We agree with the traffic engineers' position in 2011 that, in any evaluation of alternatives, Medallion Drive extension has advantages. Although we initially were concerned as to whether or not it would provide any improvement in terms of connectivity, evidence analysed by the Court towards the end of the hearing indicate that in fact contrary to the expectation, a strong proportion of the traffic using Fairview Avenue or Medallion Drive extension would be travelling to the south down Medallion Drive. Although this seems counter-intuitive, the modelling, agreed by the traffic engineers, seems to indicate that of the 6,000 vehicles per day, some 600 would be travelling south in the am peak.

[179] Although one would be expecting the majority of that traffic to be heading to the motorway, the modelling shows around one third moves to the west and one third to the east, leaving around one third travelling from the Medallion Drive extension through to Medallion Drive itself. An analysis of figures from the modelling of the upgraded Fairview Avenue alternative shows a similar number of vehicles likely to be travelling the same route. In other words, although one third carry on to the west and one third go to the east, approximately one third go to the south. This strengthens an

argument that Medallion Drive extension provides better connectivity and that it provides the same selection to the east and west yet a more direct route to the south.

[180] The Medallion Drive extension itself also provides an additional option for all forms of transport. It involves a safe, legible and fully pedestrian and cycling route and will add to existing pedestrian and cycle facilities in the area as Fairview Avenue will also be still available for pedestrians and cyclists. We contrast that with the NEIL land use proposal which is yet to be granted land use consent which does not involve public access through the NEIL land other than a pedestrian and cycleway route secured by an easement.

[181] In short, the Medallion Drive extension provides better connectivity and thus better enables people and communities to provide for their social, cultural and other requirements.

[182] We recognise the shortcomings in the consideration of alternatives and particularly their potential adverse effects. In many cases this would be fatal to a designation of this sort. However in this case we note that the removal of the designation itself may have significant consequences in respect of a re-design of the NEIL development already proposed. It may involve having to provide alternative connections to Oteha Valley Road given the current state of Fairview Avenue. In addition, the shortcomings of the analysis of the two alternatives were cured during the extensive work undertaken before the hearing and as a result of the material placed before the Court and the lengthy cross-examination and questioning.

[183] We were told that the proposed position and design of the buildings on the NEIL land had been worked on for a long period of time, and a major re-design may bring into play an entirely new range of issues. When we keep in mind that the Act requires us to manage physical and natural resources in a way or at a rate to enable people and communities we acknowledge that this brings into relevance a question of timeliness and proportionality.

[184] To date, Auckland Transport, and previously the North Shore City Council, has failed to provide infrastructure at a rate to enable the provision of housing in this area. The response of the District Plan through PC32 was to delay the subdivision of certain land below high thresholds until such infrastructure was provided. However, given the clear need for further housing, the failure to provide infrastructure for over a decade is difficult to see as fulfilling the purpose of the Act.

[185] We acknowledge that the extent of the designation notified and now sought could have the effect of blighting the development of this area of land for the period of this designation, or until construction is concluded. This is because there is a significant area beyond the road corridor which could be developed for intensive residential use but could not be utilised until such time as it was re-vested in NEIL.

[186] Given that Auckland Transport is seeking a period of ten years for the designation it is likely to be more than a decade before that land could be utilised. Even a shorter lapse period of five years does not ensure the road will be constructed within that time or the residual land re-vested. NEIL then has the choice of either:

- (a) developing now, and having to avoid that designated land entirely. This will mean that it will be essentially sterilised for further development in the future; or
- (b) would need to restrain from developing that portion of the site until such time as the land was available. In our view that would be an unacceptable effect on the land use and currently could affect between 3 and 5 buildings.

[187] For the reasons we have already stated, we conclude that greater certainty will be provided to the development of this area and to the Fairview Catchment generally by providing for a reduced designation roading corridor. This will have the advantage of enabling development not only of the NEIL land on the basis of its current application for consent, but also making direct provision in meeting the terms of PC32 for development.

Conclusion

[188] Looking at the overall questions under s 171 and Part 2, including the narrower designation and a lapse period of five years we are satisfied that such a modified designation would meet the purpose of Part 2 and enable the development of the NEIL land and other land in the Fairview Catchment if implemented.

[189] Although we recognise that the Fairview Avenue alternative may achieve the purpose of the designation and the Act we have concluded that Medallion Drive extension provides improved connectivity and efficiency for motor vehicles, cyclists and pedestrians. The need for an improved road has been clear since the 1990s and is now urgent and the failure to construct this has had a significant effect on the development of this area.

[190] The regulatory regional and district planning documents also reinforce the requirement that the infrastructure should enable development. There has been a consistent failure to resolve this issue for over a decade and urgently since 2011.

[191] To that extent we acknowledge that the designation can achieve the purpose of the Act only if it does not conflict with reasonable development on the NEIL land beyond the infrastructure necessary for the road. After nearly three years since the NOR was notified, there has still been a failure of the parties to commit to a design that avoids impact beyond the corridor. Our response in those circumstances is to confirm a corridor sufficient to allow the road construction. This enables the infrastructure and the housing development. If a consequence of that are higher construction costs, we note that there has been more than adequate opportunity for resolution. We refer in this regard to two previous decisions of the Environment Court and the Commissioners' decision on this designation. We conclude that an agreement should be reached between the parties but we are not going to hold up the development further because of the parties' unwillingness or inability to reach an agreement.

[192] To that end the question arises whether the Court could include within the designation a condition that the designation can be relied on for the development by NEIL, to avoid any argument arising on the consent application that the development cannot occur until a road is actually constructed. Given the shorter lapse period and the narrowed NOR we cannot see any argument that the development of NEIL is constrained until the road is built. References to this decision (and others) should be sufficient to counter any such argument for the NEIL land.

[193] It has been clear to us from the commencement of this case, and upon our original reading of the papers, that Auckland Transport and the developer need to reach an agreement so that they can have a common earthworks arrangement in respect of the area around the roading corridor. Many attempts seem to have been undertaken to do this, but after in excess of ten years no real progress was made until just prior to this hearing. We note that nearly 30 Joint Witness statements have been prepared, including extensive witness statements from the traffic engineers and the planners. Despite all this, agreement has still to be reached on the Auckland Transport corridor/NEIL land development interface. However, we cannot insist that the parties do this even if it is in their best interests.

Conditions

[194] Conditions are required to ensure the above. The conditions to secure these outcomes need to be certain, workable and enforceable.

[195] We recognise there is an outline plan process, but we see that as dealing with matters of detailed design rather than the outcomes required of the proposed corridor extension. The outline plan process is one that only involves the Auckland Council and Auckland Transport and not NEIL. To that extent our view is different from that of the Commissioner at the first instance hearing.

Directions

[196] For the reasons set out in detail in the Decision the Court will confirm a modified NOR subject to the following:

- (1) It is to be based upon:
 - (a) the operational road corridor shown in Annexure **D** attached to this decision, and covering a maximum width of 22m with the exception of areas specified in (2) and (3);
 - (b) a vertical profile for the road as shown in Annexure **D** (or better).
- (2) In addition, the Designation over 1 and 2 being lots 2 DP199126, being 1,531m² owned by the Auckland Council, is to be designated in full, and lot 1 DP340400, being 856m², is designated in full.
- (3) In addition to the operational road corridor there shall be an additional area provided as follows:
 - (a) an area necessary to construct the bridge abutments,
 - (b) to connect with Fairview Avenue to the west of the proposed roundabout and on the eastern side of the roundabout to connect with the existing roading designation,
 - (c) any area essential to allow construction of the road corridor or supporting infrastructure such as retaining walls;
- (4) The parties are encouraged to reach an agreement in respect of access for the purposes of construction of their respective activities.

- (5) By 30 June 2016 Auckland Transport is to produce and circulate an indicative plan of the modified designation area in accordance with this decision. The indicative plan is to identify the specific land identified in A1 and A2, and any further areas required under A3. Reasons for the extent of any additional area required for construction purposes are to be provided. In undertaking its assessment of construction needs, Auckland Transport is to minimise the effect on the NEIL development proposal adjacent to the road corridor.
- (6) Auckland Transport is to provide proposed consents and conditions for the modified designation within a further ten working days.
- (7) NEIL then has fifteen working days in which to advise Auckland Transport and the Court whether it agrees with the area proposed to be designated in line with the Court's directions in the Decision, and particularly any additional area required for construction by Auckland Transport, as well as on the proposed conditions. NEIL is to advise of any concerns and ways in which these might be addressed, including any substitute condition wording.
- (8) Auckland Transport has a further ten working days to consider and advise NEIL and the Court of its response to any matters raised by NEIL.
- (9) The Court will then make a decision on the overall extent of the land to be designated, and the conditions to which the designation will be subject. In making this decision the Court will have regard to the memoranda lodged by the parties and, if necessary, convene a further hearing or conclude the matter on the papers.
- (10) Once the extent of the designation has been decided by the Court, Auckland Transport is to undertake a survey and prepare a plan that clearly identifies the area of the designation to be confirmed by the Court, and submit this plan to the Court within twenty working days.



Costs

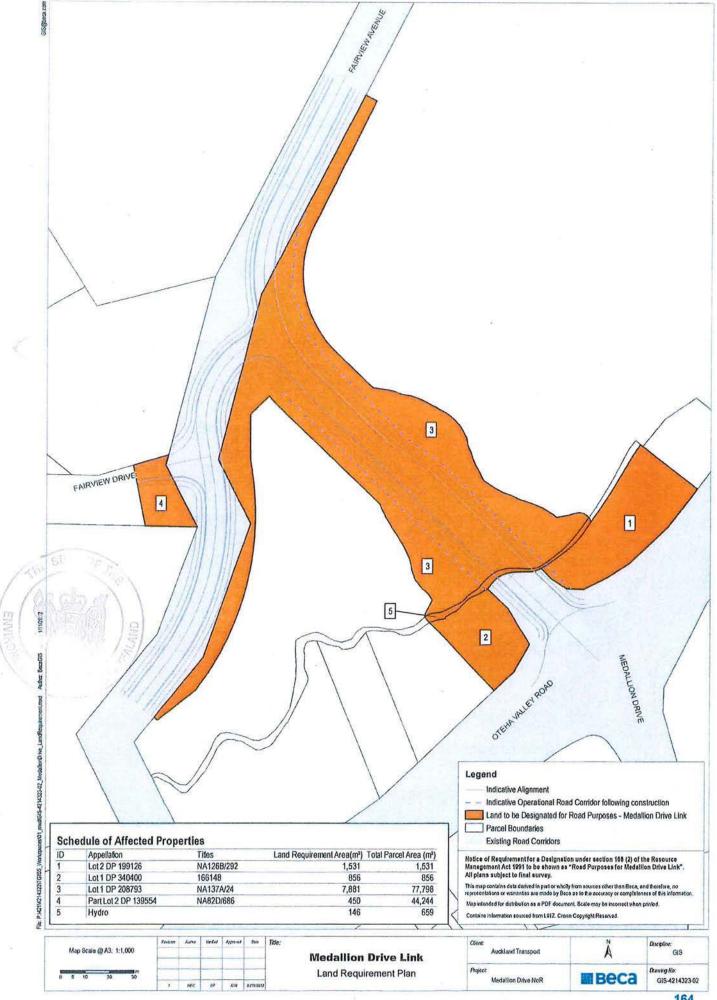
[197] Any applications for costs are reserved and application is to be made on issuing the final decision in accordance with directions given at that time.

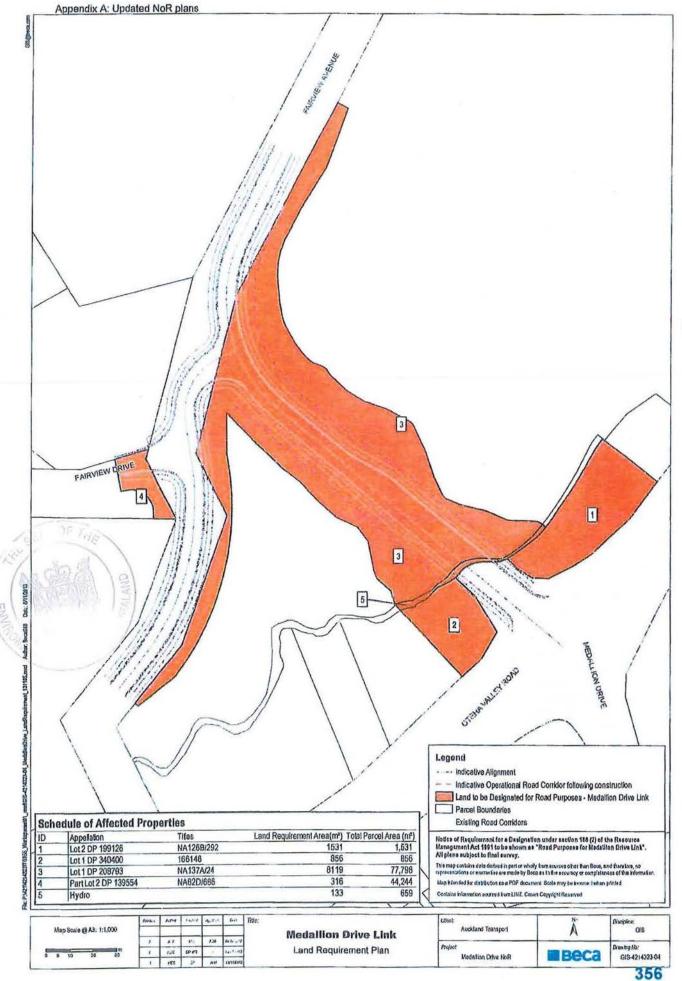
SIGNED AT AUCKLAND THIS 29th day of April 2016

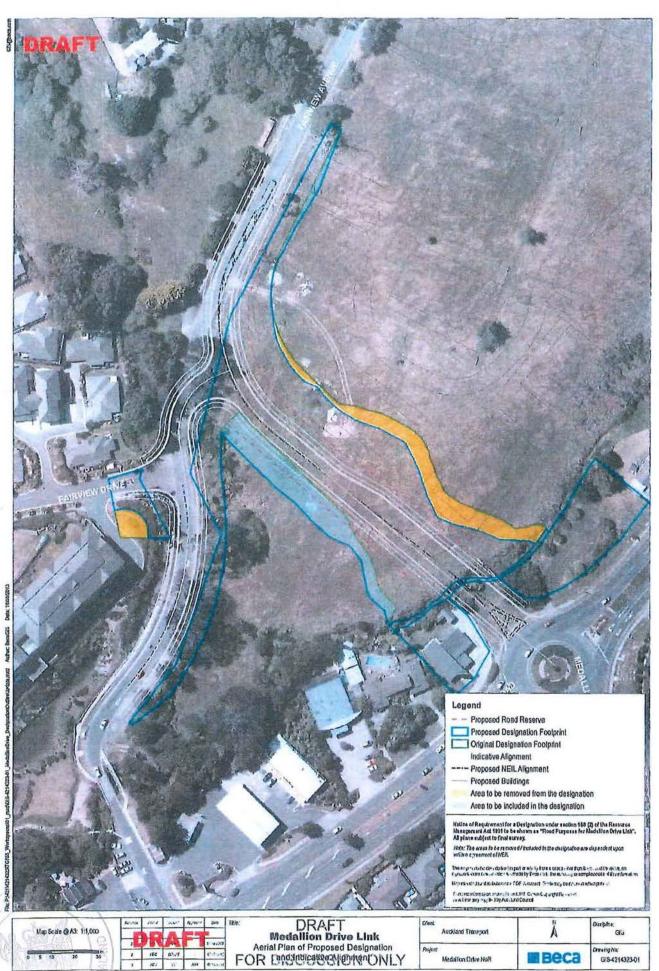
For the Court

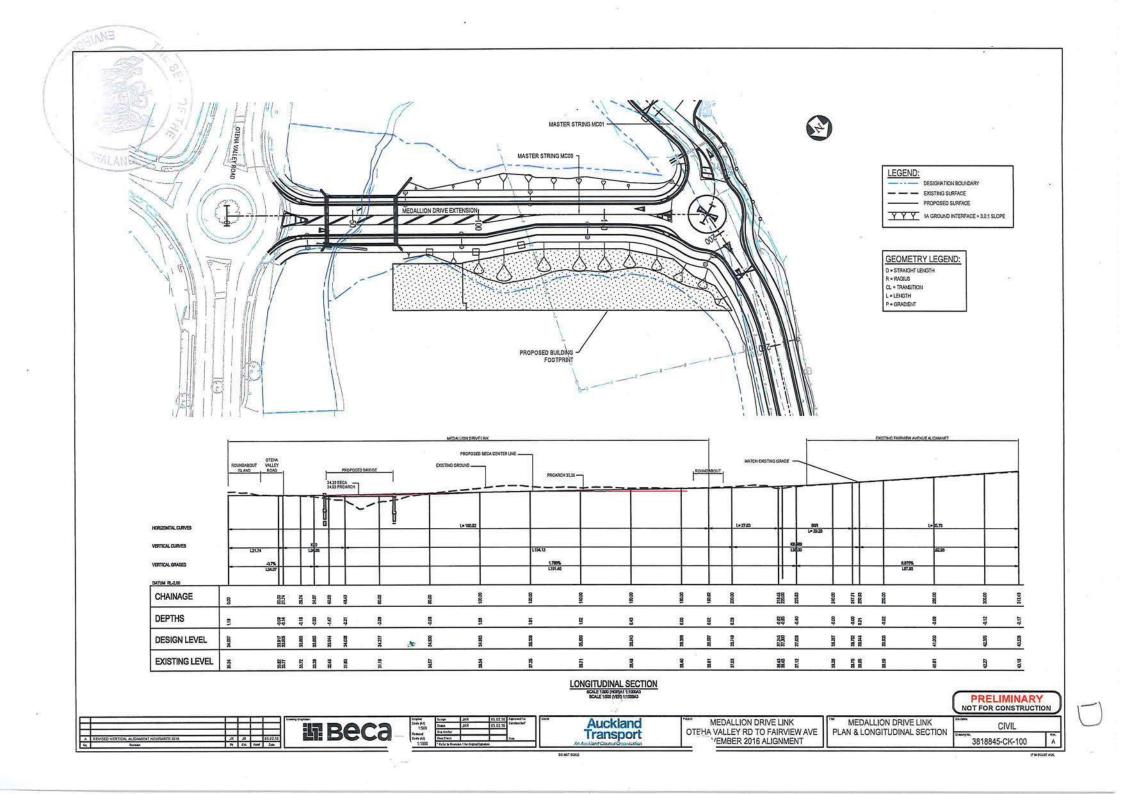
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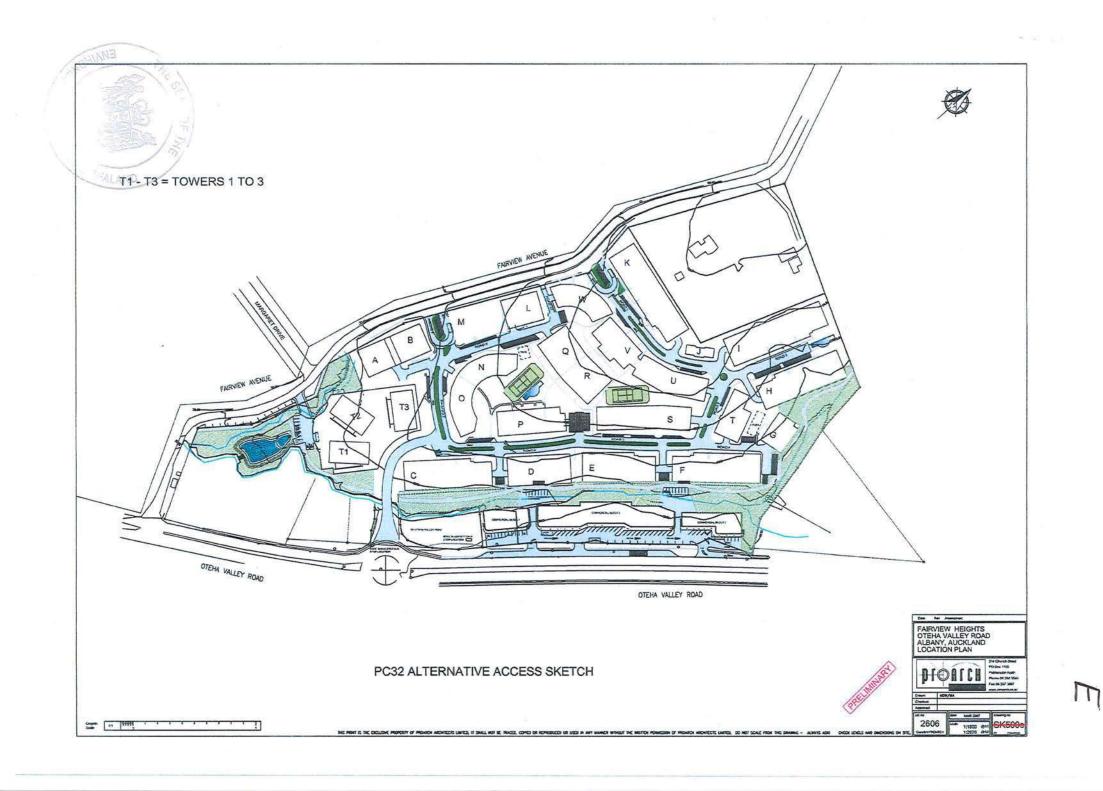
Environment Court Judge











IN THE HIGH COURT OF NEW ZEALAND PALMERSTON NORTH REGISTRY

CIV 2012-454-49 [2012] NZHC 1272

UNDER the Resource Management Act 1991

BETWEEN PROPERTY RIGHTS IN NEW

ZEALAND INCORPORATED

Appellant

AND MANAWATU-WANGANUI REGIONAL

COUNCIL Respondent

Hearing: 24 April 2012

Counsel: M W Plowman with P J Chumun for Appellant

J W Maassen for Respondent

PR Gardner for Federated Farmers of New Zealand

Judgment: 8 June 2012

JUDGMENT OF THE HON JUSTICE KÓS

Introduction

- [1] Do regional councils have statutory authority to make rules to control land use for the purpose of maintaining indigenous biological diversity?
- [2] The Manawatu-Wanganui Regional Council is promulgating a combined regional policy statement and regional plan. The statement identifies the regional council as the local authority with responsibility for developing rules controlling the use of land for the purpose of maintaining indigenous biodiversity. The plan sets out those rules. Everyone accepts that *someone* may make rules controlling the use of land for the purpose of maintaining indigenous biodiversity. The question here is whom may do so.

[3] In the Environment Court the appellant, Property Rights In New Zealand Incorporated (PRINZ), and Federated Farmers of New Zealand contended that the regional council had no such power. Rather the power vested in territorial authorities (district and city councils). The respondent Council contended that the power vested in it to determine whether such rules were made at regional or territorial level. The territorial authorities did not participate in this argument. They had been consulted on the proposed plan. Some made submissions. None opposed or appealed the indigenous biodiversity provisions.

[4] The Environment Court, in a preliminary decision dated 21 December 2011, sided with the Council. It held that s 30(1)(ga) of the Resource Management Act 1991 (the Act) required regional councils to establish objectives, policies and methods (including rules) for maintaining indigenous biodiversity.

[5] PRINZ appeals that decision to the High Court. On this occasion it is not supported by Federated Farmers.

Background

Statutory scheme

[6] Section 30(1) of the Act provides, in part:

30 Functions of regional councils under this Act

- (1) Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:
 - (a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region:
 - (b) the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance:
 - (c) the control of the use of land for the purpose of—
 - (i) soil conservation:

Indeed, two have relied on them already in notifying their own district plans.

- (ii) the maintenance and enhancement of the quality of water in water bodies and coastal water:
- (iii) the maintenance of the quantity of water in water bodies and coastal water:
- (iiia) the maintenance and enhancement of ecosystems in water bodies and coastal water:
- (iv) the avoidance or mitigation of natural hazards:
- (v) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances:

...

(ga) the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity:

...

Paragraph (ga) was added by the Resource Management Amendment Act 2003. The background to the amendment was as follows.

In February 2000 the government issued the New Zealand Biodiversity Strategy. It was issued in part-fulfilment of New Zealand's international obligations under the 1992 Rio Convention on Biological Diversity. The Strategy document had the goal of establishing a framework to arrest the decline in indigenous biodiversity that had followed settlement and subsequent human exploitation of the country's natural resources. The Strategy records that New Zealand, one of the last places to be settled by humanity, has gone on to achieve one of the worst records of indigenous biodiversity loss on the planet. There was the loss of our larger bird species following initial human habitation. By the start of the seventeenth century about a third of the country's original forests had been replaced by grasslands. From the mid-nineteenth century expanding European settlement "started a new wave of forest destruction". A further third or so of our original forestation has been converted to farmlands. Extensive modification of wetlands, dunelands, river and lake systems, and coastal areas has also occurred.²

New Zealand Biodiversity Strategy (New Zealand Government, Wellington, 2000) at 4.

[8] The same month a ministerial advisory committee proposed that regional councils take a lead role in managing biodiversity affected by private land management.³ One consideration influencing that view was that regional council administrative boundaries, being catchment-based, more closely aligned with ecological boundaries than did territorial boundaries. Another was that regional councils' existing biophysical functions generally were more closely related to biodiversity management than the broader functions of territorial authorities, so that regional council staff held expertise in many areas of direct relevant to biodiversity.

[9] In its final report, in August 2000, the committee recommended that regional councils take the – not just a - primary governance role in indigenous biodiversity:⁴

On the question of sub-national governance, we have firmed in our preliminary views that regional councils should assume the primary governance role for biodiversity.

In our preliminary report we identified a number of reasons for our preference for regional council leadership. Further policy work supported our reasoning, as did the majority of submissions. Some urged that the contribution of territorial authorities should not be under-estimated (or under-valued). We agree, and our proposal for regional leadership should not be construed as being critical of territorial authorities. We do, however, find the case for a regional integrated approach compelling.

[10] The committee acknowledged that giving both regional councils and territorial authorities biodiversity responsibilities would create an overlap in functions. It thought that an "unavoidable necessity", but not unworkable given that similar overlap existed for hazardous substances and natural hazards.⁵

[11] The May 2001 report of the Local Government and Environment Select Committee recommended that regional councils' functions be expanded by allowing "regional councils to contribute to biodiversity management through the

⁵ At 69.

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³ Bio-what? Preliminary Report of the Ministerial Advisory Committee (Ministry for the Environment, Wellington, 2000) at 35.

Final Report of the Ministerial of Advisory Committee on Biodiversity and Private Land (Ministry for the Environment, Wellington, 2000) at 65–67.

establishment of methods as well as policies and objectives". As to overlap, the select committee said: 7

Issues of overlap between the biodiversity management functions of regional councils and territorial authorities should be resolved through the regional policy statement process, in the same way that overlap issues are resolved for the management of natural hazards and hazardous substances. An amendment to proposed new section 62 will require that the regional policy statement state which local authority has responsibility for dealing with the maintenance of indigenous biological diversity.

[12] One result of this policy analysis was the addition of s 30(1)(ga). Others were amendments to ss 62 and 65. I will set s 62 out in full, as it is central to the disposition of this appeal:

62 Contents of regional policy statements

- (1) A regional policy statement must state—
 - (a) the significant resource management issues for the region; and
 - (b) the resource management issues of significance to iwi authorities in the region; and
 - (c) the objectives sought to be achieved by the statement; and
 - (d) the policies for those issues and objectives and an explanation of those policies; and
 - (e) the methods (excluding rules) used, or to be used, to implement the policies; and
 - (f) the principal reasons for adopting the objectives, policies, and methods of implementation set out in the statement; and
 - (g) the environmental results anticipated from implementation of those policies and methods; and
 - (h) the processes to be used to deal with issues that cross local authority boundaries, and issues between territorial authorities or between regions; and
 - (i) the local authority responsible in the whole or any part of the region for specifying the objectives, policies, and methods for the control of the use of land—
 - (i) to avoid or mitigate natural hazards or any group of hazards; and

Resource Management Bill 1999 (Local Government and Environment Select Committee Report) at 24. That Bill did not progress. The Resource Management Amendment Bill (No 2) 2003, based on part of the 1999 Bill was then introduced in March 2003, and was assented to in May 2003.

At 24.

- (ii) to prevent or mitigate the adverse effects of the storage, use, disposal, or transportation of hazardous substances; and
- (iii) to maintain indigenous biological diversity; and
- the procedures used to monitor the efficiency and effectiveness of the policies or methods contained in the statement; and
- (k) any other information required for the purpose of the regional council's functions, powers, and duties under this Act.
- (2) If no responsibilities are specified in the regional policy statement for functions described in subsection (1)(i)(i) or (ii), the regional council retains primary responsibility for the function in subsection (1)(i)(i) and the territorial authorities of the region retain primary responsibility for the function in subsection (1)(i)(ii).

Notably there is no default provision in s 62(2) to determine who has primary responsibility for the function described at s 62(1)(i)(iii), in the event that the regional policy statement fails to make an express allocation.

- [13] But the key point to be taken from s 62(1), after its 2003 amendment, is that it is the regional policy statement a regional council instrument that is to *identify* the "*local authority* responsible ... for specifying the objectives, policies and methods for the control of the use of land ... to maintain indigenous biological diversity". Both regional councils and territorial authorities are "local authorities" for the purposes of the Act.
- [14] Section 65 was also amended consequently in 2003. Section 65(1) reads:

65 Preparation and change of other regional plans

(1) A regional council may prepare a regional plan for the whole or part of its region for any function specified in section 30(1)(c), (ca), (e), (f), (fa), (fb), (g), or (ga).

That provision empowers a regional council to prepare a regional plan for the function specified in s 30(1)(ga). There is no mention there of the functions described in s 30(1)(a) and (b). The same exception is carried through in s 68(1)(a). As the Environment Court said in its decision, these exceptions make perfect sense. A regional council does not need to make rules about establishing, implementing and

reviewing, or preparing, objectives, policies and methods - the functions described in s 30(1)(a) and (b).

[15] Finally, I note two further provisions. First, s 31 of the Act defines the functions of territorial authorities. It reads, in part:

31 Functions of territorial authorities under this Act

- (1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:
 - (a) the establishment, implementation, and review of objectives, policies, and methods to achieve integrated management of the effects of the use, development, or protection of land and associated natural and physical resources of the district:
 - (b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of—
 - (i) the avoidance or mitigation of natural hazards; and
 - (ii) the prevention or mitigation of any adverse effects of the storage, use, disposal, or transportation of hazardous substances; and
 - (iia) the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land:
 - (iii) the maintenance of indigenous biological diversity:

•••

It may be noted that paragraph (b)(iii) was added in its present form in 2003. Secondly, there is s 75(4). It provides that a district plan cannot be inconsistent with a regional plan.

Proposed One Plan

[16] As I mentioned in the Introduction, the Council has promulgated a combined regional policy statement and regional plan. There is a power to do so in s 80(2) of the Act. The proposed instrument is called the "One Plan". As it is still a proposed plan (and statement) it has become known as the "POP". The POP was notified in

May 2007. Its function is to replace the current regional policy statement and six operative regional plans. It received over 400 submissions. Seven affected territorial authorities made submissions. Following a hearing at Council level, the Council made decisions on the POP. Appeals against those decisions are now being heard by the Environment Court.

[17] One of the submissions came from the appellant, PRINZ. Another from Federated Farmers of New Zealand (Federated Farmers). Their submissions, as far as relevant to this appeal, concerned policy 7-1 and rule 12-6 of the POP.

[18] Policy 7-1 (in the decisions version) reads:

Policy 7-1: Responsibilities for maintaining indigenous biological diversity

In accordance with s 62(1)(i) RMA, local authority responsibilities for controlling land use activities for the purpose of managing indigenous biological diversity in the Region are apportioned as follows:

- (a) The Regional Council must be responsible for:
 - (i) developing objectives, policies and methods for the purpose of establishing a Region-wide approach for maintaining indigenous biological diversity, including enhancement where appropriate
 - (ii) Developing rules controlling the use of land to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna and to maintain indigenous biological diversity, including enhancement where appropriate.
- (b) Territorial Authorities must be responsible for:
 - (ii) retaining schedules of notable trees and amenity trees in their district plans or such other measures as they see fit for the purpose of recognising amenity, intrinsic and cultural values associate with indigenous biological diversity, but not for the purpose of protecting significant indigenous vegetation and significant habitats of indigenous fauna as described in (a)(ii) above.
- (c) Both the Regional Council and Territorial Authorities must be responsible for:
 - (i) recognising and providing for matters described in s 6(c) RMA and having particular regard to matters identified in s 7(d) RMA when exercising functions and powers under the RMA, outside the specific responsibilities allocated above,

including when making decisions on resource consent applications.

So it would seem that the policy contemplates the Council having overarching responsibility for developing objectives, policies and methods (which include rules) concerning indigenous biodiversity at a region-wide level, and making rules concerning the use of land to maintain indigenous biodiversity. The territorial authorities have a subordinate role.

[19] Rule 12-6 (again in the decisions version) classifies various activities (including vegetation clearance, forestry and diverting water) as discretionary activities where they take place within a rare, threatened, or at risk habitat. That decision itself is controversial. Some appeals contend that the classification should be non-complying. That status would impose a higher threshold for consent: non-complying activities must not be consented if their effects are more than minor or they will otherwise be contrary to the relevant objectives and policies of the plan. If they pass those thresholds, they are considered then on the same basis as a discretionary activity.⁸

[20] PRINZ and Federated Farmers took a different view. They did not think the Council should be making land use rules at all in the area of indigenous biodiversity. They took the view that the Council's powers to control land use were confined to the purposes stated in s 30(1)(c) – soil conservation, water quality and the like.

[21] The Environment Court hearing the appeals on the POP resolved to determine this question as a preliminary issue.

Environment Court decision

[22] The Environment Court held that the functions of the Council regarding land use controls were not confined to those set out in s 30(1)(c). It said:⁹

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Resource Management Act 1991, s 104D(1).

Federated Farmers of New Zealand v Manawatu-Wanganui Regional Council [2011] NZ EnvC 403 at [6].

There is nothing magic about (c) – it is not a code of purposes by which a regional council is confined in its objective, policy or rule making powers.

Section 30(1)(ga) made it a mandatory function of every regional council to establish objectives, policies and methods for maintaining indigenous biodiversity. That did not exclude rules affecting or controlling the use of land. The Court said:¹⁰

If it is reasonably necessary to control the use of land in some way to fulfil the requirement, then there is nothing in s 30 to prohibit that.

The Court concluded: 11

The short point is that s 30(1)(ga) means what it says. Regional Councils are required to establish, implement and review objectives, policies and methods (including rules) for maintaining indigenous biological diversity. The content of those objectives, policies and rules may be the subject of debate, but the power of the Council to establish them, subject to process, is beyond doubt.

Submissions

PRINZ

[23] A member of PRINZ, Mr Mike Plowman, argued the case for PRINZ. There was some irony in his doing so. He is an elected regional councillor of the respondent Council. Mr Plowman's argument, in essence, was that notwithstanding s 30(1)(ga), regional councils do not have rule-making power to control land use to protect areas of significant indigenous vegetation and fauna. Section 31(1)(b)(iii) is clear in giving territorial authorities the function of controlling land use for the purpose of maintaining indigenous biodiversity. Mr Plowman argued that a regional council does not have the power to allocate to itself functions that are allocated to territorial authorities by the Act – here s 31(1)(b)(iii). Those functions must first be transferred from the territorial authority to the regional council under s 33.

[24] Secondly, s 68(1) precludes the regional council including rules for the purpose of carrying out s 30(1)(a) and (b) functions. That, says Mr Plowman, impliedly also includes the s 30(1)(ga) function which is effectively assimilated

¹⁰ At [7].

¹¹ At [14].

within s 30(1)(a) and (b). Some support for that submission is to be found in *Brookers Resource Management* where it says: 12

Section 68(1) limits the powers of regional councils to make rules in relation to functions conferred by s 30(1)(a), 30(1)(b) and 30(1)(ga). Rules are clearly envisaged by paragraphs (c) to (g), which relate to control. Accordingly, where Part 2 matters are relevant to the functions covered by paragraphs (c) to (g) those matters may be dealt with by way of rules as well as by objectives and policy. [Emphasis added].

[25] Thirdly, Mr Plowman conceded (as did Mr Gardner for Federated Farmers) that "methods" in s 30(1)(ga) includes rules. Later Mr Plowman sought to withdraw that concession. Ultimately he sought to maintain a "methods" within s 30(1)(ga) contemplated only non-regulatory responses.

Council

[26] On behalf of the Council, Mr John Maassen argued that s 30(1)(ga), together with other key provisions in Part 4 of the Act, gives regional councils statutory authority to control land use for the purpose of maintaining indigenous biodiversity. That, he said, was the direct consequence of the 2003 Amendment Act. Particular provisions Mr Maassen relied on were ss 30(1)(ga), 62(1)(i)(iii) and 68(1). He submitted also that the planning context supported the Council's interpretation. The word "methods" is used in the Act, and in s 30(1)(ga) in particular, can include both rules and non-regulatory methods.

[27] Mr Maassen referred also to the legislative history discussed earlier, and to the social and local authority context. He noted that the evidence suggested that the region had within a five year period experienced a loss of 1,322 hectares of indigenous vegetation, particularly in lowland areas. As the ministerial advisory committee had noted in 2001, 13 regional boundary and catchment-related scale were better suited to the management of indigenous biodiversity through the management of catchments and land forms than distributed territorial authorities. In addition, regional councils possess the necessary scientific knowledge, experience and data to achieve integrated management of indigenous biodiversity. He noted in this case

Brookers Resource Management (online looseleaf ed, Brookers) at [A30.04(2)].

See at [8] above.

there was apparent support from the seven territorial authorities affected for the jurisdictional approach taken in the POP.

Federated Farmers

[28] Federated Farmers of New Zealand was a party to the original appeal. It is not an appellant in the present proceeding, as it does not support PRINZ's appeal. However Mr Richard Gardner made helpful submissions indicating the position of Federated Farmers. In essence Federated Farmers would have preferred the jurisdiction issue not be dealt on a preliminary question. However the reality is that the Environment Court has set that preliminary question, resolved it and this is an appeal from it. On the substance of the appeal Mr Gardner did not support the argument by PRINZ that a regional council may not include rules in its regional plan related to indigenous biodiversity. He agreed with the finding of the Environment Court that "methods" in s 30(1)(ga) can include rules.

Analysis

[29] Five points need to be made.

[30] First, s 68(1) plainly empowers the Council to make rules for the purposes of carrying out any functions conferred on it under the Act, save those in s 30(1)(a) and (b). Parliament did not see fit to also except s 30(1)(ga). By virtue of the latter provision, one of its functions is the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity. So plainly the Council may make rules in its regional plan – here the POP – for that purpose. On the face of the Act there is no basis to exclude it doing so in relation to the use of private land. There is no apparent or valid basis to assimilate the s 30(1)(ga) function within s 30(1)(a) and (b), as PRINZ submits. The passage in *Brookers Resource Management* cited earlier¹⁴ and which suggests otherwise is incorrect. The function in s 30(1)(ga) also embraces controls on the use of land – as the third point made below confirms.

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¹⁴ At [24].

[31] Secondly, s 30(1)(ga) creates a mandatory obligation on the part of regional councils to make objectives, policies and methods for the maintenance of indigenous biological diversity. Such methods may include rules. The Council contends that. Federated Farmers concedes that. PRINZ did likewise until the implications of its concession became plain. At the end of the day, s 68(1) confirms that. More generally, a "method" is what it says: a way of doing something. In its RMA context it may include rules. Sections 31(2), 32(4)(a), 67(2)(b) and 75(2)(b), for instance, all make that abundantly clear. Methods are not confined to rules (there may be non-regulatory methods too), but necessarily they may include rules.

[32] Thirdly, it is true that s 30(1)(c) provides that it is a function of a regional council to control the use of land for certain purposes. The maintenance of indigenous biodiversity is not expressly named within that provision. I do not however accept that it is consistent with the purpose of the 2003 amendment to read down s 30(1)(ga) so that it includes every relevant function apart from controls over the use of land. Context suggests that was not what Parliament intended. Rather, s 30(1)(ga) was located outside of s 30(1)(c) simply because that function is broader than the control of the use of land - although it may include such controls.

[33] Fourthly, it is also true that s 31(1)(b)(iii) gives territorial authorities a similar function, specifically in relation to controls over the use of land. Such controls are the particular concern of territorial authorities, just as air, water and the coastal marine area (the latter on a shared basis) are the particular concern of regional councils. But the existence of a functional overlap was expressly anticipated by the legislature, as the select committee report discussed earlier demonstrates. Parliament resolved the potential conflict in two ways. First, by the 2003 amendment made to s 62, concerning the mandatory requirements of regional policy statements. Such a statement must be prepared by the relevant regional council. And by reason of s 62(1)(i) it is specifically the regional council, through its regional policy statement, that is to decide which local authority (i.e. the regional council or the relevant territorial authority) to be responsible for specifying the objectives,

¹⁵ At [10].

¹⁶ Section 60(1).

¹⁷ See s 62(2).

policies, and methods (i.e. including rules) for the control of the use of land to avoid

or mitigate natural hazards and hazardous substances – and to maintain indigenous

biodiversity. Policy 7-1 is exactly the exercise of allocative responsibility intended

by that provision. The regional policy statement may determine that a territorial has

either some or no rule-making role in relation to controls of land use to maintain

indigenous biodiversity. Secondly, s 75(4) resolves any residual conflict between

regional and territorial plans. It provides that a district plan cannot be inconsistent

with a regional plan

[34] Finally, as the responsibility is given to regional councils to allocate the

relative rule-making roles of regional and territorial authorities under s 62(1)(i), no

issue of transfer of functions arises under s 33.

Conclusion

[35] It follows that I agree with the conclusion reached at first instance by the

Environment Court.

Disposition

[36] The appeal is dismissed.

[37] The Council is entitled to costs. If they cannot be agreed, memoranda may

be submitted.

Stephen Kós J

Solicitor:

Cooper Rapley, Palmerston North for Respondent

And to:

Donald Coles, RD2, SH 22, Huntly, Appellant

Federated Farmers of New Zealand, 159 Khyber Pass, Auckland

BEFORE THE ENVIRONMENT COURT

Decision No. [2017] NZEnvC O27

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of appeals under sections 120 and 174

of the Act

BETWEEN

PUKEKOHE EAST COMMUNITY

SOCIETY INCORPORATED

(ENV-2016-AKL-000164)

Appellant

AND

AUCKLAND COUNCIL

First Respondent

AND

WATERCARE SERVICES LIMITED

Second Respondent

Court:

Environment Judge D A Kirkpatrick

Environment Commissioner R M Dunlop Environment Commissioner D Bunting

Hearing:

at Auckland on 14, 15 and 16 December 2016

Appearances:

J C Brabant and S T Darroch for Appellant

L J Cutfield for First Respondent

P M S McNamara and W M Bangma for Second Respondent

Date of decision:

1 March 2017

Date of Issue:

0 1 MAR 2017

INTERIM DECISION OF THE ENVIRONMENT COURT

- A. Watercare's requirement is confirmed, subject to amended conditions.
- B. The Council's grant of resource consents is confirmed, subject to amended conditions.
- C. The Parties are directed to review the revised proposed conditions attached



to this interim decision and respond with any submissions as to amendments to those proposed conditions within 15 working days.

- D. Any new matter raised by one party and requiring a response by another is to be addressed within a further 5 working days.
- Costs are reserved.

REASONS

Introduction

- [1] This case is about a proposal by Watercare Services Limited (**Watercare**) to build two large reservoirs on a site on Runciman Road, east of Pukekohe. The proposal is opposed by a number of landowners and residents who live around the site and who have incorporated the Pukekohe East Community Society (**the Society**) to represent them.
- [2] The dispute is essentially a contest between Watercare's focus on the benefits that these reservoirs will offer for the strategic improvement of Auckland's potable water supply and the Society's concerns about the adverse effects of the construction and existence of the reservoirs on the quality of the environment in the surrounding area and on its amenity values. This case is an example of the tension between a strategic approach to large scale infrastructure for the benefit of urban Auckland and the local interests of a particular community which will bear most of the direct adverse effects of the construction and presence of that infrastructure.
- The main issue between the parties, as argued before the Court, is whether the scale of the proposed reservoirs (in particular, their height above ground level) is necessary to provide those benefits. As part of its case, the Society advanced an alternative method of partially burying the reservoirs in order to reduce their effects. Expert opinion was divided on the relative advantages and disadvantages of the alternatives. Watercare says that any reduction in the height of the reservoirs will affect the cost, operational efficiency and resilience of its system. The Society challenges the way in which Watercare has arrived at that position.
- [4] The legal issues to be resolved by the Court, in terms of the main contest



between the parties, are:

- (a) Whether the adverse environmental effects of the reservoirs will be significant;
- (b) Whether Watercare has adequately considered alternatives for the design, especially the height, of the reservoirs;
- (c) Whether it would be appropriate to require the proposed works to be modified to address the adverse effects they will have; and
- (d) Whether the conditions to be attached to the designation (if confirmed) and the associated resource consents (if granted) are adequate to address the effects of the proposed works.

Background

- [5] Watercare is a requiring authority under s 167 of the Act and in terms of the Resource Management (Approval of Watercare Services Limited as a Requiring Authority) Notice 2012¹ for its network utility operations of:
 - (a) undertaking the distribution of water for supply; and
 - (b) undertaking a drainage and sewerage system;

including the operation, maintenance, replacement, upgrading and improvement of infrastructure related to these operations, in the Auckland region and in the Waikato Region, for the purposes of providing services to Auckland.

[6] By a notice of requirement (**NOR**) dated 13 October 2015, Watercare proposed a designation for land at 108 Runciman Road, Pukekohe East to be used for water supply and storage purposes including temporary construction activities and the long term operation, access, inspection and maintenance of water supply and storage infrastructure and associated activities. The particular work proposed pursuant to such a designation was described in summary as:



New Zealand Gazette No. 69, 21 June 2012.

- (a) Two 50 megalitre (ML) (approximately) water storage reservoirs;
- (b) A detention pond for stormwater;
- (c) Vehicular access to and within the site;
- (d) Associated pipes, chambers, structures and other activities both above and below ground; and
- (e) Earthbunding and landscaping of the site.
- [7] The two reservoirs will have the most significant permanent effects. As designed, they will be concrete cylinders approximately 80m in diameter and 13m high with the first located 48m from Runciman Road and 107m from Rutherford Road and the second located 120m from Runciman Road and 48m from Rutherford Road. The construction of them will also have significant effects, including noise, vibration and traffic effects, given the likely timeframe necessary to build them: Watercare intends to build them in sequence with each reservoir expected to take 3 years to construct, although there may be a gap between completion of the first and the commencement of the second.
- [8] Watercare's objectives for the proposed work, as stated in its NOR, are:
 - (a) To increase resilience for the southern water supply and transmission systems;
 - (b) To mitigate risks in the southern water supply and transmission systems through increased storage;
 - (c) To increase security of water supply to North Franklin and Auckland;
 - (d) To improve the operational flexibility and functionality in the water supply and transmission systems; and
 - (e) To minimise construction and whole of life operating costs, whilst having regard to the sustainable management of resources.



- [9] As the proposed work also requires resource consents under regional rules in the Auckland Unitary Plan (AUP) (being for discharge of potable water from the proposed reservoirs, diversion and discharge of stormwater, bulk earthworks, and the location of structures within an overland flow path) and consent under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (2012) (NESCS) for disturbance of soil on a site where an activity on the Hazardous Activities and Industries List (HAIL) has been undertaken, Watercare also applied for those consents at the same time.
- [10] Watercare originally sought resource consents under the then operative Regional Plan (Air, Land and Water) (ARP:ALW), the Regional Plan (Sediment Control) (ARP:SC), and the Proposed Auckland Unitary Plan (PAUP) as follows:

Under the ARP:ALW:

- (a) The diversion and discharge of stormwater undertaken by a stormwater or wastewater network utility operator outside of the urban area under Rule 5.5.13 was a discretionary activity.
- (b) Discharge of scour water from water supply reservoir, not otherwise provided for in any other rule, under Rule 5.5.68 was a discretionary activity.

Under the ARP:SC:

(c) Earthworks greater than or equal to 5ha on land with a slope less than 15 degrees under Rule 5.4.3.1 was a restricted discretionary activity.

Under the PAUP:

- (d) Any structure located within or over an overland flow path under Part 3
 Chapter H Rule 4.12.1 is a discretionary activity.
- (e) Diversion and discharge of stormwater resulting from impervious areas greater than 5000m² in a rural area under Part 3 Chapter H Rule 4.14.1.1 was a discretionary activity.
- (f) Discharge of scour water from water supply reservoir, not otherwise provided for in any other rule, under Part 3, Chapter H Rule 4.18.1 was



a discretionary activity.

[11] Overall, accepting that bundling of all consents for the single project would be appropriate, consent was required under the foregoing provisions as a discretionary activity.

[12] By the time of the hearing of the appeals, the relevant provisions of the Auckland Unitary Plan were to be treated as operative under s 86F of the Act. The relevant provisions affecting the proposed works and the consequent activity statuses, after recommendations by the AUP Independent Hearings Panel and decisions by the Auckland Council, are:

- (a) Bulk earthworks greater than 50,000m² where land has a slope less than 10 degrees outside the Sediment Control Protection Area under Rule E26.5.3.2 (A103) is a restricted discretionary activity.
- (b) Diversion and discharge of stormwater runoff from impervious areas, not otherwise provided for, under Rule E8.4.1 (A10) is a discretionary activity.
- (c) Discharge of water or contaminants (including washwater) onto or into land and/or into water, not complying with the relevant standards or not otherwise provided for, under Rule E4.4.1 (A15) is a discretionary activity.
- (d) Discharges of contaminants into air or into water or onto land not meeting certain permitted activity standards under Rule E30.4.1 (A6) is a controlled activity.
- [13] Overall, the activity status under the operative AUP remains that of a discretionary activity. It would remain so in any event given the requirement of s 88A of the Act.

[14] The proposed activity is located on land where a HAIL activity, being A10: Persistent pesticide bulk storage or use including market gardens, has been or is likely to have been undertaken. As the proposed works involve soil disturbance on the site the NESCS applies. A detailed site investigation accompanied the

application which noted that the proposed works are not considered to constitute a change in land use under Regulation 5(6) of the NESCS as changing the use of the site to a reservoir facility is not considered reasonably likely to harm human health. However, due to the duration of works and volume of soil disturbance required to undertake the proposed works, resource consent is required under Regulation 9(1) of the NESCS as a controlled activity.

[15] The Auckland Council on 30 May 2016:

- (a) as the territorial authority in respect of the NOR, recommended that the requirement be confirmed subject to conditions; and
- (b) as the consent authority in respect of the resource consents, granted the resource consents subject to conditions.

[16] On 24 June 2016 Watercare decided to accept the Council's recommendation that the requirement be confirmed but modified certain conditions. These modifications are not of any consequence to the issues raised on appeal.

[17] The Society lodged a notice of appeal dated 26 July 2016 against both Watercare's decision on the Council's recommendation on the NOR and the Council's decision on the applications for resource consents. The notice of appeal raised a number of issues concerning the relevant statutory considerations (including the allegedly self-serving and inadequate nature of Watercare's objectives and the allegedly improper or otherwise inadequate consideration of alternatives), the adverse effects on the environment including the local community and the Pukekohe East School, the historic Pukekohe East Presbyterian Church and its surrounds, the outstanding natural feature of the Pukekohe East tuff ring to the southwest of the site and the outstanding natural landscape to the east, and whether the need for the height of the reservoirs had been correctly assessed.

[18] As lodged, the appeal sought:

- (a) Cancellation of the designation and refusal of the resource consents;or
- (b) Alternatively, confirmation of the designation and resource consents



but on modified conditions that reduce the bulk and height of the tanks to a height not more than 2.5 m above existing ground level with consequential amendments to conditions including the volume of earthworks, the proposed planting regime and related matters.

Assessment of notices of requirement

- [19] Under s 174(4) of the Act, the Court, in determining an appeal against a decision of a requiring authority, must have regard to the matters set out in s 171(1) of the Act as if it were the territorial authority. Section 171(1) provides:
 - (1) When considering a requirement and any submissions received, a territorial authority must, subject to Part 2, consider the effects on the environment of allowing the requirement, having particular regard to—
 - (a) any relevant provisions of-
 - (i) a national policy statement:
 - (ii) a New Zealand coastal policy statement:
 - (iii) a regional policy statement or proposed regional policy statement:
 - (iv) a plan or proposed plan; and
 - (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—
 - (i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or
 - (ii) it is likely that the work will have a significant adverse effect on the environment; and
 - (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
 - (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.
- [20] The meaning of this subsection and the correct approach to its application in the context of its legislative history and other relevant provisions in the Act were extensively considered by the High Court in *New Zealand Transport Agency v Architectural Centre*.² The decision establishes the following principles of relevance to this case:



[2015] NZRMA 375.

- (a) The words "subject to Part 2" means that the provisions of Part 2 of the Act are to prevail in the event of any conflict with the matters which are then referred to.³
- (b) The requirement to have "particular regard" to the matters listed in paragraphs (a) (d) conveys a stronger direction than merely "to have regard to" but does not place extra weight on the matters to which it refers: rather it points to the need to consider and carefully weigh the matters specifically and separately from other relevant considerations, recognising them as being important to the particular decision.⁴
- (c) The adequacy of consideration of alternatives will be influenced to some degree by the extent of the consequences in s 171(1)(b) which permits, and may require, a more careful consideration of alternatives where there are more significant adverse effects.⁵
- (d) Section 171(1)(b) does not require a full evaluation of every non-suppositious alternative with potentially reduced effects.⁶

[21] In relation to the adequacy of the consideration of alternatives under s 171(1)(b), the relevant principles from earlier case law were gathered together in the final report and decision of the Board of Inquiry into the Upper North Island Grid Upgrade Project⁷ as follows:

(a) The focus is on the process, not the outcome: whether the requiring authority has made sufficient investigations of alternatives to satisfy itself of the alternative proposed, rather than acting arbitrarily, or giving

Final Report and Decision of the Board of Inquiry into the Upper North Island Grid Upgrade Project, Ministry for the Environment, Board of Inquiry, 4 September 2009 at [117] and [186].



At [37]-[40], citing Environmental Defence Society Inc v Mangonui County Council [1989] 3

NZLR 257 (CA) at 260, McGuire v Hastings District Council [2000] UKPC 43; [2002] 2 NZLR

577 at [22] and Auckland Volcanic Cones Society Inc v Transit New Zealand [2003] NZRMA

316 (HC) at [59]-[60]. See also the discussion in R J Davidson Family Trust v Marlborough

District Council [2017] NZHC 52 at [61] – [88].

At [64]-[68], citing Ashdown v Telegraph Group Ltd [2001] Ch 685, [2001] 2 All ER 370, at [34] and Marlborough District Council v Southern Ocean Seafoods Ltd [1995] NZRMA 220 (PT) at 228.

At [119]-[142], citing *Queenstown Airport Corporation Ltd v Queenstown Lakes District Council* [2013] NZHC 2347.

⁶ At [152]-156].

only cursory consideration to alternatives. Adequate consideration does not mean exhaustive or meticulous consideration.

- (b) The question is not whether the best route, site or method has been chosen, nor whether there are more appropriate routes, sites or methods.
- (c) That there may be routes, sites or methods which may be considered by some (including submitters) to be more suitable is irrelevant.
- (d) The Act does not entrust to the decision-maker the policy function of deciding the most suitable site; the executive responsibility for selecting the site remains with the requiring authority.
- (e) The Act does not require every alternative, however speculative, to have been fully considered; the requiring authority is not required to eliminate speculative alternatives or suppositious options.
- [22] We respectfully adopt that summary.

[23] The phrase "reasonably necessary" as used in s 171(1)(c) was considered by the High Court in *Queenstown Airport Corporation Ltd v Queenstown Lakes District Council*9 where it was described as a standard used in everyday language which should require no undue elaboration. In the context of that case, however, where the use of the NOR process affected private land and would have a coercive effect, the High Court went on to approve of the Environment Court's formulation that the meaning of the word necessary falls between expedient or desirable on the one hand and essential on the other, and the epithet reasonably qualifies it to allow some tolerance. The use of the phrase "reasonably necessary" does not require the best site to be selected. The High Court observed that the inbuilt flexibility of this definition enables the Court to apply a threshold assessment that is proportionate to the circumstances of the particular case in order to assess whether the proposed work is clearly justified.

[24] In relation to the listing of "any other matter" in s 171(1)(d), we observe that this phrase must be read and understood in the context of the requirement for

³ [2013] NZHC 2347 at [93] – [98].

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"particular regard" to be had to it, and that it must be "reasonably necessary" for such regard to be had to it in order for the territorial authority to make its recommendation on the NOR or, on appeal, for the Court to make its decision. Given the import of those other phrases as discussed above, this means that for the purposes of sub-paragraph (d), any such other matter must be of comparable significance to the matters set out in sub-paragraphs (a) - (c) of s 171(1) to the making of a decision under s 171.

Assessment of applications for resource consents

[25] The associated resource consents under the relevant regional rules of the AUP and under the NES are to be assessed and considered in terms of the usual provisions in Part 6 of the Act. As the focus of the appeal was on the NOR and the issues raised in relation to it, and the Society stated that it did not raise any additional challenge to the associated resource consents beyond whatever may follow from the Court's decision on the NOR, we will not lengthen this decision unnecessarily by a review of those provisions.

The site and its neighbourhood

The subject site at 108 Runciman Road has an area of 14.0204 hectares and frontages to both Runciman Road (to the west) and Rutherford Road (to the south). The site is currently used for cropping⁹ and has no buildings on it other than what appear to be some irrigation structures. The site is cut roughly in half by a gas pipeline running north-south and an associated easement in favour of The Natural Gas Corporation of New Zealand. Watercare's proposal is wholly located within the western portion of the site, having an area of 6.6288ha and leaving a clearance of at least 10m between the area proposed to be designated and the gas pipeline easement.

[27] The site surrounds a lot of 1790m² at the corner of Runciman and Rutherford Roads, on which is situated Watercare's hydraulic balancing tank for its bulk watermain from Tuakau to Redoubt Road.¹⁰ This tank is approximately 28m in diameter and has a total height of 4m, but is partially buried so that it is only 2m above ground level. It was built when the bulk watermain was constructed in 1992.

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Goodwin EIC at 5.2, 5.2

Located in Urban South Auckland

- [28] The western portion of the site, on which the works are proposed, slopes gently downhill along both road frontages from that corner. Along the northern boundary are five rural-residential properties, with more beyond. The eastern side of the site slopes down to a heavily vegetated area. Across Rutherford Road to the south is a rural residential property at the corner and a farm property next to it. There are more rural and rural-residential properties to the east along Rutherford Road as well as the Rutherford Road Nature Reserve.
- [29] Across Runciman Road to the west is a range of property types and activities, being, from south to north, a church, a private airstrip, a residential property and some rural residential properties and, to the northwest, the school and playcentre.
- [30] More particularly, opposite the existing balance tank is the Pukekohe East Presbyterian Church, built on the site of the first seat of local governance in Franklin in 1862, opened on 5 April 1863 and the site of a significant battle between Maori and European settlers on 14 September 1863.
- [31] To the north of the church is a private airstrip at 97 Runciman Road, with associated buildings including hangars. Next to the entrance to the airstrip and directly opposite the site is a residential property at 103 Runciman Road. These properties are zoned Mixed Rural. Next to this residential property are two more houses set back from the road at 105 Runciman Road and rural land at 109 Runciman Road, but these properties are zoned Future Urban.
- [32] The Pukekohe East School is at 137 Runciman Road. It was established in 1880 (prior to that date, the church served also as the schoolhouse). It has seven classrooms and a roll of approximately 160. It is zoned Mixed Rural. The frontage of the school is not opposite the site, but visual simulations indicate that the top of the first reservoir will be able to be seen from the playing field. A playcentre is located on the School site.
- [33] By way of a general description of this neighbourhood, it is a rural-residential area with some rural uses and a grouping of community facilities. It was clear from the evidence presented by the Society that there is a well-established community in this area.



[34] For Watercare's purposes, the main topographical characteristic of the site is its elevation. It is at a position on the Pukekohe East ridge where it is sufficiently higher than the reservoirs to the north at Redoubt Road that water pumped into the proposed reservoirs from the Waikato River would then be able to flow to the Redoubt Road reservoirs by gravity and without the need for further pumping.

[35] From the Society's point of view, the same topographical characteristic means that the proposed reservoirs would be at one of the highest points in the local landscape and would have a dominating effect on the outlook for neighbours and the amenity values of the local environment.

Relevant plan provisions

[36] It was agreed among the parties and the expert planning witnesses that the relevant provisions of the proposed AUP are beyond the point where they might be altered by any further appeal or review process and accordingly may be treated as operative in terms of s 86F of the Act. We see no reason to doubt the shared view of all counsel and expert planners and will proceed on that basis.

[37] The site is zoned Mixed Rural, as is most of the immediately surrounding land. The purpose of the Mixed Rural zone is stated in Chapter H19 of the AUP to be to provide for rural production generally on smaller sites and non-residential activities of a scale compatible with smaller site sizes. The objectives for the zone are:

- (a) The existing subdivision pattern is used by a range of rural production activities and non-residential activities that support them.
- (b) The continuation of rural production and associated non-residential activities in the zone is not adversely affected by inappropriate rural lifestyle activity.
- (c) Rural character and amenity values of the zone are maintained while anticipating a mix of rural production, non-residential and rural lifestyle activities.

[38] Farming, greenhouses, intensive farming, forestry and rural airstrips are among the permitted activities. The maximum permitted height of dwellings and accessory buildings is 9 m, and of other buildings is 15 m.

[39] There is no specific provision in the text of the AUP for the Mixed Rural zone



which addresses infrastructure or utilities. Chapter E26 of the AUP deals with network utilities on an Auckland-wide basis. The objectives for network utilities in all zones are set out in Section E26.2 and relevant objectives are:

- (1) The benefits of infrastructure are recognised.
- (2) The value of investment in infrastructure is recognised.
- (3) Safe, efficient and secure infrastructure is enabled, to service the needs of existing and authorised proposed subdivision, use and development.
- (4) Development, operation, maintenance, repair, replacement, renewal, upgrading and removal of infrastructure is enabled.
- (5) The resilience of infrastructure is improved and continuity of service is enabled.
- (6) Infrastructure is appropriately protected from incompatible subdivision, use and development, and reverse sensitivity effects.
- (9) The adverse effects of infrastructure are avoided, remedied or mitigated
- [40] Both underground and above ground reservoirs are listed in Table E26.2.3.1 at lines A47 and 48 as permitted activities in the Rural zones. Under Rule E26.2.5.2, the maximum permitted height for structures in the table is 2.5 m.
- [41] As mentioned, across Runciman Road to the west, north of the airstrip and around the school, the land is zoned Future Urban. About 240 metres to the north the land is zoned Countryside Living and is identified as the Runciman Precinct. The purpose of the Runciman Precinct is stated in Section I437 of the AUP to be to provide a rural countryside living opportunity where subdivision is able to be undertaken in a comprehensive and integrated manner recognising the environmental values and character of the area. We had little evidence on the likely effect of the proposed works on these aspects of the prospective future environment but find, in any case, that with the conditions proposed they would be less than those on the existing environment assessed below.
- [42] The site is not located in any of the overlays in the AUP, but is relatively close to land affected by a number of them. There was disagreement between the expert planners as to the degree to which the objectives and policies for the overlays may apply to the proposal. Mr Lawrence, called by the Society, took the



view that in order to protect the integrity of the natural heritage and historic heritage items near the site, the overlay objectives and policies were of particular relevance when considering the proximity, character and scale of the proposed activities while Ms Rickard, called by Watercare, took the view that any consideration of those provisions must be moderated given that the site is not subject to any overlays. We will address this difference of opinion in our consideration of the issues.

[43] The property at the corner of Runciman and Rutherford Roads is subject to an existing designation¹¹ by Watercare for a hydraulic balancing tank for water supply purposes, being part of the water pipeline from the Waikato River to Auckland. The school is subject to an existing designation for a school.

[44] Across the intersection from the balancing tank, the church is listed in Schedule 14.1 to the AUP¹² as a Category B place as having considerable historic heritage significance based on a number of its attributes, with its defined extent of place being the legal boundaries of its site. The church is also a recorded archaeological site.¹³

[45] The Pukekohe East tuff ring to the southwest of the church is identified in Schedule 6 to the AUP¹⁴ as an outstanding natural feature based on a number of attributes and described as being the best preserved tuff ring in the South Auckland volcanic field.

[46] The eastern side of the site (but not on the part of the site proposed to be designated) is identified in Schedule 7 to the AUP¹⁵ as being at the southern edge of the West Ramarama and Bombay outstanding natural landscape, within which are also some areas identified as significant ecological areas.

[47] The whole area is identified as a high-use aquifer management area. The site and most of the surrounding area is also identified as a quality-sensitive aquifer management area. The site together with the land to the north and east is identified as a high-use stream management area. The area is also noted as being subject to the provisions of the AUP relating to the Macroinvertebrate Community Index (MCI)



Designation no. 9559.

ID no. 01502.

Reference no. R12/741.

ID no. 169.

ID no. 59.

to protect water quality in the area. No specific issue arose in the evidence in relation to these controls.

Submissions at the hearing

[48] The hearing of the appeals was heard in Auckland over two and a half days on 14, 15 and 16 December 2016. The Court conducted a site visit on 21 December 2016.

[49] In presenting the case for the Society, counsel announced that it was not pursuing the issue of alternative sites but was focussing on alternative methods, in particular, the modification of the NOR to require partial burial of the two reservoirs allowing for a maximum water level of RL $146m^{16}$ and thus a roof height of between RL 148 - 149m, depending on detailed roof design. According to counsel, this would reduce the height of the reservoirs by approximately 6.7 - 7.7 metres.

[50] Counsel for the Society accepted that the reservoirs would be important and necessary infrastructure to improve the security of supply, resilience and operational flexibility of Auckland's bulk water network and that a designation was needed for such work. He submitted, however, that the proposal would have significant adverse effects on the landscape, the maintenance and enhancement of amenity values (including the character of the neighbourhood) and the quality of the environment. On the basis that Watercare's objectives for the proposal do not require any particular reservoir height or top water level or rate of supply to the Redoubt Road reservoirs, he submitted that the alternative method of partial burial of the reservoirs should be considered in terms of s 171(1)(b)(ii) of the Act.

[51] Counsel for the Society also raised concerns about the adverse effects of construction, but stated that these concerns were focussed on the alleged looseness of the conditions. The Society also did not pursue its appeal against the grant of resource consents in relation to the proposal, focussing its case on the notice of requirement.



RL 146m is the height of the water level in metres above mean sea level. RL is the acronym for Reduced Level. A reduced level is the vertical distance between a measured point and an adopted level datum. The Auckland Vertical Datum 1946, as used in the Auckland Unitary Plan, is mean sea level.

[52] Counsel for the Society was critical of Watercare's objectives for the designation,¹⁷ describing them as aspirational and lacking specific performance criteria. He acknowledged, however, that overly prescriptive objectives could be seen as self-fulfilling and thus have the effect of rendering the review under s 171(1)(c) of the Act by the territorial authority or the Court less effective.

[53] In our view, it is generally appropriate to consider the objectives of a requiring authority for a work and designation in a similar light as the objectives in a policy statement or plan, as higher level considerations for achieving the purpose of the Act rather than as executive provisions such as policies or rules. The Society's agreement that reservoirs on the site are reasonably necessary to achieve those objectives, but its position that the particular method proposed by Watercare is not, appears to be consistent with that approach to the objectives.

[54] Counsel for Watercare noted in reply that the narrowing of the relief sought by the Society resulted in the central issue in this proceeding being a comparison of the respective methods and a determination whether the NOR should be confirmed with a TWL of RL 153m or whether in light of the relevant Part 2 considerations and the degree of significance of the adverse effects the NOR should be confirmed with a TWL of RL 146m.

Issues and evidence

- [55] From the evidence presented by the parties, the following specific issues emerged:
 - (a) Whether the NOR amounted to re-litigation of an issue which had been determined in a previous proceeding, being the height of the existing balancing tank above ground.
 - (b) The degree of significance of likely adverse effects.
 - (c) Whether Watercare's proposed method is inefficient compared to the Society's alternative.
 - (d) Whether the NOR was inconsistent with or not supported by the



Set out above at [8].

relevant planning instruments.

- (e) Whether the work and designation was not reasonably necessary either because WSL's objectives do not address likely adverse effects or because partial burial of the reservoirs is necessary to meet the objectives.
- (f) Whether the proposed conditions attaching to the NOR and resource consents would be adequate to address:
 - i. Landscape and visual effects;
 - ii. Amenity values and the quality of the environment;
 - iii. Historic heritage effects;
 - iv. The safety of neighbours and neighbouring property.
 - v. The effects of discharges of treated water and stormwater;
 - vi. The handling of contaminated soils present on the site; and
 - vii. The effects of construction, in particular the effects of noise, vibration and traffic on neighbours and neighbouring properties during construction of the reservoirs.

The height of the existing balancing tank

[56] The existing balancing tank for the bulk watermain from Tuakau to Redoubt Road is located at the corner of Runciman and Rutherford Roads. As previously noted, it is a substantial structure being approximately 28m in diameter and with a height above ground level of 2m. It was mentioned by a number of submitters that the height of the tank above ground had been a contested matter when a designation for the balancing tank was sought in 1992 and that they believed that this issue had been resolved on some basis that should limit the height of these proposed reservoirs to the same height above ground.



[57] No direct evidence was presented to us of any agreement between Watercare and the opponents of the balancing tank at the time, nor of any relevant planning document or order of the (then) Planning Tribunal which would restrict Watercare's proposal or our consideration of it in this proceeding.

[58] We note that Mr Lawrence, the expert witness on planning matters called by the Society, presented a letter dated 14 March 2016 from Peter Aitken, solicitor of Waiuku, to a person named Glenn McDougall which sets out Mr Aitken's general recollection of acting for previous owners of the property on the southern corner of Runciman and Rutherford Roads. Neither the sender nor the recipient was called to give evidence. The letter is insufficient to provide a probative basis for the proposition that a height limit has previously been set which is somehow determinative of the present appeal.

[59] The case for the Society was presented on the basis of reducing the overall height of the reservoirs but not to a height as low as 2m above ground. The balancing tank is an existing structure in this environment and we take it into account accordingly, but we do not assess the appropriateness of the height of the reservoirs based on the height of the balancing tank.

[60] We note that the ongoing need for the balancing tank may be reduced once the reservoirs are operational, but that it is likely to be retained in case it is needed for any reason.¹⁸

The degree of significance of adverse effects

[61] Under s 171(1)(b), when considering the effects on the environment of allowing Watercare's NOR, we are to have particular regard to whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if Watercare has no sufficient interest in the land to do so or it is likely that the work will have a significant adverse effect on the environment. It is apparent from this provision that the legislation requires regard to be had to the consideration of alternatives where the imposition of the work and its effects on existing owners and occupiers will be significant, either because some interest in land must be acquired for the work, perhaps compulsorily, or the effects that will occur are



Matthews EIC, Attachment 2, p.2.

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significant. The two limbs of s 171(1)(b) are discrete, so both must be examined.

[62] Watercare owns the site and there was no suggestion that there was any impediment to the exercise of its ownership rights that would call s 171(1)(b)(i) into play.

[63] We have already identified a number of effects that will or are likely to occur as a result of the work. The issue is whether they are significant. The RMA does not define or otherwise set any threshold for what may be "significant," which may be seen as consistent with the approach taken to the use of the word "minor" in similar contexts. In the Court's experience the use of the word "significant" tends to require a generalised evaluative approach, consistent with its ordinary meaning, to look for effects that are sufficiently great or important in terms of their consequences for or influences on an identified value to warrant attention. There is no absolute scale of effects, nor any fixed datum from which an effect is to be measured.

[64] It is not clear whether the degree of effect should be assessed as if there were no mitigation or whether the net effect of the work and any proposed mitigation is a more appropriate basis for assessment and evaluation. In general terms, that seems also to require consideration of the relevant context. In some circumstances the proposed mitigation may be an intrinsic part of the work, so that it would be unreal to separate the two; in other cases the mitigation may be sufficiently separate from the work itself that its effectiveness should also be considered separately from the work.

[65] In this case we consider that the size of the reservoirs, in terms of both their height and their diameter, to be significant in the context of this neighbourhood. While farm buildings could be as large, and Mr Goodwin, the landscape and visual effects expert called by Watercare, identified examples of sheds and glasshouses of a similar scale, he accepted (as did his peers, Mr Hogan, called for the Council and Ms Peake, called for the Society) that the combination of height and diameter on this site, without mitigation, would have significant adverse visual effects. The proposed mitigation of earthworks and planting is separate from the construction of the reservoirs, which indicates that it is appropriate to treat the visual effects of the reservoirs before turning to consider the proposed mitigation.



[66] There was less agreement about the likely landscape effects, treating the

landscape as a combination of effects perceived not just by the eye but also by a person's overall experience of the area, but the starting point for that debate confirms to us that the landscape effects may also be significant without mitigation.

[67] A range of views were expressed about the effect on "amenity" and "character". It appears that counsel and expert witnesses who appear before us sometimes treat references to "amenity" (which generally means simply the quality of being pleasant or agreeable, often as a subjective experience) as synonymous with amenity values, which are defined in s 2 of the Act to have a broader range of meaning. While the ordinary meaning of amenity may be within the scope of the definition of amenity values, and we could understand how a party could use the terms interchangeably, it is not clear to us that they are synonymous. The word "character" is sometimes used in a similar way without any particular reference or description to specify the characteristics that would inform a detailed assessment of the amenity values of a site or of the environment in which an activity will have effects.

[68] The main point is that for the purposes of assessing the matters in s 171 of the Act subject to Part 2, in particular for present purposes considering the matters in s 7(c) and s 7(f) of the Act, we would expect counsel and expert witnesses who refer to these matters to be clear in their use of the terms which are found in the Act and to present an explanation of any other terms they may use instead of or in addition to the statutory terms. In a case of this kind, and likely in many other cases, these distinctions are necessary to understand what the particular identified effect consists of so that the most appropriate option to avoid, remedy or mitigate that effect can be identified efficiently and effectively. In this case, we think that matters of amenity and character were well-covered in the assessments of visual and landscape effects and so we will not address them separately.

[69] The potential adverse effects on the protection of historic heritage from inappropriate use and development was also raised by the parties and addressed by well-qualified and experienced expert witnesses. The proximity of the church and the nature of its historic significance, especially as the focal point of a battlefield, bring into consideration the need to assess the degree to which the proposed work may diminish those historic qualities.



[70] As well as their visual and landscape effects, the construction of the

reservoirs over a lengthy period is likely to result in significant effects, both in terms of particular events and in terms of an on-going state of affairs that may disrupt or intrude on the lives of those who live nearby or regularly travel along Runciman Road.

[71] For those reasons, we are satisfied that the adequacy of the consideration of alternatives is necessary given the likelihood of a significant adverse effect on the environment. We note that this consideration can be limited to methods, in particular whether the reservoirs should be partially buried, given the limited basis on which the Society presented its case.

Reasonable necessity and relative efficiency of methods

[72] As previously recorded, the main issue between Watercare and the Society is whether partially buried reservoirs would achieve the objectives for this work at least as well as reservoirs constructed entirely above ground level. In order to properly determine this issue we must assess whether the works and designation, as proposed by Watercare, are reasonably necessary for achieving Watercare's objectives¹⁹ while considering the effects on the environment of allowing the requirement and having particular regard to the efficient use and development of resources²⁰ by comparison with any reasonable alternative method.²¹

[73] To undertake this complex assessment in a realistic way we need to consider the context of the existing southern water supply system for Auckland and the manner in which it operates.

[74] In 1992 a water abstraction and treatment plant and pump station were built alongside the Waikato River near Tuakau. The rate of abstraction is presently limited by the terms of a resource consent to 150 megalitres per day (ML/d). At the same time a 1200 mm diameter steel watermain was built to convey water from the Tuakau pumping station to a balancing tank at Runciman Road and from there by gravity north to two reservoirs at Redoubt Road (the Redoubt Road Reservoirs). These two reservoirs have a combined capacity of 123 megalitres (ML).



As required by s 171(1)(c) of the Act.

As required by Part 2, s 7(b) of the Act.

In terms of s 171(1)(b)(ii) of the Act in the circumstances of this case

[75] Water is also piped to the Redoubt Road Reservoirs from storage dams in the Hunua Ranges via the Ardmore Treatment Plant. From the Redoubt Road Reservoirs, water is supplied under gravity to consumers across the region.

[76] There are a number of branch pipelines connected to the watermain which supply up to 12 ML/d to the southern communities of Clarks Beach, Patumahoe, Pukekohe (where there are a number of storage reservoirs) and to Pokeno (where future reservoirs are proposed) and Tuakau (all of which, for consistency with the term used in the project objectives, we will call North Franklin). If there is a supply disruption from the Waikato River, a pumping station at Drury is available to backfeed water south at a rate of about 11ML/d from the Redoubt Road Reservoirs to these communities.

[77] The consent for the Runciman Road balancing tank required that the tank be partially buried with 2m of its 4m height below ground level. This configuration limits the operational effectiveness and capacity of the watermain which connects this tank to the Redoubt Road Reservoirs by limiting the head and so reducing the hydraulic gradient.

[78] Watercare's endeavour is to provide an average of 24 hours of storage across the region to buffer demand variation and supply disruptions. Over the next 20 years, 200 ML of additional storage is required to reduce the disparity between production capacity and regional storage.²² This additional storage would be met in part by the combined storage of 100 ML proposed for the two Runciman Road Reservoirs.

[79] To provide resilience of supply in the event of power outages and to minimise costs to consumers, Watercare has a key strategic objective of maximising the use of gravity flow for the operation of Auckland's water supply system. Against this objective, Watercare is seeking to provide an enhanced gravity supply in the watermain between its proposed new reservoirs at Runciman Road and the Redoubt Road Reservoirs as well as the facility to back-feed North Franklin by gravity from Runciman Road when there are pumping outages at the Waikato treatment plant.



[08] Two engineering experts with particular experience in water supply systems gave evidence, being Mr J Wardle called by Watercare and Mr M J Bell called by the Society. Key agreements reached between them and set out in their joint witness statement were:

- (a) Their respective estimates of the gravity flows in the watermain between Runciman Road and Redoubt Road are within 1 ML/d of each other at any elevation in the range of RL153m to RL145m at the proposed Runciman Road reservoirs, which they agree is close agreement.23
- (b) The functionality of the Harrisville Road feed tank, located between the Waikato Water Treatment Plant and proposed Runciman Road reservoirs with a top water level of RL 147m, would require further consideration if the top water level at Runciman Road was to be less than 148m.
- (c) For the reservoirs proposed at Runciman Road, the water depth will be 10 metres with the top 3 metres being the normal operating range for diurnal demand and optimal water quality.

[81] The top water level (TWL) of the two Redoubt Road reservoirs when these reservoirs are 100% full is RL 116m. The flow capacity of the watermain from the proposed Runciman Road reservoirs to maintain this TWL varies depending on the water level in the Runciman Road reservoirs. The higher the water levels at Runciman Road, the higher the flow capacity. The variations in the flow capacity with changes in water levels (described as the top water level (TWL) and the low operating level (LOL)), as taken from the evidence, are set out in the following table:

Water Level in Reservoirs	Flow Capacity of Pipeline	Comment		
Watercare Proposal - Reservoirs above ground				
RL 153 m	160 ML/d	RL 153m is the TWL in the Runciman Road reservoirs proposed by Watercare on commissioning.		
RL 150 m	150 ML/d	RL 150m is the LOL (3m below the TWL) in the Runciman Road reservoirs and the controlling level for matching the abstraction limit of 150 ML/d from the		



		Waikato River.		
Society Proposal - Reservoirs partially buried				
RL 146 m	144 ML/d	RL 146m is the TWL in the partially buried reservoirs		
RL 143 m	137 ML/d	RL 143m is the LOL in the partially buried reservoirs		

[82] Mr Bell's evidence was that for the partially buried reservoir proposal, a gravity flow of 150ML/d in the watermain could be achieved only where the partially buried reservoirs at Runciman Road were full (TWL) and the Redoubt Road reservoirs were 70% full. He added that the average gravity flow which could be accommodated in the watermain over the normal operating range (between TWL and LOL) of the partially buried reservoir proposal was 145.2 ML/d or 96.8% of Watercare's target flow of 150 ML/d.²⁴

[83] Conversely, at the LOL (3 metres below the TWL), there is a 13ML/d reduction in the watermain flow capacity between Watercare's proposal (150ML/d) and the Society's partially buried alternative (137ML/d).

[84] While we were not provided with a copy of the Waikato River abstraction consent, our understanding is that under the current consent, abstraction from the river is limited to a maximum of 150 ML/d. This means that over any 24 hour period, no more than 150 ML can be abstracted from the river. Mr Perera advised that the Waikato is a "use it or lose it" source of water and that any reduction in the system capacity below 150ML/d would have a cumulative effect on system yield. He added that 4ML/d effective volume is equivalent to one year's population growth in Auckland.²⁵

[85] Mr Wardle told us that 150ML/d translates to an instantaneous flow rate of 1.74 L/sec averaged over a 24 hour period. Within a 24 hour period there can be variations to the 1.74 L/sec average flow rate. For example, Mr Perera told us that at times the instantaneous abstraction rate can be as high as 160 ML/d or 1.86 L/sec. If the instantaneous flow rate exceeds 1.74 L/sec for some of the day, then at other times during the day there must be offsetting flow rates of less than 1.74L/sec.



Bell EIC at 6.9

Perera Rebuttal at 6.4

Wardle EIC Attachment 1

Transcript at page 25

[86] As well as supplying water to the Redoubt Reservoirs, the Waikato River watermain supplies around 12 ML/d to North Franklin. Mr Wardle agreed that with this take-off, the net daily volume of water supplied to the Runciman Reservoirs could be less than 150ML.²⁸ But he added that a distinction needed to be drawn between the daily capacity and instantaneous capacity. To illustrate this he said that if at any particular time the North Franklin reservoirs were full, then Watercare would not want to be limited by the capacity in the watermain to Redoubt Road. It was his understanding that this was the basis under which Watercare had set a rate of 150ML/d as the system (or instantaneous) capacity for the design of the new reservoirs.²⁹

[87] As already described, if there is an outage at the Waikato plant, under the status quo, a pumping station at Drury back-feeds water from the Redoubt Road Reservoirs through the watermain and branch pipelines to supply North Franklin. Under Watercare's Runciman Road reservoir proposal, in the event of an outage at the Waikato plant, the height of the new reservoirs will allow back-feeding by gravity to North Franklin. This gravity supply will obviate the need for the existing Drury pumped supply.

[88] The minimum water level in the Runciman Road reservoirs to allow gravity supply to the North Franklin communities is RL 146m. This is the TWL in the partially buried reservoir alternative proposed by the Society.

[89] Inlet and outlet pipes will be constructed to connect the new reservoirs to the existing watermain located under Runciman Road. This includes construction within the road reserve close to the reservoir site.

[90] If the reservoirs were to be constructed at the depths proposed by the Society, the construction of these connections would result in considerable disruption in the road reserve. This is because in order to allow for back-feeding by gravity to North Franklin, the connections would need to be located at depths of up to 8m. This would require some 500m of the existing watermain along Runciman Road to be relaid at a lower depth.

[91] Mr Wardle points out that as this depth is at or beyond the limits of traditional

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Transcript at page 111

Transcript at page 115

trench and lay methods, construction by tunnel boring could be required at an additional cost in the order of \$5-10M. He adds that the watermain in the vicinity of the Harrisville Road feed tank would also need to be lowered so that it did not drain as the Runciman Road reservoirs neared empty. By contrast, Mr Bell's estimate of the cost of correcting the hydraulic grade line of the watermain on Runciman Road is in the order of \$1.1m using directional drilling.³⁰

[92] Neither expert was questioned on the reasons for the large difference between their cost estimates. In addition, no estimates were provided for the cost of undertaking watermain lowering work which would also be required at Harrisville Road.

[93] The TWL of RL 153m in Watercare's proposed Runciman Road reservoirs has been chosen to allow a minimum gravity flow rate of 150 ML/d in the watermain to Redoubt Road when the water level in the Runciman Road reservoirs is at a level of RL 150m (the LOL). As described above, these levels also allow for flows from the Runciman Road reservoirs by gravity to the south Auckland communities if there is an outage at the Waikato River plant.

[94] The partially buried reservoir alternative would not achieve Watercare's required minimum 150 ML/d gravity flow in the watermain to the Redoubt Road Reservoirs. The TWL and LOL proposed as the Society's alternative would fall short by 6 ML/d and 13 ML/d respectively. Under this proposal, 150 ML/d capacity booster pumps would be required at Drury to service the Redoubt Road Reservoirs. Such pumps were estimated by Mr Wardle to cost in the order of \$7.5m.³¹ Mr Bell's estimate (which is disputed by both by Mr Wardle and Mr Perera³²) is that this booster pumping station at Drury would cost around \$3m. Mr Bell said that in order for him to be able to provide any meaningful analysis of Mr Wardle's \$7.5m cost estimate, he would need to have been provided with a detailed breakdown of how the estimate was prepared, information which he did not have.³³

[95] For the partially buried reservoirs, an alternative to relaying lengths of the watermain at greater depths on Runciman Road and at Harrisville would be to



Bell EiC at 8.4

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Wardle Rebuttal at 3.5

Perera Rebuttal at 5.2.

Transcript at page 294

provide a pumping station at Runciman Road. Mr Bell estimated that this pumping station would cost around \$1.7m excluding a standby generator.³⁴ We could not find an equivalent cost estimate from Mr Wardle with the closest reference being in the NPV calculation at Attachment 9 of his evidence where he noted that the capital and operating costs of such a pump station had not been included in the NPV calculation.

[96] As well as the relative heights of the water levels, the design of the system must also take pipe friction into account. The flow of water in a pipe of a certain diameter is affected by both head pressure and the physical properties of the pipe which can cause a drop in pressure through friction. Internal friction on the walls of a pipeline is calculated using a parameter known as the pipe roughness coefficient, expressed in millimetres. Test measurements undertaken on the existing Waikato River watermain have established a roughness coefficient of 0.04mm. All of the flows calculated by the experts and presented in the evidence have been based on this 0.04mm roughness coefficient.³⁵

[97] Over time, gradual deterioration in the condition of the internal walls of the watermain will cause an increase in the roughness coefficient and a corresponding reduction in flow capacity. As an indication of the quantum of this effect, an increase in the roughness coefficient from 0.04mm for a new pipe to an upper limit of 0.2mm for an older pipe would reduce the maximum flow capacity between Runciman Road and Redoubt Road from 160 ML/d to 149 ML/d.³⁶ Mr Wardle told us that it would take decades for this level of deterioration to occur.³⁷

[98] When evaluated against the Project Objectives (set out above at [8]), our findings are as follows:

(a) Watercare's proposed above ground reservoirs at Runciman Road will increase resilience, increase storage, security of supply, improve the operational flexibility and functionality while minimising construction and whole of life costs of the southern water supply and transmission systems, by doing the following:



Bell EiC at 8.4

Transcript at page 128

Wardle Attachment 10

Transcript at page 129

- (i) Providing 100 ML of increased storage which is half of the total planned to be built over the next 20 years to reduce the disparity between existing production capacity and regional storage.
- (ii) Increasing the current constrained rate of the gravity supply in the watermain from Runciman Road to the Redoubt Road Reservoirs to Watercare's design standard of 150 ML/d at the LOL in the reservoirs.
- (iii) Increasing the security of supply to Franklin North by providing gravity supply back-feeding during outages at the Waikato River water treatment and pumping station.
- (iv) In doing so, increasing resilience by obviating the need to pump water from Redoubt Road for this back-feeding.
- (b) For comparison against the same objectives, the Society's proposed alternative of below ground reservoirs at Runciman Road would do the following:
 - (i) While providing the same 100 ML of increased storage, provide less operational flexibility and functionality than the above ground reservoirs because of its lower water levels.
 - (ii) With a TWL of RL 146m compared with the current TWL of RL 148m in the Runciman Road Balance tank, without pumping, that would offer less resilience than the status quo as a result of a reduction in the rate of the gravity supply in the watermain to the Redoubt Road Reservoirs.
 - (iii) Conversely, in order to achieve the required 150 ML/d design standard in the watermain, pumping would be necessary and with pumping there would be a lesser standard of resilience and increased operating cost than the full gravity supply offered by the above ground reservoirs.
 - (iv) In order to avoid the costly relaying of sections of the watermain under Runciman and Harrisville Roads and associated construction effects on traffic, pumping would also be required to provide for back-feeding to Franklin North which would result in this



alternative having a lesser standard of resilience than the full gravity supply achieved by the above ground reservoirs.

(v) While no resolution was reached on costings for the new reservoirs and associated works, on the face of it, the need for additional items such as the capital and operating costs for one or more new pumps, relaying the watermain in Runciman and Harrisville Road (as an alternative to pumping) and the construction of the large excavations required for the partially buried reservoir suggest that the construction and whole of life costs for this partially buried alternative would be some margin above those for above ground reservoirs.

[99] We conclude on this issue that the alternative proposed by the Society would not achieve the objectives for the work as efficiently as Watercare's proposal.

Consistency with the relevant planning instruments

[100] The three expert planning witnesses (Ms Rickard for Watercare, Mr Galimidi for the Council and Mr Lawrence for the Society) helpfully provided a joint witness statement prior to the hearing. Matters about which the three were in agreement included the status of the relevant planning documents.

[101] Matters that were not agreed among these experts appeared to be limited to the degree to which the objectives and policies for relevant overlays should apply to the proposal. Mr Lawrence took the view that the natural and historic heritage overlays, directed at protecting the integrity of identified features, were relevant to any consideration of the impact of the proposal on the integrity of the landform or the landscape and in particular the proximity, character and scale of the proposal. Ms Rickard considered that the extent to which the overlays were relevant should be moderated given that the site itself was not subject to these overlays and the site met operational requirements for the location and establishment of water supply infrastructure.

[102] It is not clear to us whether this difference of opinion results in any substantial difference to our consideration of the relevant provisions of the AUP. It may be that the issue, which the witnesses acknowledge is one of degree, is one that in this case is subsumed within the consideration of the effects of the proposal



in context, and in particular the effects of the proposal on the natural landscape and on the historic heritage of the church and its surrounds.

[103] In his evidence before us, Mr Lawrence also pointed to the identification of the soils on this site as "elite" (being Land Use Capability (LUC) Class 1) and to the relevant provisions in the AUP which seek to maintain the potential of high quality soils for agricultural purposes rather than activities that are not dependant on soil quality. Both Ms Rickard and Mr Galimidi saw those provisions as being of less relevance to the consideration of a notice of requirement for large scale infrastructure than to the assessment of activities needing resource consent in the rural zones. Mr Galimidi opined that there was no directive objective or policy which would preclude the location of major infrastructure on this site.

[104] We agree with the approach of Ms Rickard and Mr Galimidi. We also note that the position taken by the Society would have the same effects on the use of the soils of the site as Watercare's proposal. While noting Mr Lawrence's comment that the Society's position would result in a countervailing local benefit, that is a distinct consideration from the assessment of the effect of the proposal on the soil.

Adequacy of proposed conditions

[105] The Council's recommendation on the NOR and its decision on the associated resource consents, to which we have had regard as required by s 290A of the Act, included numerous conditions. On our preliminary review, we were concerned that the conditions were insufficiently clear, detailed and robust to achieve their purpose in avoiding, remedying or mitigating the potential effects of the proposal. In taking some of these matters up with witnesses called by Watercare, and in particular Ms Rickard, the consultant planner, we found that our concerns were generally shared. Counsel for the Society stated that its members also shared the same concerns and submitted that redrafting and restructuring of the conditions was necessary, particularly in relation to the construction phase or phases of the project.



[106] Counsel for Watercare and Ms Rickard both advised that our concerns and those of the Society were acknowledged. As part of his submissions in reply, Mr McNamara included revised conditions. By way of general comment, the restructuring of the conditions, including the identification of individual consents and

re-formatting of the conditions, substantially improved their overall readability and likely effect.

[107] We deal with the conditions relating to the designation and the resource consents under headings relating to the main issues before us. The numbering used follows that set out in Watercare's versions without tracked changes at tabs 3 and 5 of the submissions lodged in reply.

Landscape and visual effects

[108] Mr Goodwin, the landscape and visual effects expert witness called by Watercare, provided an assessment of the effectiveness of the screen planting in reducing the visual effects of the reservoirs from 17 viewpoints on 16 neighbouring properties (103 Runciman Road has two viewpoints) at three stages of plant growth - during establishment and construction of the reservoirs; at the completion of construction (after 3.5 years); and on full establishment of the planting (between 5 and 7 years).³⁸

[109] During the establishment and construction phase, Mr Goodwin's assessment is that there would be high to moderate visual effects on 11 properties with the effects on the remainder being in the range of moderate to low/very low.

[110] By the time of the completion of construction (3.5 years) the advance screen planting would reduce the visual effects on 9 properties to low, on 4 properties to moderate/low and on 2 further properties to moderate. The visual effects from the two viewpoints on the worst affected property at 103 Runciman Road would be high and very high.

[111] Following full establishment (5 to 7 years), apart from on two properties, the visual effects have been assessed as being low to very low (including one of the viewpoints at 103 Runciman Road). The exceptions are the church at 95 Runciman Road where the visual effects have been assessed as being moderate to low and the second viewpoint at 103 Runciman Road where the effects have been assessed by Mr Goodwin as moderate.

[112] Ms Sally Peake, the landscape and visual effects expert witness called by



Goodwin EIC at Appendix 6

the Society, advised that she accepts the growing rates proposed by Mr Goodwin. While she also accepts the results of Mr Goodwin's visual effects assessments without mitigation, she had concerns over his anticipated level of screening and the visual effects ratings following mitigation, questioning whether the canopy will thicken sufficiently to provide the degree of screening indicated in his photomontages.³⁹ She added that she had not prepared any photomontages herself.⁴⁰

[113] She said that Mr Goodwin agreed with her that there would be views between the trees as the planting became established.⁴¹ She also considered that the planting will foreshorten views for some neighbours thereby negating the perceived benefits of the mitigation.

[114] Mr Goodwin responded that in his opinion as the planting begins to obscure the reservoirs, it will mitigate the adverse visual effects and once the reservoirs are removed from view, there will have been full mitigation.⁴² He accepts that the planting will alter the amenity, character and pattern of the site and the immediately surrounding area but considers that this is typical of the general landscape in this rural area.⁴³

[115] Based on an indicative construction scenario,⁴⁴ the start of the erection of the reservoir walls would commence after two years at a time when there would be 2.5 years growth of the screen planting, assuming that WSL undertakes the necessary advance planting immediately. At this stage, we assess that the visual effects of the walls on a number of the neighbouring properties could still be in the moderate range.

[116] By the time construction is completed (3.5 years), the visual effects from the first reservoir on most of the neighbouring properties have been assessed by Mr Goodwin as being moderately low to low except for two properties where the effects will be moderate and the two viewpoints at 103 Runciman Road where the effects have been assessed as being high to very high.

⁴⁴ As set out at [152] below



Peake EIC at 47

Transcript at page 261

Peake Transcript at page 260

⁴² Goodwin Rebuttal at 5.1

⁴³ Goodwin Rebuttal at 5.2

[117] With these matters in mind, and putting to one side the effects on 103 Runciman Road which we will come back to, we have given some consideration as to whether the timing of the construction of the reservoirs should be delayed to allow at least 3.5 years growth for the screen planting before a start is made on the erection of the walls.

[118] The downside of such a delay would be that while an extra year's growth would no doubt assist in mitigating further the visual effects of the walls for most of the properties, it would not mitigate the adverse effects from the tall cranes required for erecting the wall units and for constructing the roof. We are also conscious that such a condition could mean a significant delay for Watercare in meeting its project objectives for enhancing the resilience and security of supply for Auckland's water system.

[119] Turning to 103 Runciman Road, at one viewpoint on this property the effects have been assessed as being very high during the establishment and construction phase, very high after 3-5 years and moderate even after 5-7 years. As this is the same property which is most adversely affected by construction noise, we return later to discuss options for mitigating these combined adverse effects on this property.

[120] For the balance of the properties, we find that the visual effects from the construction of the first reservoir and later the second reservoir will be at an acceptable level, even if gaps in the screening will allow views of the reservoir in the earlier stages of the growth. This finding is made on the basis that the proposed consent condition on advance screen planting is qualified to include a requirement that the timing of the planting must be such that it has been in place around the full perimeter of the site for a minimum of 3.5 years before the construction of the first reservoir is completed.

[121] We do not accept the submission that the screen planting along the road boundaries would present a regimented appearance out of character with the neighbourhood. We note that a number of properties in the neighbourhood already contain shelter-belt planting, which foreshorten views from neighbouring sites and public view points. It is notable that the property on the southern corner of Runciman and Rutherford Roads also has dense screen planting on both frontages. Given the strong preference of cadastral surveyors for straight lines, screen planting tends to



follow boundary lines; within properties, fence-lines also tend to follow straight lines and accompanying shelter-belts do too.

[122] Condition 6 provides for the submission of an Advanced Planting Plan (**APP**) separate from and prior to the Landscape Plan required with the OPW. This APP is addressed further below in relation to condition 29.

[123] Condition 25 requires a Landscape Plan be submitted with the OPW for matters other than advanced planting, which are addressed separately, and specifies its purpose.

[124] By Condition 26 the plan is to be in accordance with Boffa Miskell's Figures 4 and 5 for the 2 reservoirs respectively. The Drawings date needs correction to 14 October 2016 Revision A to align with the evidence presented by Mr Goodwin. The list of thirteen matters to be addressed is comprehensive and certain, including an express requirement for maintenance and integration with the advanced planting.

[125] Condition 29 requires that in the planting season immediately following confirmation of the NOR, Watercare is to prepare and implement an Advanced Planting Plan (APP) subject to availability of appropriately sized plants to meet the requirement. The APP is to address four appropriate matters. While it is to be served on the Council, there is no requirement for Council to approve the APP and it expressly need [not] be prepared as part of an OPW. While the reason for an APP is for planting to occur in advance of any designated works, by treating it as not necessarily being part of an OPW leaves a potential approval hiatus.

[126] Potentially there are two ways forward:

- (a) For the Court to find that mitigation of adverse landscape and visual effects by advanced planting requires an enforceable condition and Council is to have a certifying function; or
- (b) Relying on s.176A(2)(b) for the Court to detail the advanced planting which is to form part of the designation thereby negating the need for further approval (including under s.176A).



[127] We have some detail of the proposed advanced planting in the evidence but it appears to us to fall short of what is required in Condition 29(a) - (d). We suggest

that it would be preferable to amend Condition 29 so that if the advanced planting plan is provided separately from the main outline plan, it is to be approved by Council as if it formed a part of an outline plan. This might be achieved by adding at the end of the third paragraph in Condition 29 words to the following effect:

If the Requiring Authority takes the latter approach the Advanced Planting Plan is to be certified by an officer nominated by Auckland Council as satisfactorily meeting the purpose and specifications of Condition 29 prior to implementation.

[128] Given the importance of achieving effective early screen planting we do not consider that the implementation of the APP should be *subject to [the] availability of appropriately sized plants to meet the requirement.* This potential exemption is overly broad and is not resolved by the requirement that the Council be advised of a shortage of suitable plants and, in this situation, giving planting along road boundaries priority. Although the condition effectively requires Watercare to plant in the coming 2017 season, we fail to see why sufficient suitable plant stock for a project of this scale could not be sourced nationally. For that reason we consider that all the words in the fourth paragraph of Condition 29 after "notice of requirement" should be deleted. We will give Watercare the opportunity to submit reasons, if it chooses, why they should be retained and allow other parties an opportunity to respond. Notably this matter was not addressed by Watercare in its submissions in reply.

Heritage and character effects

[129] The site is across Runciman Road from the Pukekohe East Presbyterian Church. As noted above, the Church is a historic site, both as one of the first buildings erected by European settlers in the area and as the focal point of a battle between the settler's militia and a Maori taua (war party) on 14 September 1863. The story as told by James Cowan is readily available online as part of the New Zealand Electronic Text Collection – Te Pūhikotuhi o Aotearoa.⁴⁵

[130] There is no issue about the significance of the Church and its surrounds (including a small cemetery which contains memorials to those who died in that battle) and that is reflected by the scheduling of that site in the AUP for protection as



http://nzetc.victoria.ac.nz/tm/scholarly/tei-Cow01NewZ-c30.html

historic heritage. The issue is whether the proposed site for the reservoirs should also be protected from development and use by virtue of its proximity and, perhaps, by it being part of the battlefield. Mr Wild, the historic heritage expert called by Watercare and Mr Brown, the historic heritage expert called by the Council, were both of the view that the proposed works would not diminish the basis on which the Church and its surrounds have been scheduled for protection. Mr Salmond, the historic heritage expert called by the Society, did not agree, expressing the opinion that the matters of historic importance were not confined to the Church and its surrounds but lies across the whole of the surrounding land. Changes to that landscape would, in his view, result in a loss of understanding of the nature and context of the battle. He acknowledged that a reduction in the height of the reservoirs would not eliminate the degree of the impact on heritage values, but considered that the reduced visual effects would greatly diminish the intrusive character of the installation.

[131] We accept the significance of the Church and its surrounds as historic heritage. Perhaps more pertinently, the AUP includes them in its schedule of historic heritage for their protection. We are not persuaded, however, that the proposed works will have a significant adverse effect on the existing heritage values. We note the point made by Mr Wild that the surrounding area has substantially changed over the past 150 years and that the appearance of the area must be quite different from how it appeared at the time of the battle. That degree of change having occurred, we do not consider it to be appropriate that the residual effects of new development across the road should be restricted on the basis of the presence of the heritage place. If a case is to be made that a larger area should be included for protection within the extent of place of the heritage site, then that would be better pursued by way of a change to the AUP, supported by a report which examines that case in the ways required by s 32 of the Act.

[132] Given Mr Salmond's conclusion that the issue in this proceeding is not now about the location of the reservoirs on the proposed site but on the visual effects of their height, we consider that the screening proposals satisfactorily address the likely effects of the development on the heritage place.



[133] We also consider that the potential for improvement works on Runciman Road in this vicinity may be of some benefit to improving access to the heritage place.

[134] Conditions 30 – 36 deal with archaeology and heritage. It appears to be uncertain whether Condition 30 requires monitoring *during surficial earthworks and excavations into natural ground* or whether it may be dispensed with during this stage if in the archaeologist's sole opinion the likelihood of finding sensitive material is not high. We would expect the intention to be that monitoring only be discretionary *at other times during construction.* This ambiguity would be avoided if the condition were amended to read as follows (with proposed deletions struck through and proposed additions underlined):

An appropriately qualified archaeologist is to shall monitor construction activities during surficial earthworks and excavations into natural ground, and Monitoring shall continue at other times during construction if in the archaeologist's opinion of the archaeologist their assessment of the likelihood of finding sensitive material (as defined in Rule [E12.6.1] of the Auckland Unitary Plan Operative in Part) is high.

[135] Condition 33 deals at length with the installation of a heritage interpretation sign in generally satisfactory terms. One location option is the subject site. If this option were adopted, consultation is required with a suitably qualified transportation person to avoid the obstruction of vehicle sightlines moving into and out of Rutherford Road. Two issues arise:

- (a) Who would be "a suitably qualified transportation person"?
- (b) Without derogating from the sightline consideration, the Court's principal concern was that in the absence of a formed shoulder, parking on the ~3.3m wide carriageway lane⁴⁶ may impede traffic on Runciman Road.

[136] We therefore propose amending the fourth paragraph of Condition 33 to read:

If the signage is to be installed on the reservoir site, consideration of the placement of the sign shall be undertaken—done in consultation with a suitably qualified transportation person so as—Auckland Transport to avoid the obstruction of vehicle—sightlines moving into and out of at the junction of Runciman and Rutherford Roads. If Auckland Transport considers it



46 Hartshorne EIC 5.11

necessary, the Requiring Authority shall also form vehicle parking clear of the Runciman Road carriageway at a location and in a manner approved by Auckland Transport.

Safety

[137] Concerns were raised by the Society about the risks inherent in storing large volumes of water in above-ground structures on top of a ridge. While the Society did not call any expert evidence about this, Watercare did provide evidence of its approach to design and construction and it is appropriate that we consider how this approach may promote the purpose of the Act, especially by enabling people and communities to provide for their health and safety.

[138] New condition 3 requires the reservoirs to be designed in accordance with NZS 3106:2009 - Design of Structures for the Storage of Liquids. The Court does not have access to that Standard other than the first 8 pages on the website of New Zealand Standards. We note that the Standard's "Outcome Statement" states it provides a basis for designing concrete structures for the storage of liquids so that they will, among other things, not allow an uncontrolled rapid loss of the liquid contents in extreme events such as a major earthquake. It is also relevant that the Standard's Foreword records:

- (a) Provisions that are adequately covered by other Standards have not been included in this Standard; and
- (b) Amongst the referenced documents is NZS 1170.5.2004 Structural design actions Part 5: Earthquake actions New Zealand.

[139] In evidence called by Watercare, Mr Wardle also referred to NZS 1170.0:2002 Structural design actions and a document produced by the NZ Society for Earthquake Engineering entitled *Seismic design of storage tanks: November 2009*. He advised that the reservoirs will be designed to have total structural integrity subjected to an earthquake in exceedance of a 1:500 year return period and would retain overall functionality in an earthquake in exceedance of a 1:2500 year return period. He explained that the reservoir design codes require failure to occur in a ductile manner, where under extreme loading they are designed to crack rather than collapse, resulting in minor leakage through incremental widening in the wall to floor joint or in the joints in the floor itself, to be intercepted by underfloor drainage which



dissipates pressure and enables detection of leakage.⁴⁷

[140] We are conscious that the role of the Court in dealing with appeals does not extend into the control of building work which is governed by the Building Act 2004. That Act includes a provision which forbids the imposition of performance criteria on building work that are additional to or more restrictive than the performance criteria prescribed in the building code in relation to that building work. But for the purpose of enabling people and communities to provide for their health and safety, it does not transgress that limit to refer, as a condition of resource consent, to the same standards as those which an applicant puts forward to address those health and safety concerns.

[141] In light of the specific concerns raised by members of the Society about the risks posed by storing very large quantities of water at the highest point in a neighbourhood of rural-residential activity and the existence of a specific standard for the design of large reservoirs, we consider it reasonable to amend condition 3 to expressly require:

- (a) That the design(s) submitted for building consent be in accordance with NZS 3106:2009 or any updated version of that Standard and any other relevant Standard referred to in that Standard; and
- (b) That the building consent application(s) be accompanied by a peer review of the design and construction methodology conducted by a suitably qualified and experienced independent person to the satisfaction of the council as the building consent authority.

[142] On that basis, condition 3 should read as follows (with proposed additions underlined):

The Requiring Authority shall design and prepare its application for building consent(s) for the reservoirs in accordance with the New Zealand Standard NZS 3106:2009 Design of Concrete Structures for the Storage of Liquids or any updated version of that Standard and any other relevant Standard referred to in that Standard and shall provide a peer review of the design and construction methodology conducted by a suitably qualified and experienced



independent person to the satisfaction of the council as the building consent authority.

Construction effects and management

[143] There is a gentle fall of about 10m across the site from the balance tank at the south western corner (the intersection of Runciman and Rutherford Roads) to low points northeast and northwest of the proposed reservoirs. A stormwater pond is to be constructed at about the north eastern low point. This pond will be drained by a pipeline which will connect to an existing pipeline which runs under Rutherford Road and from there to a discharge point at a creek about 200m east of the site.

[144] The soils on the site comprise ash and tuff overlying basalt. As these soils are compressible, the footprint of the reservoirs will need to be pre-loaded with imported fill to a depth of about 7m.⁴⁸ This pre-loading will consolidate the soils thereby providing the necessary solid foundation for the reservoirs. For the first reservoir, it will involve the placement of around 50,000 m³ of imported material and around 35,000 m³ of material sourced from within the site.

[145] Having provided an indicative construction methodology, Mr Wardle points out that alternative methodologies may be offered by different contractors and that flexibility needs to be maintained to provide for this.⁴⁹ His indicative methodology is as follows.

[146] The construction of the reservoirs would start with site establishment including the mobilisation of construction equipment, the installation of erosion and sediment control measures, the construction of the stormwater pond and its discharge pipeline and the formation of construction access from Runciman Road near the north-western corner of the site. Permanent access is proposed from Rutherford Road.

[147] In relation to erosion and sediment control, while Auckland Council can restrict earthworks in winter or require that specific approval be given, Mr Wardle points out that given the largely clean granular nature of the material to be utilised



Goodwin EIC at 7.3

48

Wardle EIC at 9.5

for the bulk of the earthworks, in his opinion winter working would be appropriate.⁵⁰

[148] The activities for the first reservoir which would follow the site establishment would be the pre-loading; delivery to the site of precast concrete wall units, roof beam and roof units; the cast-in-situ construction of the foundations and reservoir floor; erection of the wall units and then circumferential post tensioning of these units; casting of the roof support columns; erection of the precast roof beams and units and cast-in-situ placement of the concrete topping over these units; pipe and valve installation; connection of the reservoir inlet and outlet pipes to the watermain; water testing and commissioning and completion of the site-works and remaining landscaping.⁵¹

[149] The site establishment work could be expected to take about three months to complete, the placement of the preloading material about two months with the preloading being left in place for between six and seven months. At the same time as the pre loading material is being placed, a landform mound would be constructed more or less along the western side of the first reservoir to contribute to the visual screening.⁵²

[150] At the end of the pre loading period, most of the pre loading material would be shifted to the site of the second reservoir with the rest being used for the shaping and finishing of the western landform mound. These earthworks could be expected to take about two months to complete. On completion of the earthworks, the landform mound would be planted to augment the advanced screen planting in this location.⁵³

[151] Once the pre loading material has been shifted, construction of the first reservoir will get underway with an expected overall construction time of around 15 months. Following on, water testing and commissioning are estimated to take some seven months to complete, with final site works and landscaping being undertaken during this same period. Mr Wardle did not provide a breakdown of how long within the overall 15 months it might take to construct the individual elements of the reservoir such as the foundations and the floor slab, the walls and the roof.



Wardle EIC at 9.9

⁵¹ Wardle EIC at 9.6

As required under Designation Condition 20 (a),

Goodwin EIC at 7.9 (ii)

[152] Overall, the elapsed time from the start of works on the site to the completion of construction and commissioning of the first reservoir could be expected to take about 3 years. We have summarised these indicative timings for constructing and commissioning the first reservoir in the following table:

Activity	Description	Time to Complete (Months)
1	Site establishment	3
2	Placement of Pre Load Material	2
3	Pre Loading Period	7
4	Pre Loading Removal	2
5	Foundations and Floor Slab (Assessment)	2
6	Balance of Construction of Reservoir 1	. 13
7	Commissioning and Testing (Deduced)	7
	Total	36

[153] Watercare as the Requiring Authority is required to prepare an Advanced Planting Plan.⁵⁴ The purpose of this plan is described as being to achieve early establishment of fast growing tree species to provide visual screening around the full perimeter of the site as quickly as possible and to allow planting of these species to occur before submission of an Outline Plan and before construction activity on site commences.

[154] An indicative scenario for the timing of the construction and commissioning of the first reservoir could be as follows:

- (a) Advanced screen planting completed by about June 2017.
- (b) In the period between March 2017 and December 2017 Watercare prepares and obtains approval for an Outline Plan, completes detailed design, obtains the necessary building consents, prepares construction contract documentation, completes the tender process and awards the construction contract.
- (c) Construction of the reservoir starts in January 2018.



- (d) Construction of the foundations and floor slab for the reservoir is complete after 16 months or by June 2019.
- (e) Reservoir wall erection starts in July 2019.
- (f) Construction and commissioning of the first reservoir is complete by December 2020 or 3.5 years from the time of completion of the advanced planting.

[155] Under this scenario, apart from views of construction machinery, while some of the neighbouring properties might see the pre-loading mound, they would see little of the first reservoir (if any) until erection of the wall units starts in about July 2019. By this time the advance planting will have been in place for about two years.

[156] There would then be a period of about 18 months before the advance planting provided the levels of screening shown on Mr Goodwin's 3.5 year viewpoint photomontages attached at Appendix 3 of his evidence.

[157] If the advance planting was in place by June 2017 and there were slippages in the other time frames in our scenario, this would reduce this 18 month period and allow for further growth and levels of screening to occur approaching those shown on Mr Goodwin's 3.5 year photomontages.

Construction management conditions

[158] Condition 1 has an expanded and updated list of the documents which the work is to be undertaken *in general accordance* with. Given that an outline plan of works (**OPW**) process under s 176A of the Act must be followed and in the context of the nature of the work proposed, such a general qualification is appropriate. The third group of documents listed are drawings by Boffa Miskell dated 11 October 2016 but the copies attached to the evidence in chief of Mr Goodwin of that firm are marked "Revision A" and dated 14 October 2016. Ensuring that the list of documents is accurate is essential and as we only have evidence of the later documents we propose amending the description accordingly.



[159] Condition 7 sets out the management plans to be provided with OPWs. Vibration is now to be included in a renamed Construction Noise and Vibration Management Plan (CNVMP) and the requirement for a stormwater management

plan is deleted from the designation conditions and replaced by condition 28 of the resource consent conditions. We concur with those amendments.

[160] Condition 9 has been amended to make the purposes and process for Construction Management Plan (**CMP**) preparation more explicit. The CMP is to demonstrate how compliance with performance standards in these conditions will be achieved. Without going into unnecessary detail, the construction, noise and vibration, communications and traffic management plans and associated performance standards in Conditions 14, 15 – 19 and 21 have been improved from those attached to the Council's recommendation and are generally certain, clear and enforceable. A positive enhancement is the requirement for community consultation on management plan preparation and, importantly, where community feedback is not adopted by Watercare, the reason(s) for not doing so.

[161] Conditions 10 and 11 deal with working hours and clarify earlier uncertainty about when work may occur outside specified times.

[162] Conditions 15 - 19 deal with the preparation and contents of a Construction Noise and Vibration Management Plan (**CNVMP**). We address this Plan and these conditions under a separate heading below.

[163] Condition 20 requires that prior to the submission of an OWP, Watercare must consult with Auckland Transport (AT) to discuss traffic and pedestrian safety issues that may need to be addressed. The condition goes on to require Watercare to make a contribution of up to \$10,000 for any related work(s) that are agreed upon with AT. Failing agreement within 12 months, the condition is deemed to be satisfied. Condition 20 may be satisfied before the Communications Plan required by Condition 14 is submitted as part of the OPW. It is however notable that Condition 14 does not expressly address the matters covered by Condition 20. We accordingly suggest that Condition 14 be amended by including at the end of the third sentence the words "including on Condition 20 matters".

[164] Even with that amendment, Condition 20 cannot be considered wholly satisfactory because:

(a) Watercare might not agree that measures reasonably required in the view of the specialist CCO and affected community are necessary; and



(b) the \$10,000 cap on expenditure may not be a sufficient or proportionate contribution towards the actual cost of mitigating the adverse effects of this project. It certainly does not provide meaningful compensation to the Pukekohe East community for hosting the work for 6 or more years.

[165] We raise these matters for consideration by the parties. We are minded to place the matter, after community consultation, in the hands of AT to determine what transport mitigation works (if any) are required to be funded by Watercare. We give the parties the opportunity to respond to this suggestion.

[166] Condition 21 requires a construction traffic management plan (**CTMP**) which now by limb (e) is (amongst other things) to ensure heavy traffic accesses the site from the south (via the Pukekohe East/Runciman Road intersection) in all but exceptional circumstances. By Condition 22 community consultation is required to avoid conflicts between construction traffic and major school and church events.

[167] A new Condition 23 requires there be no construction-related parking off-site, which appears to us to be reasonable in light of the size of the site and the character of the surrounding roads.

[168] Conditions 38 – 40 deal with the Airstrip. Condition 38 has at least one significant typographical error. We suggest that it be amended to read (with proposed additions <u>underlined</u>):

Any structure, building ... must not penetrate the Obstacle Limitation Surface ... except to the extent <u>authorised by</u> CAA Aeronautical Study 16/77/31 ... and/or in the CAA determination dated 13 April <u>2016</u>. <u>Trees</u> and other vegetation in the OLS ... Surface.

Construction Noise and Vibration

[169] Mr Mathew Cottle, an acoustic consultant called by Watercare, was the only expert to provide evidence on the effects of noise and vibration from the construction of the reservoirs. He advised that the applicable New Zealand Standard for construction noise is NZS 6803:1999.⁵⁵ We note that the Operative Auckland



NZS 6803:1999 Acoustics-Construction Noise.

Unitary Plan adopts this standard for setting the permitted activity standards for construction work activity.⁵⁶

[170] Table 2 of that standard recommends upper limits for construction noise received in residential zones and dwellings in rural areas when measured at a distance of 1 metre from the facades of buildings. There are different limits for:

- noise of short term duration (construction work at any one location for up to 14 calendar days);
- noise of typical duration (construction work at any one location for more than 14 calendar days but less than 20 weeks);
- noise of long term duration (construction work at any one location with a duration exceeding 20 weeks);
- noise on different days of the week (weekdays, Saturdays, Sundays and Public holiday; and
- noise during different times of the day (0630 to 0730; 0730 to 1800; 1800 to 2000; and 2000 to 0630).

In this case, the limits for noise of long term duration would apply.

[171] Designation Condition 9 restricts the periods under which construction activity may be undertaken on the site to between the hours of 0700 to 1800 from Mondays to Saturdays, with no construction work to be undertaken on Sundays or Public Holidays. The relevant noise limit between 0730 and 1800 for long term construction (as applies here) under both NZS6803 and the Unitary Plan for both weekdays and Saturdays is 70 dB L_{Aeq} . For the 30 minute period between 0700 and 0730, the limit reduces to 55 dB L_{Aeq} on weekdays and to 45 dB L_{Aeq} on Saturdays.

[172] Mr Cottle provided us with three noise prediction contours for noise generated by⁵⁷:

- construction of the Stage 1 earthworks;
- construction of the Stage 2 earthworks; and

Cottle EIC at Appendix D.

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Auckland Unitary Plan: E25 Noise and Vibration E25.6.1(3) General standards.

heavy vehicle movements along the temporary access road during the
 24 hour placement of concrete for the floors of the reservoirs.

These predictions show that noise levels generated by both stages of earthworks construction at all locations comply with the 0730 to 1800 long term duration noise limits of 70 dB L_{Aeq} and 85 dB L_{AFmax} .

[173] Mr Cottle was asked whether the predicted noise levels would meet the more restrictive limits for the 30 minute period each morning from 0700 to 0730 and if not whether he would support a change to the construction start time from 0700 to 0730. While he did not provide a specific response on the noise compliance issue, our own interpretation from his noise prediction contours is that there would be non compliance at a number of neighbouring properties if there was fully intensive construction activity during the 30 minute period at the start of each day. But Mr Cottle told us that such intensive construction works would not necessarily start at 0700 but rather the first 30 minute period of each day would typically be taken up with less noisy start up activities.⁵⁸ From this we take it to mean that the noise levels from such activities would comply with the pre 0730 limit.

[174] As provided for under Condition 19, Mr Cottle agreed that the 2.5 metre high noise barrier to be built on the northern boundary should remain in place for the full duration of the construction of each of the reservoirs. With this noise barrier in place, the night-time construction noise levels for each of the 24 hour continuous concrete pours for the floor slabs are predicted by Mr Cottle to exceed the NZS 6803 night-time noise limit of 45 dB L_{Aeq} by between 2-6dB at 118C and 120 Runciman Road.

[175] On the effects of construction noise at other properties, for the Pukekohe East Primary School, the predicted noise levels are 50 to 55 dB L_{Aeq} in the playground and 31 to 35 dB L_{Aeq} inside the classrooms (with the windows slightly open for ventilation). For the Pukekohe East Playcentre, the equivalent predictions are 47 to 52 dB L_{Aeq} in the playground and 30 to 34 dB L_{Aeq} inside the playcentre building (with windows slightly open for ventilation). As these noise levels will be variable and intermittent, in Mr Cottle's opinion they will not result in any detrimental



Transcript at page 89.

Transcript at page 90.

learning or amenity effects on students.60

[176] The Court had a particular concern about the noise levels at 103 Runciman Road because one of the occupiers, Mr Neave is a night shift worker who sleeps during the day in a bedroom which is 15 metres from Runciman Road. Mr Cottle said that based on his predictions, if the bedroom windows were closed, the noise level from construction in Mr Neave's bedroom would be about 40 dB L_{Aeq} and if they were partially open, about 45 dB L_{Aeq}. Asked if a noise level of 45 dB L_{Aeq} would provide a satisfactory sleeping environment, he said that while it was subjective, if it was a steady state noise he would consider it to be acceptable although he did acknowledge that sometimes this would not be the case. He agreed that there might be a basis for having a second look at the effects of construction noise on this residence and that this should be addressed in the construction management plan. He said that this plan would also identify any other sensitive receivers and any appropriate mitigation measures which might be required.⁶¹

[177] Our understanding is that there are two measures for assessing vibration from the construction of the reservoirs on neighbouring properties, human responses and the effects on structures. The standard against which Mr Cottle assessed vibration effects was the German Industrial Standard DIN4150-3:1999 (**DIN4150**). 62 The Operative Auckland Unitary Plan adopts this standard for setting the permitted activity standards for the effects of vibration on structures. 63

[178] At Appendix B of his evidence Mr Cottle attached Table A headed *Human Response Vibration Criteria (during construction)*. The limits in this table are the same as those set out in Table E25.6.30.1 of the Unitary Plan although this Unitary Plan table is headed *Vibration limits in buildings*. Also at Appendix B of his evidence Mr Cottle included a second table, Table B2 headed *DIN4150-3:1999 Vibration Criteria*.

[179] The wording in Designation Condition 18 refers to "... the requirements of German Standard DIN4150-3:1999 with regard to the prevention of cosmetic

Auckland Unitary Plan: E25 Noise and Vibration E25.6.30 Vibration.



⁶⁰ Cottle EIC at 3.2.

Transcript at page 91.

German Industrial Standard DIN4150-3:1999 Structural Vibration - Part 3 Effects of vibration on structures when measured in accordance with that Standard on any structure not on the

damage to buildings ..." (our underlining). In Mr Cottle's Table B1, in the Receiver column the first line is identified as *Occupied activity sensitive to vibration*. In the corresponding Unitary Plan Table E25.6.30.1 this line is identified as *Occupied activity sensitive to noise* but it appears to us that the word "noise" should be interpreted as "vibration" in that context.⁶⁴

[180] Our understanding from all of this is that Mr Cottle's Table B1 and the table in the Unitary Plan set out the human response limits and that Mr Cottle's Table B2 sets out the building damage limits. Designation Condition 18 therefore needs to be reworded to provide more specificity as to the measures it is referring to.

[181] Turning to Mr Cottle's evidence, because of the distance between construction works on the site and adjacent residents, he considers that the potential for vibration effects on residents from on site construction activity would be negligible. There would be, however, the potential for some residents to notice the effects of vibration from project trucks using Runciman Road. Mr Cottle said that for distances of 15 to 80m from the road, he predicted the vibration levels would be in the range from 0.35mm/s to less than 0.20mm/s. He said that while the threshold for perception by receivers was 0.30mm/s, the predicted levels would comply with what he described as the daytime *human response* criteria in his Table B1.

[182] At a distance of about 15 metres from the road Mr Cottle said that the levels of vibration from trucks using the road could cause some people to worry about damage to their homes. He assured us that the predicted levels of vibration would readily comply with the building damage limits in DIN4150 (his Table B2) and would not cause any superficial damage to buildings. Mr Cottle did point out that Runciman Road is a public road and that residents will be experiencing similar levels of vibration from heavy vehicles which are already using the road.

[183] During the 24 hour concrete pours, he predicted that vibration levels would comply or marginally exceed the DIN4150 human response criteria which would have the potential to cause adverse effects for some people. Mr Cottle therefore recommended that there should be consultation with residents along the affected



6

Alternatively, perhaps, this line of Table E25.6.30.1 should be read as "noise sensitive spaces" to be consistent with Table E25.6.30.2 and to use the description which is defined in the Unitary Plan (and on the assumption that spaces which are sensitive to noise are likely also to be sensitive to vibration).

section of Runciman Road prior to each of the 24 hour concrete pours to inform them of the activity, its duration and its likely effects.

[184] With one or two exceptions the noise and vibration levels from the construction of the reservoirs are predicted to comply with the permitted limits in the relevant New Zealand standard for noise, the German standard for vibration and by what we understand is intended in the Auckland Unitary Plan. Even so, it is inevitable that noise and vibration will have varying degrees of adverse effects on those who live and work on the neighbouring properties. In particular:

- (a) If not appropriately managed, there is the potential for construction noise levels from the proposal to exceed the limits in NZS 6803 and the Auckland Unitary Plan between 0700 and 0730 on weekdays and Saturdays.
- (b) Even with the proposed acoustic fence in place, there are predicted exceedances of the night-time noise levels during the 24 hour concrete pours at 118C and 120 Runciman Road.
- (c) There is the potential for noise levels at 103 Runciman Road to disrupt the daytime sleep of the shift worker, Mr Neave, who lives there.
- (d) Even though Mr Cottle told us that in his opinion the noise levels will not be detrimental to the learning or amenity of the staff and students at the school and playcentre, some could well be affected.
- (e) There is the potential for some residents to be adversely affected by ground borne vibrations during the 24 hour concrete pours for the two reservoirs.

[185] We now examine how Watercare's proposed conditions (as modified following the conclusion of the hearing) respond to these matters:

(a) Condition 15 requires that a Construction Noise & Vibration Management Plan (CNVMP) be prepared to provide a framework for the development and implementation of measures to avoid, remedy or mitigate adverse construction noise and vibration effects and to minimise exceedance of the criteria set out in Conditions 17 and 18.



- (b) Condition 16⁶⁵ details the matters to be included in this CNVMP.
- (c) Condition 16(c) requires the CNVMP to identify "the most affected houses and other sensitive locations including but not limited to the Pukekohe East school and playcentre, where the potential for noise and vibration effects exists." We note that 103 Runciman Road would be one of the affected houses (for daytime noise) as would 118C and 120 Runciman Road (for night-time noise during the 24 hour concrete pours).
- (d) Condition 16(e) requires that the CNVMP addresses the hours of operation including specific times and days when construction activities causing significant noise and vibration are expected to occur.
- (e) Condition 16(f) includes a requirement that provision be made for mitigation options including alternative strategies where full compliance with the relevant noise criteria cannot be achieved ... and ... where noise levels are predicted or demonstrated to approach or exceed the relevant limits.
- (f) Condition 16(h) requires that if monitoring or complaints show non compliance, the council is to be advised, work is to cease and not recommence until further mitigation is implemented.
- (g) Condition 16(k) (and Condition 9(i) in the Construction Management Plan) require that there be procedures for dealing with complaints.
- (h) Condition 18 requires a review alongside the wording of Section
 E.25.6.30 of the Unitary Plan to clarify the limits to apply for the effects of vibration on human responses and those for building damage.
- (i) Condition 19 confirms that the acoustic fence with specified parameters is to be maintained along the northern site boundary for the full duration of both stages of construction.

[186] As well as noise, we consider that references to "vibration" should be included in Condition 16(f) and explicit provision should be made in this condition to



This is numbered as 16A in Watercare's revised version, but there is no condition 16 and we refer to it simply as 16.

address the needs of "sensitive noise and vibration receivers" identified in Condition 16(c).

[187] The designation conditions include safeguards to protect the structure and fabric of the Pukekohe East Church building from the effects of damage from construction, in our view primarily from vibration. These conditions (34, 35 and 36) require that condition (dilapidation) surveys be undertaken of the church pre and post construction. If damage is identified which can be attributed to the effects of the construction, Watercare is required to take all reasonable steps to repair the damage.

Finding on noise and vibration

[188] We find that the effects of noise and vibration from the construction of the reservoirs can be mitigated sufficiently provided the amendments we have identified to Watercare's revised conditions, as submitted with its legal submissions in reply, are made; the safeguards provided for in the conditions, including the CNVMP are implemented; and the actual noise and vibration levels measured are consistent with those predicted by Mr Cottle. In short, subject to suitable conditions likely noise and vibration effects do not militate against confirming the NOR.

Resource Consents - Discharges and Contaminated soils

[189] The proposed controls and the remediation of potentially contaminated soils are addressed by the four resource consents sought by Watercare. Conditions 1 – 15 apply to all four consents.

[190] Condition 1 has a substantially updated list of the documentation that work is to be done "in general accordance" with. In the last bullet the date of the Boffa Miskell report requires alteration to 14 October 2016 Revision A to align with the version given in evidence to the Court.

[191] In the event of staging, Condition 2 requires the northern reservoir be constructed first. The condition (which in itself is fine) more appropriately attaches to the Designation as WSL proposes and is less relevant to the resource consent activities. We have accordingly deleted it from the consents and retained it as Condition 2 to the designation.



[192] By Condition 3 the consents have a lapse date of 15 years unless given effect to or extended by council, which is notably greater than the default period of 5 years (s.125). The designation has a lapse date of 15 years which is appropriate for important infrastructure (Condition 37). We can appreciate why on the current project Watercare would seek more than 5 years for the resource consents. We anticipate it is also attracted to aligning the designation and consent lapse periods. Should practice or circumstances change to the extent that the conditions require amendment we find this can be effected through Condition 15 - Review under s 128 of the Act.

[193] Condition 6 provides for three management plans required by the resource consents to form part of the (comprehensive) Construction Management Plan required by Designation Condition 9. This is appropriate given the plans are for the remediation of any on-site contamination found during site works; erosion and sediment control during site works; and stormwater discharges (being occasional reservoir overflows and impervious stormwater runoff).

[194] The stormwater and discharge consents also require an Operation and Maintenance Plan (Condition 33) and a Discharge Management Plan – Emergency Overflows (Condition 34). We note from Mr Wardle's evidence at paragraph 8.12 that the detention pond built for erosion and sediment control purposes during site works could form the basis of the operational stormwater pond, which makes sense to us.

[195] Overall the resource consent conditions appear appropriate and robust, bearing in mind they were not greatly (if at all) disputed during the hearing.

Conclusion

[196] This is an interim decision. We are satisfied that the requirement should be confirmed in light of our consideration of the matters set out and referred to in s 171 of the Act and that the resource consents should be granted in light of our consideration of the matters set out and referred to in ss 104 and 104B of the Act. To that extent, the appeals are dismissed.



[197] We consider it essential, however, that the conditions attached to both the designation and the resource consents should be clarified and strengthened. We

also consider it essential that the Council and the Society have an opportunity to review the revised conditions submitted as part of the reply by Watercare's counsel. We also consider it appropriate that all parties have the opportunity to comment on the proposed changes in relation to certain conditions set out in this decision.

[198] The parties are directed to review the conditions attached to this decision as Appendix 1 and Appendix 2 and respond in relation with any submissions as to amendments to those proposed conditions within 15 working days. Joint responses are encouraged.

[199] Any new matter raised by one party and requiring a response by another is to be addressed within a further 5 working days.

[200] Costs are reserved. In the circumstances of this case, as referred to in the introduction to this decision, applications for an award of costs are not encouraged.

For the Court:

Judge D A Kirkpatrick

Environment Judge



Appendix 1

Pukekohe East Reservoirs - Designation Conditions

- 1 Except as modified by the conditions below and subject to final design, the work is to be undertaken in general accordance with:
 - The Notice of Requirement dated 13 October 2015
 - Section 5 "Proposed Works" in "Runciman Reservoirs Project,
 Assessment of Effects on the Environment", dated October 2015.
 - drawings prepared by Boffa Miskell dated 144 October 2016 Revision A and referenced:
 - Figure 4 Proposed Landscape Concept Reservoir 1
 - Figure 5 Proposed Landscape Concept Reservoir 2
 - Letter dated 21 December 2015, Runciman Reservoirs Project section 92 response to information request dated 10 December 2015, and attachments; and
 - Letter dated 17 November 2015, Runciman Reservoirs Project section 92 response to information request dated 23 October 2015, and attachments

Where there is inconsistency between the documents listed above and these conditions, these conditions shall prevail.

- If the project is to be staged, with one reservoir proceeding in advance of the second, the Requiring Authority shall construct the northern reservoir first.
- The Requiring Authority shall design the reservoirs in accordance with the New Zealand Standard NZS 3106:2009 Design of Concrete Structures for the Storage of Liquids. The Requiring Authority shall design and prepare its application for building consent(s) for the reservoirs in accordance with the New Zealand Standard NZS 3106:2009 Design of Concrete Structures for the Storage of Liquids or any updated version of that Standard and any other relevant Standard referred to in that Standard and shall provide a peer review of the design and construction methodology conducted by a suitably qualified and experienced independent person to the satisfaction of the council as the building consent authority.

Outline Plan

The requiring authority must submit an outline plan or plans prior to construction of the proposed reservoirs and associated infrastructure in accordance with section 176A of the RMA.

The outline plan or plans may be submitted in stages to reflect the staged implementation of the project.



- The outline plan or plans are to include the landscape plan required by these conditions with the exception of the Advanced Planting Plan.
- 7 The outline plan or plans are also to include the following construction management plans for the relevant stage(s) of the project:
 - Construction Management Plan ("CMP")
 - Construction Noise and Vibration Management Plan ("CNVMP")
 - Construction Traffic Management Plan ("CTMP"); and
 - Communications Plan ("CP")
- Where a Plan is required as listed in Condition 7 above, the Plan shall be implemented and maintained throughout the entire duration of the construction period.

Construction

The requiring authority must prepare a Construction Management Plan for construction of the proposed reservoirs and associated infrastructure. The purpose of the CMP is to set out the management and monitoring procedures and construction methods and tools to be used in order to identify and manage environmental risks arising from construction activities and to demonstrate how compliance with performance standards in these conditions will be achieved.

The CMP shall be prepared in consultation with the Pukekoke East School, Pukekohe East Church, and the Pukekohe East Community Society Inc (if in existence at the time the consultation obligation arises). The CMP shall set out all consultation undertaken with the church, school and Society, how their feedback has been incorporated, and where feedback has not been incorporated, the reasons why.

The CMP shall include:

- a) An outline construction programme;
- b) Contact details of the site supervisor or project manager and the construction liaison person (phone, postal address, email address);
- The proposed hours of work that are consistent with Conditions 10 and 11;
- d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;
- e) Location of site infrastructure including site offices, site amenities, contractors' yard access, equipment unloading and storage areas, contractor car parking and security.
- f) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) from public roads



or places adjacent to the work site;

- g) Procedures for ensuring that residents, educational facilities, road users and businesses in the immediate vicinity of construction areas are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the work;
- h) Means of providing for the health and safety of the general public; and
- i) Procedures for responding to complaints about construction activities.

Advice note:

Other construction management plans will form part of the CMP, as required by the consent conditions. These include a Remedial Action Plan, Erosion and Sediment Control Plan and both the Stormwater Management Plan including an emergency overflow Discharges Management Plan, which will be prepared and approved in accordance with the consent requirements

- 10 Except as specified in Condition 11, the construction hours shall be:
 - General site activities 7am to 6pm, Mondays to Saturdays
 - Truck movements 7am to 6pm, Mondays to Saturdays

To avoid doubt, except as authorised by Condition 11 no construction work is to take place on a Sunday or any day that is a public holiday in Auckland

- 11 The purposes for which work may occur outside of the specified days or hours are:
 - (a) where work is specifically required to be planned to be carried out at certain times e.g. to tie into the existing water supply network;
 - (b) for delivery of large equipment or special deliveries required outside normal hours due to traffic management requirements;
 - (c) in cases of emergency;
 - (d) for securing the site or for removal of a traffic hazard;
 - (e) for 24 hour concrete pour activities.
- 12 Construction truck movements associated with the project are restricted from passing the Pukekohe East school between 8:15am and 9:15am and between 2:45pm and 3:30pm Mondays to Fridays during school term times.

Project Liaison Person

A liaison person is to be appointed by the requiring authority for the duration of the construction phase of the project to be the main and readily accessible point of contact for the designation and construction work. The liaison's person's name and contact details are to be publicly displayed on the site. This person must be reasonably available for on-going liaison with the community on all matters of concern arising from the project. If the liaison person will not be available for any reason, an alternative contact person is to



be nominated to ensure that a project contact person is available by telephone 24 hours a day, seven days per week during the construction phase.

Communications Plan

The requiring authority is to prepare a Communications Plan for the construction phase of the project. The requiring authority is to submit the CP to the Council with the outline plan. The purpose of the CP is to identify the key stakeholder groups, neighbours and members of the public and methods for engaging with them including on Condition 20 matters. The CP provides a framework for communication by setting out the range of communication methods that will be employed, and specific situations where communication is particularly important as set out below.

The CP shall be prepared in consultation with the Pukekoke East School, Pukekohe East Church and the Pukekohe East Community Society Inc (if in existence at the time the consultation obligation arises). The CP shall set out all consultation undertaken with the church, school, and Society, how their feedback has been incorporated, and where feedback has not been incorporated, the reasons why.

The CP is to set out

- a. the method(s) of consultation and liaison with key stakeholders and the owners/occupiers of neighbouring properties regarding the likely timing, duration and effects of works. This is to include details of how the 24 hour concrete pour will be actively managed to minimise disturbance to the adjacent residents and local community
- b. details of prior consultation or community liaison undertaken with the parties referred to in (a) above; and
- full contact details for the person appointed to manage the public information system and be the point of contact for related enquiries; and
- d. a summary of the outcomes of the consultation required by these conditions.

For the purposes of this condition, specific situations where communication is particularly important include:

- e. where work is specifically required to be planned to be carried out at certain times e.g. to tie into the existing water supply network;
- f. for delivery of large equipment or special deliveries required outside normal hours due to traffic management requirements;
- g. for 24 hour concrete pour activities; and
- Any other circumstances in which works are to take place on a Sunday or a day that is a public holiday in Auckland.



Construction Noise and Vibration

15 A **Construction Noise and Vibration Management Plan** (CNVMP) shall be prepared by an appropriately qualified person and submitted as part of the Outline Plan.

The purpose of the CNVMP is to provide a framework for the development and implementation of measures to avoid, remedy or mitigate adverse construction noise and vibration effects, and to minimise any exceedance of the criteria set out in Conditions 17 and 18.

The CNVMP shall be prepared in consultation with the Pukekoke East School, Pukekohe East Church and Pukekohe East Community Society Inc (if in existence at the time the consultation obligation arises). The CNVMP shall set out all consultation undertaken with the church, school, and society, how their feedback has been incorporated, and where feedback has not been incorporated, the reasons why.

- The CNVMP is to be prepared in accordance with the "Noise Management Plan" requirements of Annex E2 of NZS6803:1999 and include, as a minimum, provision for the following:
 - a) construction noise and vibration standards;
 - b) measures adopted to meet the noise and vibration criteria set out in Condition 17 and 18 as far as practicable:
 - identification of the most affected houses and other sensitive locations, including but not limited to the Pukekohe East School and playcentre, where the potential for noise and vibration effects exists;
 - d) description and duration of the works, anticipated equipment and the processes to be undertaken;
 - e) hours of operation, including specific times and days when construction activities causing significant noise and vibration are expected to occur;
 - f) mitigation options, including alternative strategies where full compliance with the relevant noise <u>and vibration</u> criteria cannot be achieved. Noise <u>and vibration</u> mitigation measures are to be implemented as required where noise <u>and vibration</u> levels are predicted or demonstrated to approach or to exceed the relevant limits, including for sensitive noise and vibration receivers identified under Condition 16(c) above;
 - g) schedule and methods for monitoring and reporting on construction noise and vibration;
 - h) in the event of the measured noise and vibration levels exceeding the relevant standards, the Council must be notified, works are to cease, and further mitigation options must be investigated and implemented prior to works re-commencing.
 - i) procedures for maintaining contact with stakeholders, notifying of proposed construction activities and handling noise and vibration



complaints;

- j) the measures that will be undertaken by the requiring authority to communicate and obtain feedback from affected stakeholders on noise and vibration management measures.
- contact numbers for key construction staff, staff responsible for implementation of the CNVMP, and complaint receipts and investigations; and
- l) construction operator training procedures.

17 Construction Noise Limits

Construction noise is to be measured and assessed in accordance with NZS 6803:1999 "Acoustics – Construction Noise" and must, as far as practicable, comply with the following criteria:

Time of week	Time period	Long-term duration (dBA)	
		Leq	Lmax
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85

18 Construction Vibration Limits

Construction vibration shall as far as practicable, comply with Standard E25.6.30 of the Auckland Unitary Plan Operative in Part.

The CNVMP shall also describe the measures adopted to meet the requirements of German Standard DIN4150-3:1999 with regard to the prevention of cosmetic damage to buildings, and in addition to the above, shall address the following aspects with regard to construction vibration:

 Preparation of building condition reports on 'at risk' buildings prior to, during and after completion of works, where for the purposes of this



- condition an 'at risk' building is one at which the levels in the German Standard DIN4150-3: 1999 are likely to be approached or exceeded;
- Use of building condition surveys to determine the sensitivity of the building(s) on the adjacent sites to ground movement in terms of the Line 1-3 criteria of the DIN standard; and
- c. Any buildings that require post-condition surveys.; and
- d. Specification of the limits to apply to the effects of vibration on human responses.

Fence

19 Prior to the commencement of works on site, the Requiring Authority shall erect an acoustic fence along the full length of the northern boundary of the site. The fence shall be not less than 2.5 metres in height and shall be constructed using durable materials with a surface mass of at least 12 kg/m². The fence shall be maintained with no gaps for the full duration of construction of both reservoirs. The fence may either remain in place, or may be removed and reinstated in between construction of the first and second reservoir.

For clarity, the required timing in this condition does not apply to the timing for the implementation of the Advanced Planting Plan required by Condition 29.

Traffic

- 20 Prior to the submission of the outline plan (or first outline plan if staged), the requiring authority shall, meet with the road controlling authority to discuss:
 - a) traffic and pedestrian safety issues in the vicinity of the school and playcentre;
 - b) the potential for a permanent 50kph speed limit on Runciman Road from its intersection with Rutherford Road to the northern boundary of the Pukekohe East school; and
 - c) potential safety methods or features that could be used in the vicinity of the Pukekohe East School

Where potential safety methods or features are agreed between the requiring authority and the road controlling authority, the requiring authority shall contribute up to \$10,000 to the installation of safety methods or features.

If agreement cannot be reached between the requiring authority and the road controlling authority on any or all of the identified appropriate methods or features within twelve months of conveying the safety concerns, then this condition is deemed to have been met.

Note to Parties: This condition will be finalised by the Court in light of submissions received on our discussion of Condition 20 in paragraphs 164 – 166 of the main body of the Decision and our indication that we are minded to place the matter, after community consultation, in the hands of AT to determine what transport mitigation works (if any) are required to be funded by



WSL.

Construction Traffic

21 A Construction Traffic Management Plan ("CTMP") must be prepared, implemented and maintained by the requiring authority throughout the entire construction period.

The purpose of the CTMP is to manage the various traffic management, safety and efficiency effects associated with construction of the Project to:

- (a) Protect public safety including the safe passage of all road users including pedestrians, cyclists and horse riding;
- (b) Minimise delays to road users; and
- (c) Inform the public about any potential impacts on the road network.

In particular, the CTMP must include measures to:

- Maintain traffic capacity or minimise the impact on traffic capacity during weekdays and weekends;
- b. Manage the effects of deliveries of construction material, plant and machinery;
- c. Ensure safe access and egress of heavy vehicles in and out of the site taking into account the site's topography and giving priority to incoming trucks. The temporary site access is to be utilised by construction traffic during both stages of the construction period;
- d. Ensure drivers on Runciman Road are alerted to the site access and those accessing Runciman Road from Rutherford Road are alerted to increase of truck movements/truck crossing;
- e. Ensure heavy traffic accesses the site from the south (via the Pukekohe East and Runciman Rd intersection) in all but exceptional circumstances
- f. When the pre-loading, 24 hour concrete pour and siteworks and landscaping activities occur on the site, to alert drivers on both approaches of Pukekohe East Road to the increase of heavy vehicle movements using the Pukekohe East Road/ Runciman Road intersection through the use of temporary advanced warning signs; and
- g. Temporarily reduce the speed limit on Runciman Road from 100km/hr to 70 km/hr from the temporary site access point to past the intersection with Rutherford Road, for the periods in which the pre-loading, 24 hour concrete pour and landscaping activities occur on site.
- The CTMP required by Condition 21 is to be prepared in accordance with New Zealand Transport Agency's 'Code of Practice for Temporary Traffic Management ("CoPTTM") and is to be developed in consultation with the Pukekohe East Church, the Pukekohe East School and the Pukekohe East Community Society Inc (if in existence at the time the consultation obligation arises). The purpose of the consultation is to identify potential conflicts



between major school and church events with construction activities. The requiring authority shall undertake all reasonable steps to seek to avoid conflicts with major school and church events that occur outside typical day to day activities.

The CTMP shall set out all consultation undertaken with the church and school, how their feedback has been incorporated, and where feedback has not been incorporated, the reasons why.

The Requiring Authority shall ensure that there is no construction related parking occurring offsite for the duration of the construction works. This may include a range of methods such as provision of car parking spaces for staff members, carpooling, travel planning.

An explanation of the methods to be used to achieve this outcome shall be included in the CTMP.

24 The construction of any vehicle crossing (temporary or permanent) must be in accordance with the Auckland Council's current relevant engineering standards.

Landscape Plan

With the exception of the Advanced Planting Plan required by Condition 29 a detailed landscape plan is to be prepared for the proposed works and submitted with the outline plan. The landscape plan may be staged to reflect the construction of the two reservoirs in stages.

The purpose of the landscape plan is to detail how the site will be landscaped in connection with each of the proposed reservoirs, to outline the methods to be implemented during the construction phase and for a defined period thereafter to avoid, remedy and mitigate adverse effects of the permanent work on landscape and visual amenity, and to manage all planting work associated with the Project.

- 26 The landscape plan shall:
 - a. Be prepared in general accordance with the drawing prepared by Boffa Miskell dated 114 October 2016 Revision A and referenced:
 - a. Figure 4 Proposed Landscape Concept Reservoir 1 and
 - b. Figure 5 Proposed Landscape Concept Reservoir 2 and taking into account the 2 metre restriction in the Obstacle Limitation Surface (referred to in Condition 26(f) below).
 - b. Confirm the extent of the proposed landscape-related earthworks, site preparation and mounding;
 - c. Detail the proposed planting of trees and shrubs on the site (number, plant spacing/densities, species, grade and their height at planting);
 - d. Incorporate the use of eco-sourced indigenous species of trees or



- shrubs where these are reasonably available and meet the required specifications (e.g. size);
- e. Set out how the planting and other landscape works will be staged to maximise visual screening and integration of the reservoirs with the surrounding landscape;
- f. Incorporate use of lower growing vegetation beneath the Obstacle Limitation Surface associated with the airstrip located at 97 Runciman Road;
- g. Incorporate boundary signage or other features to acknowledge heritage values in the surrounding area;
- h. Include planting specifications, instructions/schedule and an ongoing maintenance requirements for the site;
- i. Incorporate the planting undertaken as part of the Advanced Planting Plan, and the programme for maintenance and/or removal of that planting;
- j. State the programme for implementation of the works.
- k. Set out a maintenance programme for the site that shall be implemented for the duration of the project;
- I. Include details of fencing; and
- m. Include details of planting for the within and around the stormwater pond.
- The landscape plan is to be developed in consultation with key stakeholders including mana whenua, immediately adjacent landowners, the Civil Aviation Authority, the Pukekohe East Church and the Pukekohe East School. The requiring authority is to provide a summary in the landscape plan of all consultation undertaken in relation to its development, how feedback has been incorporated into its content and where feedback has not been incorporated, the reasons why.
- The requiring authority must implement the landscape plan confirmed as part of the Outline Plan process, and shall maintain the works in accordance with the maintenance programme in the landscape plan.

Advanced Planting

The Requiring Authority shall, in the planting season immediately following confirmation of the Notice of Requirement, prepare an Advanced Planting Plan for submission to the Council not less than 20 working days prior to the intended planting start date.

The purpose of the Advanced Planting Plan is to achieve early establishment of fast-growing tree species to provide visual screening around the full perimeter of the site as quickly as possible, and to allow planting of these species to occur before submission of an Outline Plan and before construction



activity on the site commences. The Advanced Planting Plan shall specify:

- a. tree species and planter bag sizes selected for their ability to screen quickly
- b. spacings
- c. planting programme and maintenance schedule; and
- d. demonstration of how the height restrictions of the Obstacle Limitation Surface are met, both by choice of tree species, and maintenance

For the avoidance of doubt, the Advanced Planting Plan does not need to be prepared as part of an Outline Plan. If the Requiring Authority takes the latter approach the Advanced Planting Plan is to be certified by an officer nominated by Auckland Council as satisfactorily meeting the purpose and specifications of Condition 29 prior to implementation.

The Advanced Planting Plan shall be implemented in the first planting season immediately following confirmation of the notice of requirement, subject to availability of appropriately sized plants to meet the requirement. Where there are either no or insufficient plants available, the Requiring Authority shall provide Council with a written report detailing:

The methods and efforts undertaken to secure sufficient plants

Timing for securing plants within the next planting season and planting programme

Where insufficient plants are available to plant the full perimeter of the site, the Requiring Authority shall undertake planting of the two road boundaries first.

Archaeology and Heritage

- An appropriately qualified archaeologist is to monitor construction activities during surficial earthworks and excavation into natural ground, and at other times during construction if, in the opinion of the archaeologist their assessment of the likelihood of finding sensitive material (as defined in Rule [E12.6.1] of the Auckland Unitary Plan Operative in Part) is high. An appropriately qualified archaeologist shall monitor construction activities during surficial earthworks and excavations into natural ground. Monitoring shall continue at other times during construction if in the archaeologist's opinion the likelihood of finding sensitive material (as defined in Rule [E12.6.1] of the Auckland Unitary Plan Operative in Part) is high.
- That all earthworks or land disturbance or any activity associated with earthwork or land disturbance shall comply with the Accidental Discovery rule [E12.6.1] set out in the Auckland Unitary Plan Operative in Part.
- The previous conditions will not apply where the requiring authority holds all relevant approvals under the Heritage New Zealand Pouhere Taonga Act 2014, apart from the requirement in the case of discovery of human remains to contact mana whenua and the New Zealand Police.



A heritage interpretation sign to contribute to retelling the story of the area shall be installed by the Requiring Authority.

The Requiring Authority shall, in consultation with the Pukekohe East Presbyterian Church Preservation Society, the owner of the church site, and a suitably qualified heritage specialist, investigate the potential for the installation of the signage adjacent to or within the church grounds, with this consultation commencing prior to the commencement of construction of the first reservoir. Consultation shall include the road controlling authority where a location within the road reserve is considered. If, within six months of the commencement of consultation either an agreement is unable to be reached, or any required statutory approvals (which may include under the RMA 1991 or Heritage New Zealand Pouhere Taonga Act) for the installation of the signage are not able to be obtained, the Requiring Authority shall install the signage on the reservoir site.

Regardless of the location, the signage this is to be developed in consultation with key stakeholders including mana whenua, Heritage New Zealand and the Pukekohe East Presbyterian Church Preservation Society.

If the signage is to be installed on the reservoir site, consideration of placement of the sign shall be undertaken in consultation with a suitably qualified transportation person so as to avoid the obstruction of vehicle sightlines moving into and out of Rutherford Road. If the signage is to be installed on the reservoir site, consideration of the placement of the sign shall be done in consultation with Auckland Transport to avoid the obstruction of sightlines at the junction of Runciman and Rutherford Roads. If Auckland Transport considers it necessary, the Requiring Authority shall also form vehicle parking clear of the Runciman Road carriageway at a location and in a manner approved by Auckland Transport.

The Requiring Authority shall install the signage prior to commissioning of the first reservoir

The Requiring Authority shall provide the Team Leader- Major Projects, Auckland Council with the results of a condition (dilapidation) survey of the Pukekohe East Church, undertaken not more than one month prior to submission of the outline plan (or first outline plan if construction is staged). If access to the church to carry out the condition survey is withheld preventing the condition survey from being undertaken, then this condition is deemed to have been complied with.

The requiring authority shall provide the Team Leader- Major Projects, Auckland Council with the results of a condition (dilapidation) survey of the Pukekohe East Church, undertaken not more than one month after completion of construction of the each reservoir. If access to the church to carry out the condition survey is withheld preventing the condition survey from being undertaken, then this condition is deemed to have been complied with.

Where the post-construction condition survey of the Pukekohe East Church



identifies any damage that can be attributed to the effects of construction of the reservoir, the Requiring Authority shall, within one month of discovering the damage, take all reasonable steps to repair the damage. Where the damage is identified as potentially jeopardising the structural stability of the building, the Requiring Authority shall undertake all reasonable steps immediately to repair the damage.

Where any repairs are undertaken, the Requiring Authority shall prepare a report and submit this to Council and the Pukekohe East Church Preservation Society for information within one month of completion of the repair works.

Lapse of Designation

- The designation will lapse on the expiry of a period 15 years after the date it is included in the District Plan in accordance with section 184(1)(c) of the RMA, unless:
 - a. It is given effect to before the end of that period; or
 - b. The Council determines, on an application made within 3 months before the expiry of that period, that substantial progress or effort has been made towards giving effect to the designation and is continuing to be made, and fixes a longer period for the purposes of this sub-section of the Act.

Airstrip

- Any structure, building, construction equipment or tree associated with the project must not penetrate the Obstacle Limitation Surface defined for the airstrip operating on the property located at 97 Runciman Road except to the extent authorised by CAA Aeronautical Study 16/77/31 dated 8 April 2016 and/or in the CAA determination dated 13 April 2016. Trees and other vegetation in the OLS area of the site are to be maintained regularly to ensure compliance with the defined Obstacle Limitation Surface.
- The requiring authority is to provide the operator of the airstrip at 97 Runciman Road and the Civil Aviation Authority a minimum of 90 days' notice of the commencement of construction of the main structure (i.e. walls and roof) of each reservoir.
- The requiring authority is to provide information in relation to construction and operation of the reservoirs to the operator of the Pukekohe East airstrip.

The information shall be suitable to be used by the operator of the Pukekohe East airstrip to provide advice to aircraft operators using the airstrip regarding the presence of the reservoirs along with their normal briefings about any other local operating procedures required to ensure safe aircraft operations at the airstrip.



Advice Notes

- 1 The consent holder is reminded of its general obligation under section 16 of the Resource Management Act 1991 to adopt the best practicable option to ensure that emissions of noise do not exceed a reasonable level at any time.
- A Corridor Access Request ("CAR") is to be submitted to Auckland Transport for each road on which work will be undertaken via the beforeudig http://www.beforeudig.co.nz/ CAR process. The CAR will include but not be limited to information on:
 - Project manager's name and contact details
 - · Contractor name and contact details
 - Contract / project name and or reference number
 - A reasonable description of the work to be undertaken on the specific road covered by the CAR
 - · Start and end dates for the specific road covered by the CAR
 - A site specific temporary traffic management plan as described under the traffic management conditions.

Each CAR is to be submitted at least 20 working days prior to the anticipated start date of the work covered by the specific CAR. Applications for complete road closures are to be submitted at least 30 working days prior to the anticipated closure date. Work on the road reserve covered by the specific CAR shall not commence until the requiring authority is in possession of a Works Approval Permit from Auckland Transport. All work shall be carried out in accordance with the National Code of Practice for Utility operators' Access to Transport Corridors and any other CAR specific conditions agreed between Auckland Transport and Watercare Services.

- The Heritage New Zealand Pouhere Taonga Act 2014 provides for the identification, protection, preservation and conservation of the historic and cultural heritage of New Zealand. All archaeological sites are protected by the provisions of this Act (section 42). It is unlawful to modify, damage or destroy an archaeological site without prior authority from Heritage New Zealand Pouhere Taonga. An authority is required whether or not the land on which an archaeological site may be present is designated, a resource or building consent has been granted, or the activity is permitted under Unitary, District or Regional Plans. Under the section 6 of the Heritage New Zealand Pouhere Taonga Act "archaeological site" means, subject to section 42(–
 - any place in New Zealand, including any building or structure (or part of a building or structure), that –
 - was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and



- II. provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- 2) includes a site for which a declaration is made under section 43(1).

It is the responsibility of the consent holder to consult with Heritage New Zealand Pouhere Taonga about the requirements of the Heritage New Zealand Pouhere Taonga Act and to obtain the necessary authorities under the Act should these become necessary as a result of any activity associated with the project. For information please contact the Heritage New Zealand Pouhere Taonga Northern Regional Archaeologist — 09 307 0413 / archaeologistMN@historic.org.nz.

- 4 Under the Protected Objects Act 1975, Māori artefacts such as carvings, stone adzes, and greenstone objects are considered to be tāonga (treasures). These are taonga tūturu within the meaning of the Protected Objects Act. According to section 2 of this Act taonga tūturu means an object that
 - a) relates to Māori culture, history, or society; and
 - b) was, or appears to have been
 - i. manufactured or modified in New Zealand by Māori; or
 - ii. brought into New Zealand by Māori; or
 - iii. used by Māori; and
 - c) is more than 50 years old

The Protected Objects Act is administered by the Ministry of Culture and Heritage. Tāonga may be discovered in isolated contexts, but are generally found in archaeological sites. The provisions of the Heritage New Zealand Pouhere Taonga Act 2014 in relation to the modification of an archaeological site should also be considered by the requiring authority if tāonga are found in an archaeological site, as defined by the Heritage New Zealand Pouhere Taonga Act 2014. It is the responsibility of the requiring authority to notify either the chief executive of the Ministry of Culture and Heritage or the nearest public museum, which will notify the chief executive, of finding taonga tūturu within 28 days of finding the taonga tūturu; alternatively provided that in the case of any taonga tūturu found during the course of any archaeological investigation authorised by Heritage New Zealand Pouhere Taonga under section 48 of the Heritage New Zealand Pouhere Taonga Act 2014, the notification shall be made within 28 days of the completion of the field work undertaken in connection with the investigation.

Under section 11 of the Protected Objects Act, newly found taonga tūturu are in the first instance Crown owned until a determination of ownership is made by the Māori Land Court. For more information please contact the Ministry of Culture and Heritage – 04 499 4229 / protected-objects@mch.govt.nz.

5 Guidance should be sought from Mana Whenua for tikanga in relation to the



designation

The requiring authority needs to ensure that all work permits required from Vector are obtained prior to commencing works within and immediate adjacent to the gas pipeline corridor. The requiring authority must ensure that all persons working the vicinity of the pipeline undergo pipeline awareness training provided by Vector. If as a result of the activities being carried out under this designation an unforeseen risk to the integrity of the pipeline corridor develops, works in the vicinity of the pipeline shall cease and the requiring authority is to notify Vector and the Auckland Council as soon as practicable. Remedial works are to be agreed with Vector Gas Ltd.



Appendix 2

PROPOSED CONDITIONS OF CONSENT - PALUCIZOTISIANTA, RAREGIZOTISIANBA, RAREGIZOTISIANB

Ceneral Conditions

Move: These general conditions apply to all the resource consents namely.

- O LAND USE CONSENTS (Section 9) R/LUC/2015/4/178
- O STORMWATER PERMIT (Sections 14 and 15) RAREG/2015/4182
- o DISCHARGE PERMIT (section 1/5) RAREG/201/5/41/83
- O CONTAMINATIED LAND DISCHARGE PERMIT RAREGIZO115/43/43

Activities in accordance with plans

- The works shall be carried out in general accordance with the plans and all information submitted with the application, detailed below, and referenced by the Council as consent numbers R/LUC/2015/4178, R/REG/2015/4182, R/REG/2015/4183 and R/REG/2015/4343, including:
 - Section 5 "Proposed Works" in the accompanying "Runciman Reservoirs Project, Assessment of Effects on the Environment", dated October 2015
 - Letter dated 21 December 2015, Runciman Reservoirs Project section 92 response to information request dated 10 December 2015, and attachments
 - Letter dated 17 November 2015, Runciman Reservoirs Project section 92 response to information request dated 23 October 2015, and attachments
 - Ecological Assessment prepared by Bioresearches dated October 2015
 - Detailed Site Investigation Report by CH2M Beca, dated 23/09/15
 - Remedial Action Plan Runciman Reservoirs Project by CH2M Beca, dated 3/11/15

And the following drawings:

- Indicative Erosion and Sediment Control for trenching in the road (rural)
 DWG No. 20101119.02
- Stage 1 Erosion and Sediment Control DWG No. 2012093.019
- Stage 2 Erosion and Sediment Control DWG No. 2012093,020
- drawings prepared by Boffa Miskell dated 144 October 2016 Revision A and referenced:
 - o Figure 4 Proposed Landscape Concept Reservoir 1
 - Figure 5 Proposed Landscape Concept Reservoir 2



Where there is inconsistency between the documents listed above and these conditions, these conditions shall prevail.

- * Note: the landscape plans incorrectly record the Obstacle Limitation Surface associated with the airstrip at 97 Runciman Road as restricting planting in the OLS to two metres in height. The height that any vegetation in the OLS area may not exceed is as determined by the Civil Aviation Authority when imposing the OLS from time to time (subject to the airstrip remaining in operation).
- 2 If the project is to be staged, with one reservoir proceeding in advance of the second, the Consent Authority shall construct the northern reservoir first.

Consent Lapse

- 3 Each of these consents will lapse fifteen years after the date they commence unless:
 - a. The consent is given effect to; or
 - b. On application the Council extends the period after which the consent will lapse.

Monitoring charges

The consent holder is to pay the Council an initial consent compliance monitoring charge of \$1350 (inclusive of GST), plus any further monitoring charge(s) to recover the actual and reasonable costs incurred to ensure compliance of these consents.

Site Access

Subject to compliance with the consent holder's health and safety requirements, the servants or agents of the Council are to be permitted to have access to relevant parts of the surface construction sites controlled by the consent holder at all reasonable times for the purpose of carrying out inspections, surveys, investigations, tests, measurements and/or to take samples.

Construction Management Plan

The consent holder is to prepare a Construction Management Plan for construction of the proposed reservoirs and associated infrastructure. The purpose of the CMP is to set out the management and monitoring procedures and construction methods and tools to be undertaken used in order to identify and manage environmental risks avoid, remedy or mitigate potential adverse effects arising from construction activities and to demonstrate how compliance with performance standards in these conditions will be achieved.

The CMP shall include:



- (a) An outline construction programme;
- (b) Contact details of the site supervisor or project manager and the construction liaison person (phone, postal address, email address);
- (c) The proposed hours of work;
- (d) Measures to be adopted to maintain the land affected by the works in a tidy condition in terms of disposal / storage of rubbish, storage and unloading of construction materials and similar construction activities;
- (e) Location of site infrastructure including site offices, site amenities, contractors' yard access, equipment unloading and storage areas, contractor car parking and security.
- (f) Procedures for controlling sediment run-off, dust and the removal of soil, debris, demolition and construction materials (if any) from public roads or places adjacent to the work site;
- (g) Procedures for ensuring that residents, educational facilities, road users, the Pukekohe East Presbyterian Church, and businesses in the immediate vicinity of construction areas are given prior notice of the commencement of construction activities and are informed about the expected duration and effects of the work
- (h) Means of providing for the health and safety of the general public; and
- (i) Procedures for responding to complaints about construction activities.

The CMP shall include the following Management Plans:

- (i) The Remedial Action Plan ("RAP") submitted with the application and any amendments to this plan
- (ii) Erosion and Sediment Control Plan ("ESCP")
- (iii) Stormwater Management Plan ("SMP")

Advice note:

Other construction management plans will form part of the CMP, as required by the designation conditions. These include a communications plan, a construction traffic management plan and a noise and vibration management plan, which will be prepared and approved using the Outline Plan process in accordance with the designation requirements

Where a Plan is required as listed in Condition 6 above, the Plan shall be implemented and maintained throughout the entire duration of the construction period.

Contamination

The consent holder is to implement the procedures and measures documented in the Remedial Action Plan (CH2M Beca, 3 November 2015), or any subsequent approved updated versions of that plan.



- 9 All sampling and testing of contamination of the site, if required, is to be overseen by an appropriately qualified and experienced contaminated land practitioner. All sampling must be undertaken in accordance with "Contaminated Land Management Guidelines, No.5 Site Investigation and Analysis of Soils, Ministry of the Environment" revised 2011.
- All excavation in the work areas is to be managed to minimise any discharge of debris, soil, silt, sediment or sediment-laden water from beyond site to either land, stormwater drainage systems, watercourses or receiving waters.

Advice Note:

'Discharge from the site' includes the disposal of water (eg. perched groundwater or collected surface water) from the remediation area.

11 All imported fill is to:

- a. comply with the definition of 'cleanfill' in 'A Guide to the Management of Cleanfills', Ministry for the Environment (2002); and
- be solid material of an inert nature; and
- c. not contain hazardous substances or contaminants above natural background levels of the receiving site.
- All soil removed from the land disturbance area is to be deposited at a disposal site that holds a consent to accept the relevant level of contamination. Where it can be demonstrated that the soil has been fully characterised in accordance with the Ministry for the Environment's 'A guide to the management of cleanfills' (2002) and meets the definition of 'cleanfill', removal to a consented disposal site is not required.

Unexpected contamination discovery

Where contaminants are identified that have not been anticipated by the assessments in the application material, works in the area containing the unexpected contamination are to cease and the contamination is to be notified to the Team Leader Southern Monitoring, Auckland Council. Works are not to recommence until confirmation has been received from the Team Leader Southern Monitoring Auckland Council that disturbance of the unexpected contamination is within the scope of these consents and that any response measures adopted continue to be consistent with their conditions and supporting material.

Works completion report

14 Within three months of completion of the activities authorised under these consents on the site, a Works Completion Report ("WCR") is to be provided to the Team Leader Central Monitoring, Auckland Council. The WCR is to be prepared by an appropriately qualified and experienced contaminated land practitioner and is to include details of any soil sampling and monitoring



undertaken. The purpose of the WCR is to set out the findings from the works undertaken in relation to land contamination and provide an enduring record of any contamination issues. The WCR is to address the following matters in detail:

- a. a summary of the works undertaken, including a statement confirming whether the excavation of the site has been completed in accordance with the application reports listed in condition 1
- b. a summary of any testing undertaken, including tabulated analytical results and interpretation of the results
- c. copies of the disposal dockets for the material removed from the site
- d. evidence that all imported fill materials have complied with the definition of 'cleanfill' in 'A Guide to the Management of Cleanfills', Ministry for the Environment (2002)
- e. records of any unexpected contamination encountered during the works, the contingency measures adopted and remedial works undertaken, if applicable
- f. the methods adopted and results of any air monitoring undertaken
- g. details regarding any complaints and/or breaches of the procedures set out in the Contaminated Soils Management Plan, and the conditions of these consents.

Review under Section 128

- The conditions of these consents may be reviewed by the Council one year after their commencement, and at two yearly intervals after that time, in order to:
 - a. deal with any actual or potential adverse effect on the environment which may arise from the exercise of these consents and which is appropriate to deal with at a later stage, particularly, with regard to earthworks, the disturbance of contamination on the site and its remediation, the diversion and discharge of stormwater from the site, and emergency overflows; and/or
 - b. insert conditions, or modify existing conditions, to require the consent holder to characterise the nature and extent of any actual or potential adverse effects on the environment and to adopt the best practicable option to:
 - prevent or minimise any of such adverse effects, particularly on the ecological and natural values of the receiving environment from any discharges authorised under these consents, and/or
 - ii. avoid, remedy or mitigate any adverse effects on any property.



SPECIFIC CONSENT CONDITIONS

LAND USE CONSENTS (Section 9) - RALUCIZA 514:178

Mote: Conditions 1 to 15 above apply to this consent.

Earthworks Management and Controls

- 16 Prior to commencement of the earthworks activity on the site, a final Erosion and Sediment Control Plan specific to each stage of earthworks is to be submitted to the Team Leader, Southern Monitoring Auckland Council for approval. The purpose of the ESCP is to set out the earthworks methodologies and controls to avoid or mitigate adverse effects from earthworks undertaken on the site for the actual staging of the construction of the reservoirs. The ESCP is to include but not be limited to:
 - a. earthworks staging and sequencing;
 - design details and supporting calculations of all erosion and sediment controls and associated works including, clean and sediment laden diversion bunds / channels, silt fencing, the sediment retention pond and stabilised entranceways;
 - c. the timing and expected duration of each section of works;
 - d. details relating to the management of exposed areas (e.g. grassing, mulching);
 - e. monitoring and maintenance requirements for the proposed erosion and sediment controls;
 - f. the Chemical Treatment Management Plan required by condition 17.

Advice Note:

In the event that minor modifications to the proposed erosion and sediment control measures are required, any such modifications should be in general accordance with, or exceed, the requirements of the Council's GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region. Modifications should be limited to the scope of this consent and as identified in the approved plans. Any changes to the erosion and sediment control measures which affect their performance or level of treatment they provide, may require an application to be made in accordance with section 127 of the RMA. Any minor amendments should be provided to the Team Leader – Southern Monitoring, prior to implementation to confirm that they are within the scope of this consent.

17 Unless alternate methods that are acceptable to the Team Leader Southern Monitoring Auckland Council are justified in the ESCP required the consent holder is to prepare a Chemical Treatment Management Plan ("ChTMP") based on a rainfall activated methodology to control the discharge quality from the proposed on-site sediment retention pond, which is to include:



- a. specific design details of the chemical treatment system;
- b. monitoring, maintenance (including post storm) and contingency programme (including a record sheet);
- c. details of optimum dosage (including assumptions);
- d. results of initial chemical treatment trial;
- e. spill contingency plan;
- f. details of the person or bodies who will hold responsibility for operation and maintenance of the chemical treatment system and the organisational structure which will support this system, throughout the duration of the consent.

Earthworks pre-commencement

- 18 Prior to commencement of any earthworks on the site, including in each period between October 1 and April 30 of any year that this consent is exercised, the consent holder is to arrange and conduct a pre-commencement meeting that:
 - a. Is located on the site;
 - b. Is scheduled not less than five working days before the anticipated commencement of the works;
 - c. Includes the site supervisor, representation from the contractors who will undertake the earthworks, the project archaeologist, and an officer from the Southern Monitoring Team, Auckland Council.

The following information is to be made available by the consent holder and discussed at the pre-commencement meeting to ensure all relevant parties are aware of and familiar with the following matters:

- these resource consent conditions
- any updates to timeframes for the works authorised under by consent
- the approved ESCP
- contact details for the project manager, the main contractor, the site engineer supervising the works and other key contractors

Advice Note:

'Commencement of earthworks' means the time when the earthworks, including any site preparation works or bulk earthworks, are to commence.

Certification of erosion and sediment controls

19 Written certification that the erosion and sediment controls have been constructed in accordance with the requirements in the approved ESCP are to be submitted to the Team Leader Southern Monitoring. Auckland Council by an appropriately qualified and experienced person within ten working days following implementation and completion of the specific erosion and sediment control works. The certified controls are to include the sediment retention



pond and diversion channels / bunds. The information supplied, if applicable, is to include:

- a. contributing catchment area;
- b. shape of structure (dimensions of structure);
- c. position of inlets/outlets; and
- d. stabilisation of the structure.

The written certification is to be in the form of a report or any other form acceptable to the Council. Interim certificates may be submitted for different earthworks stages in order to comply with this condition.

All perimeter controls are to be operational before earthworks commence. All 'cleanwater' runoff from stabilised surfaces including catchment areas above the site itself are to be diverted away from earthworks areas by way of a stabilised system in order to prevent surface erosion.

Advice Note:

Perimeter controls include cleanwater diversions, super silt fences and any other erosion control devices that are appropriate to divert stabilised upper catchment runoff from entering the site, and to prevent sediment-laden water from leaving the site.

- There is to be no deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the site. In the event that such deposition does occur, it is to be removed immediately. In no instance are roads or footpaths to be washed down with water without appropriate erosion and sediment control measures in place to prevent discharges of sediment laden water into the stormwater drainage system, watercourses or receiving waters.
- 22 No sediment laden runoff shall leave the site without prior treatment by an approved sediment control device.
- The operational effectiveness and efficiency of all erosion and sediment control measures implemented shall be maintained throughout the duration of the earthworks activity, or until the site is permanently stabilised against erosion. A record of any maintenance work shall be kept and be supplied to the Team Leader Southern Monitoring Auckland Council on request.
- The site shall be progressively stabilised against erosion at all stages of the earthwork activity, and shall be sequenced to minimise the discharge of sediment to surface water in accordance with the approved Erosion and Sediment Control Plan. Site stabilisation shall mean when the site is covered by a permanent erosion proof ground cover such as aggregate and includes vegetative cover which has obtained a density of more than 80% of a normal pasture sward.



Where the earthworks are completed, or where bare earth is not being worked for in excess of one month, all areas of bare earth are to be permanently stabilised against erosion to the satisfaction of the Team Leader Southern Monitoring, Auckland Council.

Advice Note:

Should the earthworks be completed or abandoned, bare areas of earth shall be permanently stabilised against erosion. Measures may include:

- · the use of mulch
- · top-soiling, grassing and mulching otherwise bare areas of earth
- aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.

The on-going monitoring of these measures is the responsibility of the consent holder. It is recommended that you discuss any potential measures with the Council's monitoring officer who will guide you on the most appropriate approach to take. Please contact the Team Leader. Southern Monitoring for more details. Alternatively, please refer to the Council's GD05 Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region.



STORMWATTER PERMIT (Sections 14 and 15) - RARECIZOISIA462

DISCHARGE PERMIT (section 15) - INREGIZMINATION

Note: Conditions 1 to 15 above apply to this consent.

26 Stormwater permit R/REG/2015/4182 and discharge permit R/REG/2015/4183 will expire 35 years after their commencement date, unless they have lapsed, been surrendered or been cancelled at an earlier date.

Discharge management works

The following discharge management works are to be constructed for the following catchment areas and design requirements, and are to be completed prior to any discharges commencing from the site:

Works to be undertaken	Catchment area: impervious	Catchment area: pervious	Design requirement(s)
Stormwater/ reservoir overflow detention pond	13.500m ²	-	 Attenuation of 10 and 100 year storm events Extended detention of 34.5mm and release over 24 hours detention volume equal to one hour overflow duration at maximum flow from the reservoirs

Advice Note:

It is anticipated that the stormwater discharges from the site will commence once the site bulk earthworks associated with construction of the first reservoir have been completed and the site has been permanently stabilised against erosion.

Prior to commencement of the construction of the first reservoir, the consent holder is to submit the final detailed design of the discharge management works set out in Condition 27 to the Team Leader Southern Monitoring as part of a Stormwater Management Plan for the construction and operational phases of the project for approval.

The purpose of the SMP is to demonstrate how the design of the site during both construction and operation phases controls stormwater discharges from the site.

This is to include, but not be limited to:

Specification of detention device;



- b. Site drainage plans;
- c. Catchment impervious area details (and associated volume calculations) for stormwater and overflow management devices;
- d. Plans and engineering drawings, including detailed cross sections of all stormwater management devices, details and levels of in- and outlet structures, spillway, water levels during different design storms and reservoir overflow events;
- e. Planting plans for the stormwater device(s);
- f. Final design calculations for all stormwater management device(s) demonstrating the capacity and detention efficiency;
- g. Assessment of erosion protection requirements and outfall structure design details;
- h. Demonstration of how the design ensures there will be no permanent stormwater discharge to Runciman Road from the site, with all discharges to be on the on-site pond and/or Rutherford Road.

Modifications approval

- 29 In the event that any modifications to the stormwater and/or discharge management system(s) are required, the following information is to be provided to the Council by the consent holder:
 - a. Plans and drawings outlining the details of the modifications; and
 - b. Supporting information which details how the proposal will not affect the capacity or performance of the system.
 - c. All modifications information shall be submitted to the Team Leader Southern Monitoring for approval prior to implementation.

Advice Note:

Any changes to the proposal which will affect the capacity or performance of the discharge management and/or stormwater system proposed in the application will require an application to the Council pursuant to section 127 of the RMA. An example of a minor modification is a change to the location of a pipe or slight changes to the site layout. If there is a change of device type (even proprietary), the consent will have to be varied under section 127 of the RMA.

Stormwater and discharge management works - pre-construction meeting

- 30 Prior to commencement of the construction of any stormwater or discharge management works, the consent holder is to arrange and conduct a pre- construction meeting that:
 - a) is located on the site;
 - b) is scheduled no less than five working days before the anticipated



commencement of the works;

 includes the site supervisor, stormwater engineer, representation from the contractors who will undertake the works, and an officer from the Southern Monitoring Team, Auckland Council.

The following information is to be made available by the consent holder prior to, or at, this pre-construction meeting:

- timeframes for key stages of the works outlined and design details approved by the Council under conditions 19 and 20;
- contact details for the site contractor and the site stormwater engineer.

Stormwater and discharge management works - post-construction meeting

Within 60 working days of achieving the practical completion of any stormwater and discharge management works on the site, the consent holder is to arrange and conduct a post-construction meeting for the purpose of confirming compliance with these consent conditions.

The meeting is to:

- a. be located on the site;
- b. Include the site stormwater engineer and an officer from the Southern Monitoring Team, Auckland Council.

Certification of stormwater and discharge management works (as-built plans)

- Prior to the post-construction meeting the consent holder is to submit as-built plans of the stormwater and discharge management works which are certified by an appropriately qualified registered surveyor as a true record of the system to the Team Leader Southern Monitoring Auckland Council. The as-built plans are to display the entirety of the stormwater and discharge management system, and are to include:
 - the surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the stormwater and discharge structures, with co-ordinates expressed in terms of NZTM and LINZ datum;
 - location, dimensions and levels of any overland flowpaths, including cross sections and long sections;
 - plans and cross sections of all stormwater and discharge management devices, including storage volumes and levels of any outflow control structure:
 - documentation of any discrepancies between the as-built plans and the design plans approved by the Council.

Advice note:

It is anticipated that due to separate construction phases for both reservoirs,



separate construction meetings and as-built certifications may be required.

Operation and Maintenance plan

- Prior to the post-construction meeting the consent holder is to submit an Operation and Maintenance Plan for approval to the Team Leader Southern Monitoring. The purpose of the Operation and Maintenance Plan is to set out how the stormwater management system is to be operated and maintained to ensure that adverse environmental effects are minimised. The OMP is to include:
 - details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure to support this process;
 - b. a programme for regular maintenance and inspection of the stormwater management system;
 - c. a programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;
 - d. a programme for post storm and overflow inspection and maintenance;
 - e. a programme for inspection and maintenance of the outfall;
 - f. general inspection checklists for all aspects of the stormwater management system, including visual checks;
 - g. a programme for inspection and maintenance of vegetation associated with the stormwater management devices; and
 - h. a programme for inspecting the discharge management system to ensure discharges are not occurring to Runciman Road.

The stormwater and discharge management systems are to be managed in accordance with the approved Operation and Maintenance Plan. Any amendments to the Operation and Maintenance Plan shall be submitted in writing to the Team Leader Southern Monitoring for approval prior to their implementation. The Operation and Maintenance Plan is to be updated and submitted to the Team Leader Southern Monitoring on request.

Discharge quality monitoring

33 After any overflow of chlorinated drinking water from the reservoir to the stormwater pond has occurred, water quality in the stormwater pond is to be monitored by the consent holder to establish the time required for chlorine levels to break down naturally to background levels in accordance with the procedures set out in the approved Discharge Management Plan.

Discharge Management Plan – Emergency Overflows

34 Prior to any reservoir established on the site being commissioned, the consent holder is to submit a Discharge Management Plan – Emergency Overflows ("DMP-EF") to the Team Leader Southern Monitoring for approval.



The purpose of the DMP-EF is to set out the methods, procedures and contingencies adopted to prevent or to minimise potential adverse effects on the aquatic ecology of the permanent section of the stream receiving emergency overflow discharges from the site.

The DMP-EF is to include, but not be limited to:

- a. Methods and procedures for the sampling of water quality in the stormwater pond after an overflow from the reservoir has occurred;
- b. Sampling locations in stormwater pond;
- c. Monitoring parameters for analysis are to include:
 - Free Available Chlorine (mg/L)
 - Hq •
 - Temperature

and the permitted activity standards in Auckland Unitary Plan – Operative in Part: Clause E4.6.2.1(2) and E4.6.2.4(2)

- Identified trigger levels and background levels in the receiving stream environment in relation to ANZECC water quality guidelines for each of the above parameters;
- e. Methods and procedures for releasing any overflow water from the stormwater pond into the receiving environment based on monitoring results and trigger levels set, and contingencies;
- f. Reporting requirements details, including to the Council, in respect of overflow occurrences, the steps taken and monitoring results.

The approved DMP-EF is to be implemented during the operation of the reservoir.

Maintenance and monitoring reporting records

- 35 The consent holder is to retain details of all inspections, maintenance and monitoring results for the stormwater management system and under the DMP and approved SMP for the preceding three years.
- The consent holder shall submit a maintenance and monitoring report to the Team Leader Southern Monitoring Auckland Council on request. The maintenance and monitoring report shall include the following information:
 - details of who is responsible for maintenance of the stormwater management system and the organisational structure supporting this process;
 - b. details of any maintenance undertaken;
 - c. details of any inspections completed and;
 - d. details of any monitoring undertaken.



CONTRAMINATIED LAND DISCHARGE PERMIT - RIRECIZMENASAS

Note: Conditions 1 to 1:5 above apply to this consent

- 37 Permit R/REG/2015/4343 will expire 15 years after the date it commences, unless it has lapsed, surrendered or been cancelled at an earlier date.
- Any perched groundwater, or surface water encountered within the excavation area requiring removal is to be considered potentially contaminated, and is to be either:
 - a. disposed of by a licensed liquid waste contractor; or
 - discharged to the stormwater system or surface waters, provided testing demonstrates compliance with the Australian and New Zealand Environment Conservation Council Guidelines for Fresh and Marine Water Quality (2000) for protection of 95 percent of freshwater species.

ADVICE NOTES

- A copy of the conditions of these consents and associated project documentation is to be available at all times on the work site as a requirement in order for contractors to be aware of any restrictions.
- The scope of this resource consent is defined by the application made to the Auckland Council and all documentation supporting that application.
- The initial monitoring charge is made to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc, all being work to ensure compliance with the resource consent. In order to recover actual and reasonable costs, inspections, in excess of those covered by the base fee paid, will be charge d at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge(s) as they fall due. Such further charges are to be paid within one month of the date of invoice. Only after all conditions of the resource consent have been met, will the Council issue a letter confirming compliance on request of the consent holder.
- 4 If the consent holder disagrees with any of the above conditions, and/or disagrees with the additional charges relating to processing the application the consent holder has a right of objection under to sections 357A and/or 357B of the RMA. Any objection must be made in writing to the Council within 15 working days of notification of this decision
- 5 To arrange the pre-commencement meetings please contact the Team Leader Southern Monitoring: All information required should be provided at least 5 days prior to the meeting.



BEFORE THE ENVIRONMENT COURT

Decision No. 2013 NZEnvC 59

IN THE MATTER

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

 $\mathbf{B}\mathbf{Y}$

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 Canterbury Regional Council

Respondent 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



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INTRODUCTION

- 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. 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.
- 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.

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

Meridian Interim Decision

OURT !

SEAL OF

- [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

base includes hydro² and wind generation facilities. It operates a number of wind-generation facilities³ with one under construction⁴ 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.

4 Project Mill Creek (Wellington)
SEAL⁵ Ocentral Wind and Hawkes Bay Wind farm
6 Mr Muldoon, evidence-in-chief, paragraph [12]

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

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)

- 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



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. 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.

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

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

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

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.

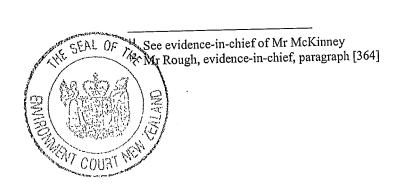
[23] We were told that there was considerable opposition to Meridian's proposal from "the community". Who exactly "the community" is and who was authorised to speak for it became an issue.

Who is the community?

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?

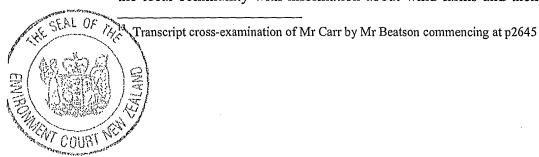
The Society, as its name suggests, was specifically formed to oppose Meridian's proposal. It comprises a number of members and addressed matters of collective concern. There were also members of the Society who in their personal capacities addressed matters of individual concern, but Mr Carr for Tipapa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



- [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



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 meeting¹⁴ 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. 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. 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

¹⁴ Meridian Exhibit 16

¹⁵ Transcript p2652 lines 21-24, Mr Carr

¹⁶ Transcript p2652 lines 21-24- p2653 lines 1-10, Mr Carr

Meridian Exhibit 17(a) and (b)

¹⁸ Meridian Exhibit 17 (c)

¹⁹ Tipapa Exhibit 4

Mr Carr Opening Statement Meridian Ex 18 (a)-(d)

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
Transcript p2314, lines 1-6
F²⁴ Transcript p2314, lines 18-19
25 Transcript p2500, lines 21-25

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 consents²⁶ 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.

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

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

The RMA and relevant statutory instruments

The relevant statutory considerations for a discretionary activity are set out in [41] 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

- When considering an application for a resource consent and any submissions received, the consent authority must, subject to Part 2, have regard to
 - any actual and potential effects on the environment of allowing (a) the activity; and
 - any relevant provisions of-(b)
 - (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
 - any other matter the consent authority considers relevant and (c) reasonably necessary to determine the application.
- The RMA has a single purpose (section 5) which is as follows: [42]

Purpose 5

- The purpose of this Act is to promote the sustainable management of (1) natural and physical resources.
- In this Act, sustainable management means managing the use, (2)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
 - sustaining the potential of natural and physical resources (a) (excluding minerals) to meet the reasonably foreseeable needs of future generations; and



- (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.
- 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 2011²⁷, 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

- 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 SEAL OF outcomes as the corresponding provisions in the operative document. In the proposed

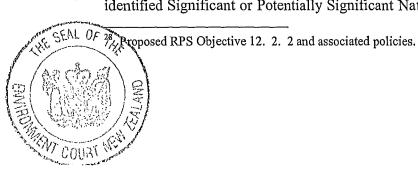
RPS there are more specific provisions relating to natural character values of waterways and the management of freshwater generally. There is also more direction given to identifying and protecting significant natural areas, providing for ecological enhancement and restoration, and managing biodiversity 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. 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



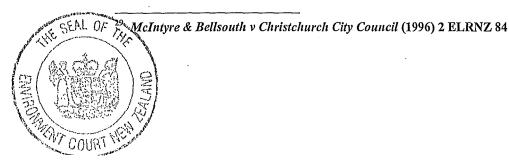
outside the identified Coastal Environment Management Area. No notable trees, heritage features or archaeological sites are identified on land that is subject to the applications. SH1 and the main trunk rail line are both designated alongside the site. SH1 is classified as a Strategic Arterial Road and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



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 apply³¹.

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, health³², avifauna³³ 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

Ms Meares, Transcript, page 1848, lines 1-15
Mr Pearson, Transcript, page 2140, lines 18-23
[1999] NZRMA 66, page 51, paragraph [114]



^{30 [1999]} NZRMA 66

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

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

- (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—

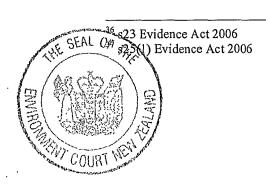
regardless of the scale, intensity, duration, or frequency of the effect, and also includes—

- (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. Section s25 is most relevant to this case and provides 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



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:

³⁸ s25(1) Evidence Act 2006
SEAL 059 s4(1) Evidence Act 2006
2010 NZEnvC 14 at paragraph [11]

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.



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.

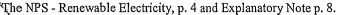
Renewable energy

[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."

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

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)



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:



- 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:

- 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 \$104(1)(c). No party contended otherwise.

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



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

SEAL OF 45 Ibid, page 5
SEAL OF 45 Mr Truesdale, evidence-in-chief, paragraph [11]

⁴³ Mr Pyle, evidence-in-chief, paragraphs [6.2] and [6.11]

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. 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. 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. He

[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

Section 6.3 of the Concept Report



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]

Mr Truesdale, evidence-in-chief, paragraph [17]

[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

Mr Truesdale, evidence-in-chief, paragraph [19]
 Mr Truesdale, evidence-in-chief, paragraph [20]

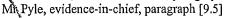
Mr Pyle, evidence-in-chief, paragraph [6.18] Mr Pyle acknowledged that Transpower uses a slightly lower growth estimate. NZWEA has estimated the requirement for new renewable energy electricity by 2025 at around 13,000GWh, or an average of around 900GWh per year.

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 hydrogeneration.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 hydrogeneration. 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.

CEAL OF

Mr Truesdale, evidence-in-chief, paragraph [27]



Mr Pyle, evidence-in-chief, paragraphs [9.3] – [9.4]

Mr Pyle, evidence-in-chief, paragraph [9.8]

Mr McKinney, evidence-in-chief, paragraph [8]

[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:

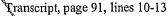
- (a) local economy expenditure, both during the construction and operation stages as follows:
 - (i) an estimated NZ\$54 million (25% of the total budget for the project) to be spent directly within the North Canterbury region;⁶²
 - (ii) during the 18-24 month construction period, employment is anticipated to peak at approximately 100-150 people with

Mr. Muldoon, evidence-in-chief, paragraph [58]

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

- 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.

Mr Muldoon, evidence-in-chief, paragraph [72]





Mr Muldoon, evidence-in-chief, paragraph [58]
 Mr Muldoon, evidence-in-chief, paragraph [59]

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

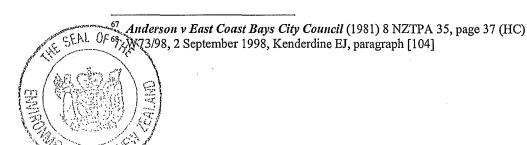
[110] Under ss7(c) and (f) of the RMA we are required to have particular regard to "the maintenance and enhancement of amenity values ... and the quality of the environment" when considering whether or not to approve the proposal. A key issue in this case was whether the introduction of wind turbines 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



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]

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.

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.

SEAL 0/91) 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.



[124] The landscape experts first described the landscape values relative to the site, and agreed⁷² that:

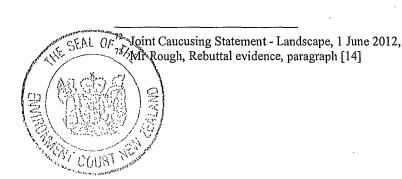
- the site is typical of a working pastoral farm landscape, with very few built elements on it and no particular natural or cultural features of note;
- the ecology of the site is highly modified, but the current degree of visual modification to the landscape is moderate;
- the site has moderate visual 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, which, whilst we acknowledge is somewhat dated, identified "important" landscapes in the



Hurunui District. A map⁷⁴ 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".

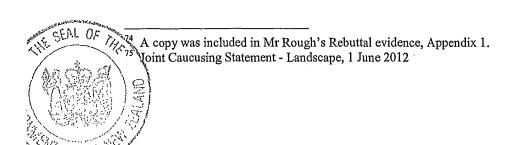
[128] Whilst the Court on occasion has been prepared to determine that certain landscapes are outstanding, or that they are outstanding natural features (a classification the Court was prepared to make in the *Mt Cass* decision), in our view this is not something that should be undertaken lightly. There 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 agreed⁷⁵ 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;

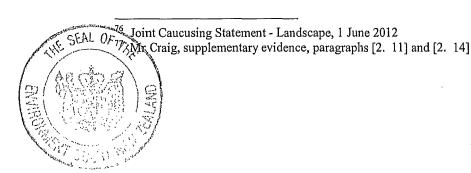


- the turbines would be very significant structures in the landscape, potentially striking a strong visual focus, but the use of one turbine model would give better visual unity than using a variety of models
- from many views the proposed roads would not be seen.

[131] The experts also agreed⁷⁶ 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:
 - o the presence of distinctive natural features;
 - o the ability to enjoy panoramic framed views, albeit the subject of the view would be affected;
 - o the effect of changing light, weather and atmosphere;
 - o 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



[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), but dominant and overbearing. But we also note that not all local people were necessarily of

The Society, Opening Submissions on Landscape, paragraph [4. 5]

⁷⁸ Mr Craig, evidence-in-chief, paragraph [7. 7]

Mr Rough, evidence-in-chief, paragraph [102] and rebuttal, paragraphs [31] and [32]

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.

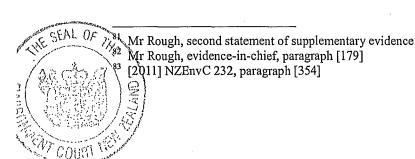
The assessment of visual amenity effects

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. 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. We were referred to *Meridian Energy Limited v Wellington City Council*, 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.



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. 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. 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.

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

[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. 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.

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

Ms Steven, paragraph [16.4] in relation to the viewpoint 41

⁸⁷ Mr Rough, evidence-in-chief, paragraph [11(k)]

Mr Rough, rebuttal, paragraph [65]

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.

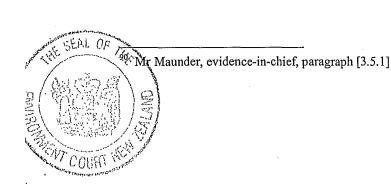
[149] A more significant problem with the BuildMedia images was their presentation to the Court. It did not become evident until this part of the evidence was sought to be presented by Mr Meares, who was assisting with this part of the presentation of the Society's case. Mr Meares sought to enlarge the 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 TruViewTM 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.



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 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." As well, her opinion was that adverse cumulative effects would arise, with the Mt Cass wind farm and this proposal being

Ms Steven, evidence-in-chief, paragraph [22.50] Ms Steven, evidence-in-chief, paragraph [22.63]



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

Mr Rough, evidence-in-chief, paragraph [217] and second supplementary, paragraph [13]

collectively so prominent and dominating that the existing rural character of the landscape will no longer prevail. 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. 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. 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,

Mr Rough, evidence-in-chief, paragraphs [201] and [202] and second supplementary \$100, \$100 states property Viewpoint 34



⁹⁶ Joint Caucusing Statement - Landscape, 1 June 2012, paragraph [59]

Mr Craig, supplementary evidence, paragraph [2.15]
 Meridian Energy Limited v Wellington City Council, W031/07, 14 May 2007, Judges Kenderdine & Thompson, paragraph [517]

(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. 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

Ms Steven, evidence-in-chief, paragraph [17.3] and Mr Rough, evidence-in-chief, paragraph [367] Ms Steven, evidence-in-chief, paragraph [17.6]



Meridian Energy Limited v Wellington City Council, [2011] NZEnvC 232, paragraph [356]
 W067/08, 26 September 2008, paragraph [229]

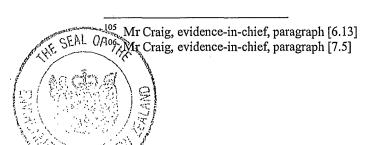
there would still be some viewpoints where there were significant adverse effects arising, and these more or less corresponded with the degree of physical change to the landscape, notwithstanding the presence of circumstantial factors such as screening vegetation. ¹⁰⁵ His opinion was that these adverse 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



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



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



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

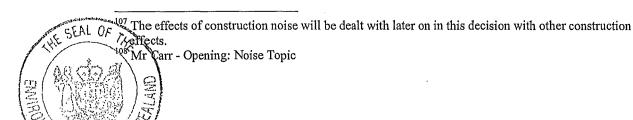
Overview

[178] In this section of our decision, we examine the effects of noise arising from the operation 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



"noise sensitive receivers". 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 Meridian¹¹⁰, 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.

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

Mr Carr attended the first session, but not the second.

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

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.

Rrofessor Dickinson and Mr Rapley spoke at the woolshed meeting held at Tipapa on 17 June 2010 Hurunui Wind Farm Noise Assessment from Mr J Carr – A Review, November 2011, page 5

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. 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

SEAL Was pre-trial Minute dated 19 July 2012.

Joint Witness Caucusing Statement – Noise, paragraphs [3] and [4]

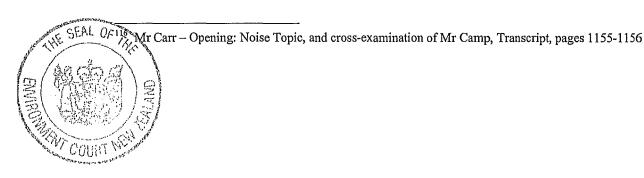
standard, and also because five years ago Dr Chiles had worked for Marshall Day Acoustics, a firm in which Mr Camp is a principal. We do not accept that there is any substance to Mr Carr's submission that Mr Camp's evidence is biased because of these matters.¹¹⁶

[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.



[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:

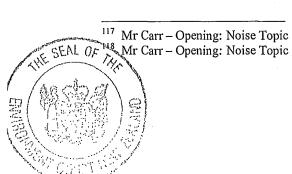
Policy 10.9

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



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 precommissioning 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. In relation to Te Uku, Mr Botha said there were two complaints in two years. 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. 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. 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. 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," provided that there are appropriate conditions to ensure that unusual noise issues such as tonality and amplitude modulation do not exist. 125

120 Transcript page 1106

Mr Camp, evidence-in-chief, paragraph [4.2]

¹¹⁹ Transcript, pages 1051-1052

Mr Camp, evidence-in-chief, paragraph [3.4], Joint Caucusing Statement – Noise, 15 June 2012, paragraph [4]

Dr. Chiles, evidence-in-chief, paragraph [2.3]

Div Chiles, evidence-in-chief, paragraph [7]
Mr Camp, evidence-in-chief, paragraph [2.3]

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

Transcript, p879, line 1

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)

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

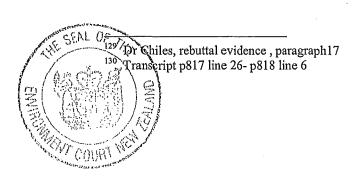
[205] We conclude that we *can* use the standard as a basis for the assessment, but whether we *should* rely on it depends on the accuracy of its predictions. We now turn to analyse this topic.

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.



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. 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. 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. Dr Chiles' opinion was that NZS6808:2010 is conservative specifying 0.5 as the default value for soft ground, because in his view it is more likely that more sound would be absorbed in this situation.

[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. 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

SHAR Transcript, page 752, lines 2-3

³⁶ Dr Chiles, evidence-in-chief, paragraph [27]

Transcript page 763, lines 14-19

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

Transcript, page 957, line 2

¹³⁸ Transcript, page 760, line 31 – page 761, line 2

GFAL Go Transcript, pages 760 - 763
Transcript, page 762

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. 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

144 Exhibit HGR1, version 4

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]

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. 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

146 Transcript, pages 822-823

Mr Camp, supplementary evidence, paragraph [7.4]

OF 148 Dr. Chiles, Rebuttal, paragraph [24]

¹⁴⁵ Joint Witness Caucusing Statement – Noise, paragraphs [26] – [28]

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.

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 conditions¹⁴⁹ 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

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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...



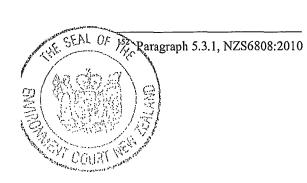
- [233] The proposed conditions lack balance and would not allow ongoing operation of the wind farm. We do not agree that such a condition would be sufficiently certain or enforceable and in any event does not accord with our findings.
- [234] The predicted noise levels at Tipapa are not within the group 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 $L_{\rm Aeq\ (15min)}$ 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.

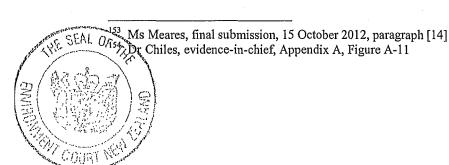
[238] In a high amenity area the level set by the standard is 35dB $L_{A90(10min)}$ or background + 5dB, whichever is the greater.



- [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. 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



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. 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

Although some nearby farmers were concerned 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.

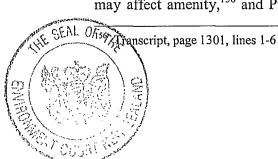
[255] Whilst adverse noise effects might affect amenity and can therefore be considered under s7(c) and potentially s7(f) of the RMA, how health effects can be considered under the RMA was less clear. Section 5(2) identifies social wellbeing as a separate matter from health, but both are referred to 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



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. 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." 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

Transcript, page 1555, lines 17-32



¹⁵⁷ Transcript page 1594, lines 30-33, page 1595, lines 5-7

¹⁵⁸ Transcript page 1594, lines 30-33

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.

Dr Shepherd referred to papers by Pierpont and Harry to support his theory that [263] 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 paper¹⁶⁵ and the Massachusetts review¹⁶⁶ 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.

We do not agree that this amounts to bias or that Dr Shepherd's evidence was [264] 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

Transcript, page 1434, lines 17-19

Meridian closing submissions paragraph [183].

Pedersen 2007 paper, van den Berg's 2005 dissertation

Overestimating how many wind turbines in Europe are offshore

Berglund discussion, Pedersen discussion

Meridian, Exhibit 9,

Meridian exhibit 10

⁽⁾ ranscript, page 1757, miles 1757 (b) (183](b)

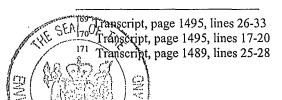
return to the significance of this shortly when we evaluate the weight that should be given to the competing expert opinions.

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.



[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.

Dr Shepherd, evidence-in-chief, Appendix A

SEAL 172 Environment Court Practice Note – Expert Witnesses, Code of Conduct, paragraph [5.3.1(f)]

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.

Joint Witness Caucusing Statement – Health, paragraph [76]

¹⁷⁵ Transcript, page 1539, lines 13-15

¹⁷⁶ Transcript, page 1539, lines 32-34

Transcript, page 1539, line 9

Transcript page 1548, lines 3-5

⁷⁹ 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.



[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

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

Meridian, Closing, paragraph [135]

SEAL 083 Franscript, page 1462, lines 29-33

W069/09, 3 September 2009, Dwyer EJ, paragraph [98]

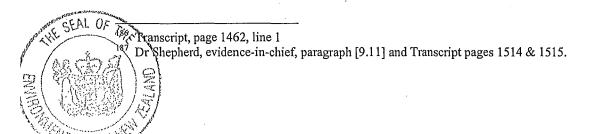
also accepted that annoyance has to be measured by self-reporting. We also agree with Meridian that compliance with NZS6808:2010 would not necessarily avoid annoyance, and even if a setback were to be imposed those outside a setback could also remain annoyed by the presence of a wind farm. It is difficult 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.

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. 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.



[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.

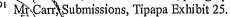
[292] Dr Shepherd also referred to research by Nissenbaum and included figures ¹⁸⁸ of dose response curves relating a health variable such as annoyance or disturbed sleep, and distance. He said that these figures "clearly demonstrate(s) that adverse effects are substantially greater below two kilometres". 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. 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). 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

Mr/Archbold, evidence-in-chief, paragraph [4] and Transcript page 2619.



Dr Shepherd, evidence-in-chief, Figures 8A, 8B and 12.

Ms-B Meares, Submissions dated 15 October 2012, para 14.

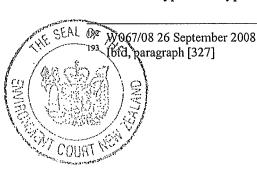
[296] With reference to the overseas documents that were cited as supporting a 2km setback, we start by noting that care needs to be taken when transferring overseas examples into New Zealand as different countries usually have different legislation and planning frameworks. Having read some of these 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 Council¹⁹² 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" 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



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

[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

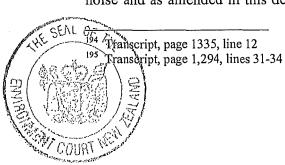
[306] Dr Black accepted that community anxiety about potential health effects caused by wind turbine noise was a valid health concern, but one that would only be experienced by a very small percentage of the population.¹⁹⁴ The evidence in this case did not establish whether there would be any such people 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



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

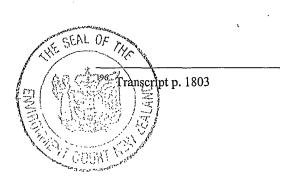
Overview

[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 of the experience of those appearing before us.

- 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. 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)).



- [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.

[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

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.

Mr Messervy, Personal Submission dated 5 October 2012, para 34(c).

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

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). 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

By hibit HGR1, Revised Draft 23 October 2012, Draft Conditions of Consent Version 4.

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 potential effects associated with the wind farm relate to the construction period.

[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 SEAL applicable to all four consents).

Transcript pages 291 and 292.

[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.

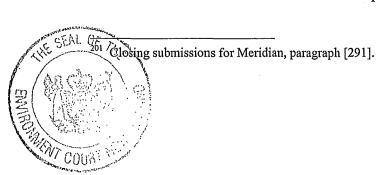
[361] Mr Carr also sought to define the exact location of the concrete batching plant, primarily so that it was not near the Tipapa boundary. Mr Wiles, for Meridian, explained that the location of the concrete batching plant was worked out later when the detailed construction strategy had been finalised, 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.



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.

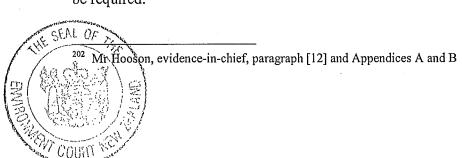
Ecology

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. 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.



[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

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

Mr Hooson, evidence-in-chief, paragraphs [45] – [47]
SEF 204 Mr Hooson, Appendix B, paragraph [3.2]
205 Mr Hooson, Appendix B, paragraph [3.2]

[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.

[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);

²⁰⁷ Mr Hooson, evidence-in-chief, paragraph [130]

Joint statement of Dr Lloyd and Mr Hooson relating to Terrestrial Ecology, May 2012, paragraph [1]; Mr Hooson, evidence-in-chief, paragraph [130]



²⁰⁶ Exhibit HGR1, 23 October 2012

(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

Joint Witness Caucusing Statement (Mr Wiles, Mr Breese, Mr Keesing and Dr Lloyd) – Construction, Erosion & Sediment and Aquatic Ecology, 15 June 2012, paragraph [3]

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. 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. 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

Dr Keesing, rebuttal evidence, paragraph [31]

Property Dr Keesing, rebuttal evidence, paragraph [47] and Meridian submissions on ecological effects, Dr Keesing, rebuttal evidence, paragraph [47] and Meridian submissions on ecological effects, Draragraph 44.

Mr. Breese, rebuttal evidence, paragraph [32]

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)

In his initial ecological survey of the site, Mr Hooson undertook a visual search for lizards at eleven different places²¹⁴ 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 62-67²¹⁹ 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

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]

SEAL Dr Tocher, evidence-in-chief, paragraphs [4.12]-[4.17]

²¹⁸ Dr Tocher, evidence-in-chief, paragraphs [4.18]-[4.23]

Exhibit HGR1 23 October 2012

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

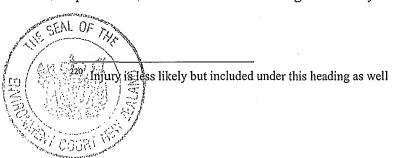
Overview

- [391] The potential risks for avifauna are:
 - (a) the loss of habitat, and
 - (b) the risk of death²²⁰ 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."



[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 Council²²¹ 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

^{224 [2012]} NZEnvC 135, paragraphs [72] and [74]

SEAL 2227 [Ibid, paragraph [72]

223 Olsen Auckland City Council [1998] NZRMA 66 (HC) page 10

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 preconstruction data, before moving on to consider the specific risk assessments for the NZ falcon, NZ pipit, black-fronted terms 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. 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

experts, 13 June 2012, paragraph [9]

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]

Mr Hooson, rebuttal evidence, paragraph [74] Mr Hooson, rebuttal evidence, paragraph [74]

Mr Hooson, rebuttal evidence (Dr McClellan), paragraphs [53]-[68]; Joint statement of avifauna

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.

Dr McClellan, supplementary evidence, paragraph [13 (c)]

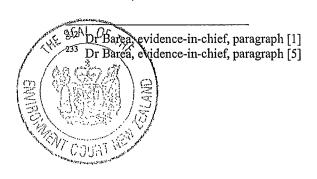
[414] Mr Onley described the data obtained for the breeding pair on the site as a step up from that which had been done for other wind farm sites, but he was not convinced that enough data had been collected for other non-resident falcons using the site. He referred to information from the Ornithological 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



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

⁷ Dr McClellan, supplementary evidence, paragraph[8]

Exhibit HGR1, 23 October 2012

²³⁴ Joint Statement of Avifauna Experts, 13 June 2012, paragraph [7]
²³⁵ Mr Onley, evidence-in-chief, paragraph [38]

SEA236) Dr Barea, rebuttal evidence, paragraph [14]

- 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, 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. His main concern was that the release of juvenile falcons would place them at risk from turbine strike. 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. 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.

Mr Onley, evidence-in-chief, paragraph [40]

Joint Statement of evidence Avifauna Experts, 13 June 2012, paragraph [8]. SEA1240/Mr. Onley, evidence-in-chief, paragraph [40]

Dr McClellan, supplementary evidence, paragraph [9]

[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.

SEA3 Dr Barea, rebuttal evidence, paragraph [9]

244 Dr Barea, rebuttal evidence, paragraphs [9] and [30]

245 Dr Barea, rebuttal evidence, paragraph [9]

[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

Mr Hooson, evidence-in-chief, paragraph [94]

Joint Statement of Avifauna Experts, 13 June 2012, paragraph [18]

Dr McClellan, Supplementary evidence, paragraph [13b] Mr. Onley, evidence-in-chief, paragraph [29]-[31]

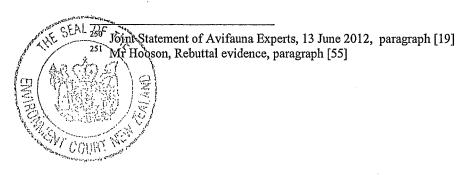
is unclear whether or not the NZ pipit at a local level is potentially at risk of being adversely impacted by the proposal. Nonetheless we think that careful monitoring of this species by the Avifauna Panel will be sufficient to mitigate any adverse effects on this species. The current proposed conditions (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 terms 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;



- (d) the majority of the observations during the roaming counts were away from proposed turbine locations;
- (e) black-fronted terms 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;

It was noted that one of these sites turbines were sited close to gull and tern nesting colonies.

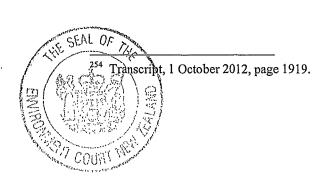
Mr Hooson, Rebuttal evidence, paragraph [56]

- (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:



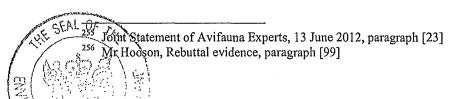
- (a) within the first two years of operation (commencing from the date all wind turbines are generating electricity, or within six months of any wind turbine first generating electricity, whichever is earlier), retrieving any bird carcases or other signs of bird strike, including feather spots or partial 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 defailed information publicly available, particularly if other consent holders may not be

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.



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.

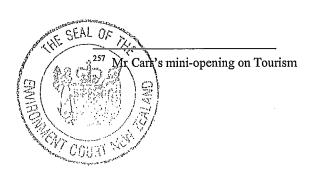
Recreation and Tourism

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.



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), 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. 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.

²⁵⁸ Mr Greenaway, evidence-in-chief, paragraphs [44]-[45]

SEA2600 Mr. Greenaway, evidence-in-chief, paragraph [45] 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.

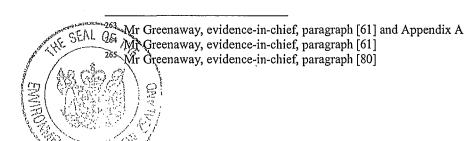
[454] In relation to recreational settings Mr Greenaway referred to the Stevenson and Ioannou 2010 study, which indicated that more than 81% of New Zealanders were supportive or very supportive of wind energy, and a similar proportion (80%) support wind farms in New Zealand. Mr Greenaway was careful 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



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. 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

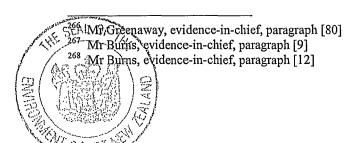
[459] Mr Burns did not consider Centre Hill and Greta Valley as visitor destinations for Hurunui District, referring to the Hurunui Tourism Strategy 2015 completed in June 2011. He noted that there are no attractions or accommodation in these areas that feature in the official 2011 Visitor Guide for 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



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. 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. 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.

²⁶⁹ Mr Burns, evidence-in-chief, paragraph [26]
SERE Mr Burns, evidence-in-chief, paragraph [26]
271 Transcript, pages 2169-2170

[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'

MA Pearson, evidence-in-chief, paragraph [15] Mr Pearson, evidence-in-chief, paragraph [15] 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.

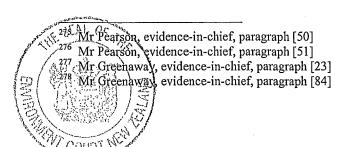
Greta Valley and Motunau Beach

[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". 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. 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. 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. 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.



[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:

 \dots 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

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

Mr John Carr, evidence-in-chief, undated
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]

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

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?

The question of adverse effects on property values has been addressed by the [485] 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

Mr Crighton referred to the McCarthy Study,²⁸⁵ the purpose of which was to [487] 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 farms²⁸⁶ comprising a total of 286 turbines had been established there.²⁸⁷ Mr Crighton told us that the region in which the study was

Mr Crighton, rebuttal evidence, paragraph [39]

Tararua/Te Apiti and Te Rere Hau

Mr Crighton, rebuttal evidence, paragraph [43]

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

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 romparison approach

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.

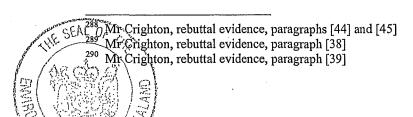
[488] The study was undertaken over a three year timeframe, commencing before any wind farm was constructed and finishing one and a half years after the completion of the wind farms. The results from the study show that trends in property sale prices over this time increased in a similar way to those 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.



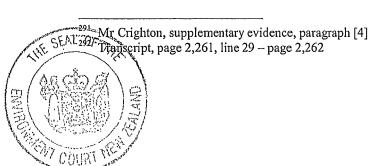
Ms Meares' material

[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



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:

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.

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

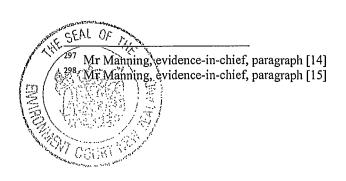
5% on rural farm value of \$2,170,000 \$108,500

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



Mr Crighton's opinion

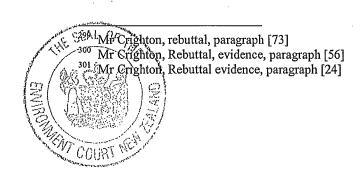
[506] Mr Crighton did not accept Mr Manning's methodology. In fact he described Mr Manning's valuation and report as falling "woefully short of our profession's reporting and valuation standards". ²⁹⁹ In his opinion, Mr Manning had failed to provide his methodology and did not cite references to support 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. 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.



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

Metidian/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, \$25 October 2012; and the Society – Glenmark Exhibit 10, 12 October 2012.

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. 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.

[2010]NZEnvC406

304 Meridian, closing submissions, para 293

105 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. 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

Glenmark, Exhibit 9.

Ms. Rigg evidence-in-chief, paragraphs [4.27] & [4.28], and Transcript page 2801.

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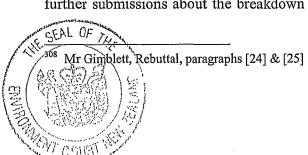
Gimblett, for Meridian, said that in his opinion it depended on whether or not it is required to provide mitigation of effects or is in some way an essential element of the application. He agreed with Ms Rigg that if, in making an overall decision on the proposal, a fund of that type is to be relied 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



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 Othern to be well placed to prepare alternative conditions and we direct them to do so, but

Mr Muldoon, Transcript page 667, lines 2-17

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 change 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

proposéd:

[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

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

SEAL OF

[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



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

J & J Megaw S Hughes-Games

CJ & TW Adler

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
SEAL OG 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

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

A & W Harris F Clark AJ Sloss

T McLean

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.

Environment Court Interim Decision No: 2013 NZEnvC Project Hurunui Wind Farm - Schedule of Conditions of Consent to be amended.

Table 1

Exhibit HGR1,	Summary – Directions/ Comments	Decision
Version 4,		paragraph
23 October 2012		reference,
Condition Number		where
		applicable
2	Delete	540
6	Amend to provide for no more than 31	177, 245
	turbines and the deletion of turbines labelled F01 and G01	
19 (text after 19(c))	Should the paragraph of text after condition	515
20	19(c) be part of condition 20? It all seems to relate to turbine testing.	
23	Provide for a minimum of 4 monitoring locations and for staged wind farm	229, 230, 231, 235, 247
	monitoring.	
26	Clarify when this process is to commence.	304, 305
	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.	
28 - 40	Ensure that these EMP related conditions are	356, 357, 359
	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).	
41 - 61	Review and rationalise conditions relating to	426, 431, 434,
	avifauna.	441
	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).	
45	Amend to include reference to condition 44 as	515
	well as condition 43	
48 & 61	List these two conditions together	443
69 & 70	Provide for any appropriate monitoring and	379
is the organization	reporting.	240
73(m)	Provide for annual large event at Tipapa	349

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	Summary Directions/Comments	Decision
Version 2, 26		paragraph
September 2012 and	·	reference,
CRC Attachment 3,		where
4 October 2012.		applicable
•	Clarify Meridian's offer to clear in-line pond	383
	in Cave Creek.	
Schedule 1 General	Confirm if monitoring in Tipapa Stream	385
Condition 19(a)	provided for.	
All conditions	Any consequential amendments	

Table 3

		i
Exhibit HGR1	Check for consistency where conditions relate	356, 357, 359,
Version 4,	to the same or similar topics.	515, 547
23 October 2012	Provide one document of consent conditions	
and	for the proposal. Where appropriate this can	•
CRC Exhibit 1	be divided into separate and/or common	
Version 2,	sections to relate to separate consents and/or	
26 September 2012	separate consent authority responsibilities.	
and CRC		
Attachment 3,		, ,
4 October 2012.		



BEFORE THE ENVIRONMENT COURT

Decision No. [2017] NZEnvC 46

IN THE MATTER

of the Resource Management Act 1991

AND

of an application pursuant to s 149T of the

Act

BETWEEN

QUEENSTOWN AIRPORT CORPORATION LIMITED

(ENV-2011-WLG-41)

Applicant

Court:

Environment Judge J E Borthwick

Environment Commissioner R M Dunlop Environment Commissioner D J Bunting

Hearing:

at Christchurch on 27 and 28 February 2017

Appearances:

M Casey QC and C Somerville-Frost for Queenstown Airport

Corporation Ltd

Dr R J Somerville QC and B Milo for Remarkables Park Ltd

Date of Decision:

31 March 2017

Date of Issue:

31 March 2017

DECISION OF THE ENVIRONMENT COURT

- A: Pursuant to s 149U(4) RMA the notice of requirement to extend Designation 2 is confirmed, subject to the conditions attached to and labelled "A" forming part of this decision. The extent of the designation that is confirmed is shown on Figure 1 also attached to and labelled "B" forming part of this decision.
- B: Costs are reserved.

REASONS



Litigation history

- [1] This is the final decision concerning Queenstown Airport Corporation Limited's notice of requirement to alter Designation 2 of the Queenstown Lakes District Plan to extend the aerodrome at Queenstown Airport.
- [2] We appreciate that the litigation history is well known to the parties but it is necessary to recap on it here since it provides the context for this decision.
- [3] The Environment Court released an Interim Decision in 2012¹ confirming the notice of requirement ("NOR"), modifying the same by reducing the extent of land to be designated. The reduction followed on from our finding that there was no nexus between the Airport's objective for the requirement and the enablement of Code D aircraft operating at Queenstown Airport. The predicted growth in regular passenger transport services could be achieved using Code C aircraft operating on an appropriately configured runway and single taxiway.
- [4] More particularly the modification enabled all of the proposed works including a new parallel taxiway for Code C aircraft separated 93m from the main runway. After the Interim Decision was released, Queenstown Airport Corporation Limited resiled from its position that under the Civil Aviation Rules the runway-taxiway separation distance for Code C aircraft was 93m, contending the distance was at least 168m. If that was correct, then all of the land in the NOR was required.
- [5] The Interim Decision was successfully appealed by Queenstown Airport Corporation Limited ("QAC") and Remarkables Park Limited ("RPL"). Notwithstanding the appeal the parties agreed that the court should release its final decision,² which confirmed the notice of requirement and attached conditions. As it turned out this was not to be the court's final decision for this proceeding.
- [6] The High Court referred parts of the Interim Decision back to the Environment Court for further consideration.³ In the first of two decisions following the High Court



¹ [2012] NZEnvC 206; (2012) 18 ELRNZ 489.

² [2013] NZEnvC 95.

³ [2013] NZHC 2347.

appeal, which for convenience we refer to as the "Legitimate Expectation Decision",⁴ we found that RPL could legitimately expect, other relevant considerations aside, that QAC would use its own land for airport purposes, and not RPL's land. However, we confirmed our earlier finding that, in accordance with s 171(1)(b) of the RMA, the QAC had given adequate consideration to alternative sites – including the use of its own land.⁵

[7] In the second decision following the High Court appeal ("the Separation Distance Decision")⁶ we reconsidered the separation requirements for a Code C runway and taxiway. We found under the Civil Aviation Rules an acceptable means of compliance was a separation distance of 168m, and at Queenstown Airport this separation should be viewed as a minimum. This issue was overtaken during the hearing by evidence concerning the Airport's proposal for a dual parallel taxiway south of the main runway. The dual taxiway was the subject of very little evidence during the 2012 hearing and RPL responded on a broad front challenging the proposed works, including the proposal for general aviation and helicopter facilities located on Lot 6. RPL argued that in the absence of an aeronautical study the NOR should be cancelled or, at the very least, the court should defer the final resolution of this proceeding until any Civil Aviation determinations that are required have been made.

[8] In this decision we consider whether the designated land is able to be used for the purpose of achieving the requiring authority's objectives for which the designation is sought.

Is work and designation reasonably necessary?

- [9] For the purposes of s 171(1)(c) RMA the work and designation are reasonably necessary where:
 - there is a nexus between the works proposed and the achievement of the requiring authority's objectives for which the designation is sought;
 - the spatial extent of land required is justified in relation to those works; and



⁴ [2014] NZEnvC 244.

⁵ [2014] NZEnvC 244.

⁶ [2015] NZEnvC 222.

the designated land is able to be used for the purpose of achieving the requiring authority's objectives for which the designation is sought.

[10] If any of the above statements proved negative, QAC could not say that the works and designation are reasonably necessary for achieving the objectives of the requiring authority under s 171(1)(c).⁷ This list is not exhaustive; in other cases different considerations may apply.

[11] Our enquiry into whether QAC can use the land arose out of the following key findings in the Separation Distance decision:

- the designation is required to ensure the continued safe and efficient functioning of the Airport by the expansion of its aerodrome to meet projected growth. This is to be achieved by the integrated development of airport facilities;8
- the proposed expansion of the passenger terminal will displace the existing general aviation (GA) and helicopter facilities:9
- an array of factors including safety militate against a northern location of GA and/or helicopter facilities. 10 QAC gave adequate consideration under s 171(1)(b) RMA to locating the Code C taxiway together with a proposed new GA Precinct to the north of the main runway;11
- some of the proposed works require the approval of the Director of Civil Aviation and will be the subject matter of an aeronautical study. At that time the Airport had not formally consulted with its stakeholders regarding operational restrictions that may be imposed in relation to the new aerodrome configuration. It is possible that the configuration of the proposed aerodrome extension will be modified as a result of the aeronautical study and stakeholder consultation;12
- the court was not in a position to know whether the works could be operationalised (that is put into operation or use);¹³



^[2015] NZEnvC 222 at [270].

^[2015] NZEnvC 222 at [244].

^[2015] NZEnvC 222 at [244].

^[2014] NZEnvC 244 at [103].

^[2015] NZEnvC 222 at [229] and [252].

^[2015] NZEnvC 222 at [232].

^[2015] NZEnvC 222 at [218] and [267].

- the Airport's response to the Director's approval for the works, including any operational restrictions recommended following the aeronautical study, are material to the consideration of s 171(1)(c) and, subject to Part 2, the ultimate determination of the proceedings; 14 and finally
- if the Airport was unable to obtain the Director's approval it was unlikely that the court would regard the designation as being reasonably necessary for achieving the objective for which the designation was sought.

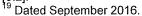
[12] The upshot was that we declined to make a final decision on the notice of requirement and directed QAC report back on matters under the jurisdiction of the Director of Civil Aviation. 15

Aeronautical study

In response to the directions given in the Separation Distance Decision, QAC [13] submitted an aeronautical study, including proposed changes to its exposition, to the Director of Civil Aviation on 20 August 2016. The aeronautical study was required under the Airport's exposition as the dual taxiway, final approach and take-off helicopter area ("FATO") establishment and the development of the GA Precinct would change the operating environment. 16 The study addressed how the Airport would be operated with these facilities in place 17 for the purpose of establishing whether the proposed operation of the dual taxiway is acceptable to the Director of Civil Aviation. 18

A copy of the draft aeronautical study was provided to RPL on 4 July 2016. Without having received a response from RPL within the timeframe indicated, QAC then submitted the final aeronautical study to the Director of Civil Aviation in August 2016. RPL provided feedback directly to the Director on 23 September 2016 in a report prepared by The Ambidji Group Pty Ltd entitled "A Review of the Draft Aeronautical Study New General Aviation Precinct, Proposed Dual Taxiway and FATO Operation."19

Queenstown Airport - New General Aviation Precinct Aeronautical Study, 20 August 2016, Version V2 at [3.2].





^[2015] NZEnvC 222 at [270]. [2015] NZEnvC 222at [272].

Queenstown Airport - New General Aviation Precinct Aeronautical Study, 20 August 2016, Version V2 at

Queenstown Airport – New General Aviation Precinct Aeronautical Study, 20 August 2016, Version V2 at

The Ambidji Report was highly critical of the Aeronautical Study.²⁰

[15] On 30 September 2016 the Manager of Aeronautical Services for the Civil Aviation Authority, Mr S Rogers, acting pursuant to a delegation by the Director, responded to the Aeronautical Study. He advised under the Civil Aviation Rules, pt 139.13, the proposal represents a significant change to the aerodrome layout. He confirmed the purpose of an aeronautical study prepared under AC 139-15 is to provide a holistic view of aerodrome operational environment from a macro perspective. Without referring to the Ambidji Report, Mr Rogers said the proposal was deemed acceptable in that it allows for the continued compliance with Civil Aviation Rules pt 139.51(d)(1)(i) to (vii), 139.51(d)(2) and 139.101(4). He noted that:

... a task Specific Case will be submitted to provide more detailed mitigation for the risk associated with each phase of the introduction to service of the new aerodrome layout. Specifically the risks associated with the dual taxiway, the new FATO and the GAP.²¹

Request for a final determination

[16] Following receipt of the Director's letter QAC requested the court release a final determination of the proceeding on the papers.²² RPL on the other hand opposed this course and sought to call evidence to determine whether the Aeronautical Study satisfactorily addressed the operational issues identified by the court and second, whether it demonstrates the proposed arrangement can support acceptably safe airport operations in accordance with Aviation Circular 139-15. RPL contended the "veracity" of the Aeronautical Study is relevant to the court's consideration and recognition of RPL's legitimate expectation.²³

²² By memorandum dated 26 October 2016 QAC confirmed that it could make operational the works outlined in the Aeronautical Study and that it was "comfortable" with the changes proposed to its exposition (which will not be made operative until the works are established).





²⁰ The Ambidji Report reviewed the draft aeronautical study dated 1 July 2016 – Version V1. The final aeronautical study is dated August 2016 – Version V2. Mr E L Morgan for RPL states at [3.1] of his December 2016 brief that there is no material difference between the draft and final versions of the Aeronautical Studies. The Ambidji Report concludes, amongst other matters, that the study had not been conducted in accordance with the Civil Aviation Authority's standards and guidelines; no quantifiable data were presented to validate risk levels; presents insufficient operational information and assessment for an effective safety risk review (and approval) of the proposed changes; the proposed changes to the aerodrome layout do not represent best practice in delivering the efficiency gains required to meet forecast demands; the study does not apply fundamental safety design principles to minimise the major accident category (including runway or taxiway incursions); and fails to consider alternative options that could deliver enhanced safety.

²¹ "GAP" means General Aviation Precinct.

- As the parties could not agree on how to proceed, the matter was set down for a [17] pre-hearing conference. Having heard from counsel the court directed a hearing limited to the following matters:²⁴
 - (1) how far does the court have to go to satisfy itself as to s 171(1)(c) and Part 2 of the Act?
 - (2) in its memorandum of 18 November 2016 at [12] QAC states that it cannot go further to progress the intended works, or establish any physical work (and actually amend its exposition), until the designation is approved by the court. Three questions arise from that statement:
 - is the statement correct? (a)
 - (b) if so, does the evidence before the court exhaust the proper extent of the court's enquiry?
 - if not, should QAC furnish the court (or the Director) with task specific safety case(s) to provide more detailed mitigation for risk associated with each phase of the introduction of the new aerodrome layout?
 - whether the Director in accepting QAC's aeronautical study (August 2016) (3) must be taken to have correctly addressed the relevant safety issues that arise under QAC's layout.25
- [18] The court reiterated in a subsequent Minute that the evidence was limited to the assertion by QAC that it cannot progress the intended works, or establish any physical work, until the designation is approved by the court.²⁶
- RPL subsequently filed extensive evidence challenging the Aeronautical Study; [19] two witnesses going so far as to challenge the finding by CAA (Mr Rogers) as to compliance with Civil Aviation Rule pt 139.27 The admissibility of most of RPL's evidence is challenged in turn by QAC.²⁸

With the consent of the parties the witnesses were called and their evidence provisionally admitted subject to the court's determination of its relevance to any matter in issue.



Record of PHC dated 23 November 2016.

We have in mind that the maxim "all things are presumed to be done in due form" may apply.

²⁶ Minute dated 6 December 2016.

²⁷ Morgan at [3.4] and [5.4]. Selwyn EiC 22 December 2016 at [8.3].

Issue 1: How far does the court have to go to satisfy itself as to s 171(1)(c) and Part 2 of the Act

[20] RPL accepts the findings of the court that QAC did give adequate consideration to the use of alternative sites, including the use of its own land. It seeks to distinguish ss 171(1)(b) and 171(1)(c), saying the former is concerned with an inquiry into process and the latter an inquiry into outcome.

[21] RPL submits under ss (1)(c) the court is to evaluate the "outcome". The "outcome" – namely the proposed works and designation of Lot 6, can only be justified where there is a "satisfactory", "sufficient" or "overriding" reason" for QAC not to give relief to RPL's expectation that QAC use its own land for airport purposes. The outcome would be justified where, for reasons of public safety and efficiency, QAC cannot use its own land and the need to acquire Lot 6 is therefore "pressing" or "essential". Evidence that is capable or sufficient of proving that it is unsafe and inefficient to use QAC's own land must be "compelling". 34

[22] While RPL accepts the findings of the court that QAC gave adequate consideration to the use of alternative sites under s 171(1)(b), it argues that in the absence of an aeronautical study fully assessing the operational safety and efficiency of the existing airport layout the court cannot be satisfied that it is unsafe and inefficient to locate the GA Precinct on QAC land. Without such a study the evidence cannot objectively prove the requirement for RPL's land is pressing or essential³⁵ and, it follows, the court cannot be satisfied that the NOR is reasonably necessary to designate Lot 6 land for the same works.³⁶

[23] QAC does not agree with RPL that the works and designation must be "essential" in order for them to satisfy the criteria in s 171(1)(c). The orthodox approach, approved by Justice Whata, enables a court to apply a threshold assessment that is proportionate to the circumstances of the particular case. Thus provided that

³⁶ Transcript at 79.



²⁹ Somerville, submissions 10 February 2017 at [2.12].

³⁰ B v Waitemata District Health Board [2016] NZCA 184 at [55].

³¹ New Zealand Maori Council v Attorney-General [1994] 1 NZLR 513 at 525.

³² Refer RPL 2015 submissions dated 15 June 2015 at [2.35] *Paponette v Attorney General of Trinidad and Tobago* [2010] UKPC 32 at [37]-[38].

³² R v North and East Devon Health Authority, ex parte Coughlan [2001] QB 123 (Eng CA) at [57].

³³ Transcript at 78.

³⁴ Somerville, submissions 10 February 2017 at [2.31].

Transcript at 79, Somerville, submissions 10 February 2017 at [2.32].

they are more than simply an expedient or desirable³⁷ way by which to achieve the objective,³⁸ the works and designation may be reasonably "necessary" even though they are not essential. We add, if the court is satisfied the works are clearly justified there is no error of law approaching the threshold test of reasonable necessity in this manner.³⁹ Given the now extensive evidence before the court and the findings it has made in the previous proceedings, QAC submits that the court has gone as far as it can in order to satisfy itself that the proposed NOR is reasonably necessary in terms of s 171(1)(c) and Part 2 of the Act.⁴⁰

Discussion

[24] The fact that QAC owns designated land to the north of the main runway does not mean, as RPL contends, the designation of Lot 6 is not reasonably necessary.⁴¹

[25] We find that there is an error in RPL's reasoning arising through the definition of "outcome" in two ways: both in relation to the subject site (Lot 6) and also in relation to QAC's own land. Under RPL's approach the test in s 171(1)(c) can only be satisfied if the works and designation are essential to achieving the objective because the use of QAC's own land is excluded for reasons of public safety and efficiency. Separately, RPL is also saying something about the sufficiency of evidence contending that "compelling" evidence in the form of an aeronautical study is required to exclude the use of QAC's land.

[26] The considerations under s 171(1)(b) and (1)(c), while inter-related, are separate enquiries. In the 2012, 2014 and 2015 decisions we held that if there is an alternative site for undertaking the work that is owned by QAC, this begs the question whether the requirement for RPL's land is reasonably necessary. In the Interim Decision, and again in the Legitimate Expectation decision, we found an array of factors – including safety and efficiency – militate against a northern location of GA and/or helicopter facilities. We also found that the use of QAC land would not promote the sustainable management of natural and physical resources. We made these findings based on the evidence before us; the findings were not informed by an aeronautical

³⁹ [2013] NZHC 2347 at [94]-[95].

⁴³ [2014] NZEnvC 244 at [103]. ⁴⁴ [2014] NZEnvC 244 at [103].



Queenstown Airport Corporation Limited v Queenstown Lakes District Council [2013] NZHC 2347 at [19].
 Casey, submissions 10 February 2017 at [48].

Casey, submissions 10 February 2017 at [55].

Somerville, submissions 10 February 2017 at [2.10].

⁴² See [2012] NZEnvC 206 at [94], [2014] NZEnvC 244 at [90]-[91], [2015] NZEnvC 222 at [252].

study of QAC's land. 45 These findings have not been appealed.

[27] Once again RPL seeks to re-litigate matters that are the subject of earlier decision(s) by enlarging upon the examination of the alternative sites through the vehicle of s 171(1)(c) and indirectly challenging the adequacy of evidence which the court relied on in its earlier decisions. While RPL disavows an argument that the test under s 171(1)(c) is to examine whether a reasonable decision maker could arrive at a decision to locate GA facilities on Lot 6 land, 46 we consider this also a purpose in its argument.

[28] To substantiate its argument RPL focuses on the law of legitimate expectation although the court's jurisdiction is founded in the relevant sections of the RMA. While we have carefully considered the cases referred to us, we prefer Whata J's articulation of the law in *Queenstown Airport Corporation Limited v Queenstown Lakes District Council* [2013] NZHC 234, grounded as it is on the RMA. RPL may legitimately expect compliance with the assurance given by QAC, and upon which it has relied, subject only to an express statutory duty or power to do otherwise. At [106] Whata J stated:

In the present case, that must mean satisfaction of the criteria expressed at s 171 and in particular at subs (1)(b) and (c), having regard to any relevant legitimate expectations, properly established. Fairness would then implore an outcome which is consistent with those expectations provided that the outcome met the statutory criteria and achieved the statutory purpose. Conversely, the Court, like QAC, cannot be bound to give effect to those expectations where to do so is inconsistent with the requirements of s 171. In short the Court's jurisdiction, though wide, is framed by the scheme and purpose of the RMA.

[Footnotes omitted].

[29] RPL is right to say the outcome in these proceedings must be a fair and proportionate response.⁴⁷ The law of legitimate expectation is based on fairness, the broad principle being that good administration requires that public bodies deal straightforwardly and consistently with the public.⁴⁸ Fairness implores an outcome which is consistent with those expectations provided, however, that the outcome meets the statutory criteria and achieves the statutory purpose.

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⁴⁵ See [2015] NZEnvC 222 at [252].

⁴⁶ Somerville, submissions 10 February 2017 at [2.12].

⁴⁷ Transcript at 78.

⁴⁸ Nadarajah v The Secretary of State for the Home Department [2005] EWCA Civ 1363 at [68].

[30] RPL submits the only way to justify interference with its private property rights on a "proportionality review" is on the basis of a "compelling case" in the public interest or "compelling evidence" to show that confirming Lot 6 in breach of the substantive legitimate expectation is justified in the public interest. ⁵⁰

[31] RPL does not explain what it means by "proportionality review". The phrase "proportionate response" occurs in the English Court of Appeal case of *Nadarajah v The Secretary of State for the Home Department.*⁵¹ Laws LJ, discussing the law of legitimate expectation (obiter), said at [68]:

A public body's promise or practice as to future conduct may only be denied, and thus the standard departed from, in circumstances where to do so is on the public body's legal duty or is otherwise a proportionate response having regard to a legitimate aim pursued by the public body in the public interest. The court is the judge of whether it is a proportionate response.

[32] When expressed in the language of the RMA, the question of whether the NOR is a "proportionate response" under s 171(1)(c) is to be considered relative to QAC's objectives.

[33] Since 2012 we have sought clear justification from QAC that it has given adequate consideration to alternative sites and, separately, that the works and designation are reasonably necessary to achieve the objective for the designation. We have been mindful of the fact that QAC does not own the land to be designated. Bringing RPL's legitimate expectation to account in the particular context of s 171(1)(c), the NOR would not be a proportionate response in circumstances where there is either no nexus between the works proposed and the achievement of the requiring authority's objectives or where the spatial extent of land to be designated exceeds the land required by the works. It would also be unfair to RPL to designate the land if QAC were unable to use the same for the proposed works. In each of these circumstances it could not be said that the works and designation are reasonably necessary to achieve QAC's objective under s 171(1)(c) which brings us back to the first issue raised at the beginning of this section.



⁴⁹ Somerville, 10 February 2017 at [2.18].

⁵⁰ Somerville, 10 February 2017 at [2.22].

⁵¹ Nadarajah v The Secretary of State for the Home Department [2005] EWCA Civ 1363.

Outcome

[34] Section 171(1)(c) is concerned with whether the proposed works and designation for the subject site are reasonably necessary for achieving the requiring authority's objective. The enquiry does not extend to an examination of the existing aerodrome, including land owned by QAC. Accordingly, the court does not require QAC to conduct a further aeronautical study examining the use of its own land for GA and the other services.

Issue 2: Can QAC progress the intended works, or establish any physical work (and actually amend its exposition), before the designation is confirmed?

[35] Opposing QAC's request that the court make a final determination on the papers confirming the NOR, RPL submitted that the Aeronautical Study that was prepared by QAC was deficient and even though the Study was accepted by the Director of Civil Aviation, it does not address the operational issues highlighted in the Separation Distance decision and demonstrate acceptably safe airport operations. RPL sought to call evidence and be heard on these issues.⁵²

[36] QAC responded stating that the requirements under the Civil Aviation Act 1990 are, to the extent that they are able to be, met at this stage of the process. It cannot go further to progress the intended works, or establish any physical works (and actually amend its exposition), until the designation is approved by the court.⁵³ If correct, this bears on how far the court can go to satisfy itself as to s 171(1)(c) and Part 2 of the Act.

[37] Mr Clay, the General Manager Operations and Safety for Queenstown Airport gave evidence that there will be changes to the rest of the Airport's operational infrastructure consequential upon the construction of a Code C taxiway within the existing airport designation. Airport operations are made up of multiple interdependent processes; changes to the passenger terminal and apron stands will encroach upon the existing GA precinct. It would be irresponsible of the Airport to incur the cost of constructing the Code C taxiway (a cost largely born by the airlines) without being in a position to realise the NOR objectives.⁵⁴



⁵² RPL memorandum dated 9 November 2016.

⁵³ QAC memorandum dated 18 November 2016 at [12].

⁵⁴ Clay, EiC dated 22 January 2017 at [23]-[26].

[38] Mr Clay's observation that the Airport's operations are made up of multiple interdependent processes accords with the observations we made in an earlier decision as to the integrated development of airport facilities:⁵⁵

The NOR is required to ensure the continued safe and efficient functioning of the Airport through the expansion of its aerodrome to meet projected growth. When the whole of the NOR is considered it is plain this is to be achieved by the integrated development of airport facilities. Amongst the many changes to the physical characteristics of the aerodrome proposed to achieve its objective, the expansion of the passenger terminal and associated facilities will displace the GA (including helicopters) from its present location.

[39] It is therefore not entirely correct for Mr Casey to say that QAC can go no further to progress the intended works or establish any physical works until the designation is approved by the court.⁵⁷ Rather, the decision to go no further pending the court's final determination is a decision that is open to a prudent airport operator. However, that is not the end of the matter and we consider next whether the evidence before the court establishes, subject to Part 2 of the Act, that QAC can actually achieve its objective were the Lot 6 land to be designated, having particular regard to the need for the Director to consider (at least) task specific safety cases for components of the work.

[40] One final comment before we move on. RPL argued the confirmation of the NOR was irrelevant to the issue whether QAC can or cannot progress works within the existing designation. QAC could progress the works associated with the Code C taxiway as this would be constructed within the existing designation, with the GA Precinct to be constructed after its formation. For reasons that are not entirely clear RPL called evidence intended to prove that the airspace capacity is limiting growth in regular passenger transport services. The constraints in airspace capacity are addressed in the Separation Distance decision. Mr Clay's evidence at this hearing, which was unshaken in cross-examination, was that airspace would be enhanced through the introduction of the parallel taxiway. This accords with the observations we made on the same topic in the Separation Distance decision from [178] et ff, including in particular [193].



⁵⁵ [2015] NZEnvC 222 at [244].

⁵⁶ NOR, Form 18 at [1.3].

⁵⁷ We accept QAC cannot amend its exposition until the works have been constructed.

Issue 3: Should QAC furnish the court (or the Director) with task specific safety case(s) to provide more detailed mitigation for risk associated with each phase of the introduction of the new aerodrome layout?

[41] In the Separation Distance decision, subject to appropriate restrictions on aircraft movements, we were satisfied that the dual taxiway could operate safely.⁵⁸ At RPL's instigation we declined to issue a final determination giving QAC an opportunity to complete an Aeronautical Study and seek the Director's approval (or more accurately "acceptance") of the proposal.

[42] The principal elements of the NOR works and their indicative layout are described in the Aeronautical Study. The works and layout are the same as those presented to the court at earlier hearings. Attached to the Study is a copy of the 2015 decision and the Study records the court's wish to know what approvals may be required from the Director.

[43] The purpose of the Aeronautical Study is stated – it is to establish whether all relevant Civil Aviation requirements can be satisfied or addressed in a manner that is acceptable to the Director of Civil Aviation. The Study uses a methodology evidently agreed upon between CAA and QAC. The methodology employs a qualitative, not numerical, risk assessment (a matter of some considerable criticism by RPL's witnesses).

[44] In response the Director confirmed under Civil Aviation Rules, pt 139.131 the proposal entails significant change to the aerodrome layout and that it was practical (in this case) for an aeronautical study to be submitted to the CAA before project commencement. As the proposal is compliant with the relevant Civil Aviation rules it is deemed acceptable. The Director elaborates, not only are the proposed physical characteristics obstacle limitation surfaces, visual aids, equipment and installations compliant with the Civil Aviation Rules (pt 139.51(1)(i) to (vii)), but they are also acceptable to the Director (pt 139.51(d)(2)).



⁵⁸ [2015] NZEnvC 222 at [267].

[45] Importantly, the Director determined QAC will continue to meet the standards and comply with the requirements of Subpart B of the Civil Aviation Rules prescribed for aerodrome certification (pt 139.101(4)). QAC cannot operate the aerodrome except under the authority of an aerodrome operator certificate granted by the Director under the Civil Aviation Act and in accordance with the relevant rules (pt 139.5).

[46] The Director's decision makes clear that the continued compliance with the aerodrome certification does not mean that the operation of the dual taxiway and runway in conjunction with the proposed helicopter and GA facilities on Lot 6 is without risk. How risk is to be managed is to be addressed in the task specific safety cases.

RPL submits QAC should furnish the court (or Director) with the task specific [47] safety cases before a decision on the NOR is made⁵⁹ as the safety cases may result in design changes to mitigate potential risks or unacceptable design outcomes;60 may bear on the amount of Lot 6 land required⁶¹ or even as to whether the proposal can be operationalised. 62 In the absence of evidence on how risks are to be managed on Lot 6 it says the court is not in a position to make a decision under s 171(1)(c) or be satisfied in terms of Part 2.63 RPL submits that the safety cases are needed irrespective of its legitimate expectation that QAC would use its own land.

Discussion

[48] We commence by making a general observation: the court cannot abrogate its decision-making under the RMA to the Director of the Civil Aviation Authority. Indeed the Environment Court cannot delegate its function in relation to safety issues in so far as they are a relevant RMA matter. 64 The court is entitled to hear expert evidence and come to its own conclusions.65

[49] The NOR is not an application for resource consent wherein QAC seeks authorisation for certain activities, with the actual and potential effects of those activities

⁶³ Transcript at 77.

Cammack v Kapiti Coast District Council (EC) W069/09; Dome Valley District Residents Society Inc v Rodney District Council (EC) A099/07; Director of Civil Aviation v Planning Tribunal [1997] 3 NZLR 335.



⁵⁹ Selwyn, EiC dated 22 December 2017 at [8.5(b)]. Morgan, EiC 22 December 2016 at [6.10]. Sachman, EiC 22 December 2016 at [7.9].

Morgan, EiC 22 December 2016 at [6.10]. Selwyn, EiC dated 22 December 2017 at [8.5(b)].

⁶² Transcript at 119.

Dart River Safaris Ltd v Kemp [2001] NZRMA 433 (HC); Southern Alps Air Ltd v Queenstown Lakes District Council [2008] NZRMA 47.

on the environment being a matter which the decision-maker is to have regard (s 104). The wording in s 171(1) is different and, subject to Part 2, we are to consider the effects on the environment of allowing the requirement having particular regard to the matters stated in ss (1)(a)-(d).

[50] There is no bright line distinguishing between matters that may be properly regarded as "the effects on the environment of allowing the requirement" under s 171 and the consenting process under s 104 which is to consider "actual and potential effects on the environment of allowing the activity". Where we draw the line in this case is at the task specific safety cases. While both resource consent applications and notices of requirement are broadly concerned with proposed works, NORs have two key distinguishing features that are relevant to the scope of our deliberations.

[51] The first feature is that the final layout and design of the work may be a matter left for a future outline plan (s 176A). We do not recollect RPL having previously taken issue with the proposal being subject to an outline plan, and this is the subject of agreed conditions. The point being the content of the outline plan will overlap with the subject matter of the task specific safety cases, and this work has not yet been done.

[52] The second feature concerns the effect of including a designation in a district plan; namely the exemption of the work from the restrictions that otherwise apply to the use of land under s 9(3). Section 176 is enabling of the use and development of land, as it exempts the requiring authority's work from land use controls in the District Plan. "Use" in relation to land is defined in the Act. 66 The matters to be addressed in the task specific safety cases are only indirectly (if that) concerned with the use of land, and would not typically be the subject matter of rules in a district plan (for example, the timing and sequencing of work or the bringing into service of the new facilities). In this case the court has closely examined the proposed use of land and the effects, including on safety, arising from the use of land for activities such as the taxiways, FATOs and buildings. Our approach to safety is informed by the Act, including s 171 and Part 2.

⁽b)in sections 9, 10A, 81(2), 176(1)(b)(i), and 193(a), also means to enter onto or pass across the surface of water in a lake or river.



⁶⁶ use, ---

⁽a)means in ss 9, 10, 10A, 10B, 81(2), 176(1)(b)(i), and 193(a), means—

⁽i) alter, demolish, erect, extend, place, reconstruct, remove, or use a structure or part of a structure in, on, under, or over land:

⁽ii)drill, excavate, or tunnel land or disturb land in a similar way:

⁽iii)damage, destroy, or disturb the habitats of plants or animals in, on, or under land:

⁽iv)deposit a substance in, on, or under land:

⁽v) any other use of land; and

We have been careful to consider not only the risk to public safety arising out of the use of land, but to be satisfied that QAC can still achieve its objective for the NOR subject to any future restrictions that may be imposed to adequately mitigate those risks.⁶⁷ We have drawn the line at the point of mitigating any residual risk as that is an operational matter, only indirectly related to the use of land, for QAC and the Director of CAA.

[53] The furnishing of the task specific safety cases is not a complete answer to RPL's submission that we are to evaluate the "outcomes" under s 171(1)(c). As we have previously observed, risk is managed within a known context. The management of risk responds on an ongoing basis to changes within the environment. Evidently what is meant by "task specific safety case" is not defined in the Civil Aviation Act or its Rules. However, the Advisory Circular AC 139-15 attempts to draw a distinction between an aeronautical study and a task specific safety case, stating that aeronautical studies should be viewed as providing "a holistic view of an aerodrome's operational environment e.g. the macro perspective as compared to a safety case study which is a task specific document e.g. the micro view."

[54] RPL has not sought a judicial review of the Director's decision, but nevertheless is highly critical of the same. While RPL's witnesses would have preferred to see risk exhaustively addressed in the Aeronautical Study, it is not a purpose of an aeronautical study to address the micro level management of risk (although we accept in individual cases this may be done). The approach taken by QAC is supported by AC 139-15.

[55] Mr Clay explains in his evidence⁶⁸ that the safety of the new aerodrome layout and how it is intended to be operationalised by QAC has been assessed through the Aeronautical Study which the CAA has deemed acceptable. The task specific safety cases will ensure that the development of the airport is implemented and made operational in a safe way. He says that a task specific safety case is the mechanism the CAA uses to ensure compliance with the Aeronautical Study and to have progressive overview of QAC's management of risk. We accept Mr Clay's statement that the management of risk inherently needs to be progressive, with continual



⁶⁷ See, for example, discussion in [2015] NZEnvC 222 at [157]-[158]. A similar approach was taken by Judge Dwyer in *Cammack and Evans & ors v Kapiti Coast District Council* (EC) W069/2009 at [41] et ff, and in particular the limits to jurisdiction discussed at [90]-[91]. In that case Judge Dwyer was considering a plan change. The court held that there are limits to the court's jurisdiction under the former section, s 9(8). Declining to introduce certain rules outside the scope of s 9(8) in the plan change left operational controls for the airport authority.

Clay, EiC 10 February 2017 at [10]-[12].

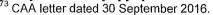
assessment, review and feedback, especially as elements of the proposal are sequenced and constructed. 69

[56] It is not suggested by RPL or by its witnesses that the Director has failed to take into account a relevant CAA rule (or the converse). RPL aviation consultant, Mr Morgan, expressly acknowledged the proposal was deemed acceptable under the relevant rules, the majority of which are design elements that have a material effect on the final design. While RPL's witnesses are concerned that the Aeronautical Study does not achieve its purpose and provide a holistic view of the aerodrome operational environment, their concerns were addressed through the Director's guidance that a detailed safety case will need to be provided for each stage of the introduction to service of the proposed airport changes. We conclude that the Director has not gone through a simple tick the box exercise but has considered the Aeronautical Study in accordance with AC 139-15 and Civil Aviation Rules pt 139.

[57] We take notice of the powers and functions of the Director of Civil Aviation which include enforcing statutory and regulatory requirements of the Civil Aviation Act. It is a purpose of the Civil Aviation Act to promote aviation safety through the rules of operation and assigned responsibilities and auditing participants' performance against the prescribed safety standards and procedures. The Court of Appeal recently noted this function is likened to oversight responsibility, rather than one which requires participation in operational issues which are the province of the airline operators. We anticipate there is an ongoing requirement to produce task specific safety cases as part of the concomitant obligation on QAC as the holder of an aerodrome operator certificate to continue to meet the standards and comply with the requirements prescribed for aerodrome certification under the rules (pt 139.101).

[58] Finally, we do not accept RPL's mild suggestion that the Director's acceptance of the proposal was conditional upon the presentation of the task specific safety cases. That submission is not open to us on our reading of the decision.⁷³ While Ms Selwyn seems to revisit that argument by suggesting that the safety cases may have a bearing

⁷¹ Selwyn, EiC 22 December 2017 at [6.5]. Morgan, EiC 22 December 2016 at [5.10].
72 New Zealand Air Line Pilots' Association Industrial Union of Workers Inc v Director of Civil Aviation [2017] NZCA 27 at [14]-[17].





Clay, rebuttal 10 February 2017 at [11.6]
 Morgan, EiC 22 December 2016 at [5.1]-[5.2].

on the amount of Lot 6 required,⁷⁴ we found in the last decision there is no evidence to support this proposition. Nothing we have heard during this hearing has changed our view on this.

Outcome

[59] In the Separation Distance decision the court declined to make a final determination because we were concerned that if QAC could not use the land for the works the designation would not be reasonably necessary for achieving the objectives for which the designation is sought (ss 171(1)(c)). The Director's confirmation that QAC will remain compliant with its aerodrome operating certificate answers our question in the affirmative: the proposal can be operationalised. How this is to be achieved, in micro terms, will appropriately be the subject matter of the task specific safety case(s) in accordance with the Civil Aviation Act and its rules.⁷⁵

[60] For the reasons that we have given on this occasion we do not require QAC to furnish the court with the task specific safety cases.

[61] Pursuant to s 171(1)(c) we find that the works and designation are reasonably necessary to achieve the requiring authority's objective.

Red Oaks Drive

[62] The proposed GA Precinct is to have separate road access from the aerodrome terminal. Determining how that is appropriately provided is complicated by existing road conditions and the timing of planned improvements. QAC advises that Red Oaks Drive has (still) not been extended to provide for a connection to the boundary of the area to be designated. This was not disputed by RPL. The area of land required for access from Hawthorne Drive to the General Aviation Precinct is therefore to be included within the area to be designated. Condition B(1)–(5) in the court's 2013 decision is confirmed.



⁷⁴ Selwyn, EiC 22 December 2016 at [8.5(b)].

⁷⁵ We note Dr Somerville addresses the Safety Case in terms of "how" risk is to be managed at Transcript 13.

Activities and lapse period for the designation

[63] Condition 1 contains a statement of the activities which are permitted within the area to be designated. The fact that the designation will be included in the District Plan does not mean that the implementation of these activities will proceed or that QAC has a timeframe in mind.

[64] Mr Clay, for QAC, would not be drawn on a statement contained in the Aeronautical Study that QAC anticipates the Code C taxiway to be built within five years and prior to the development of the GA Precinct. We remind QAC under s 184 RMA the designation will lapse after the expiry of five years unless one of ss (1)(a)-(c) applies.⁷⁶

Part 2

[65] RPL argues that as there is a conflict between the s 171(1)(b) and (c) considerations Part 2 should be used to resolve that conflict. Consequently the NOR should not be confirmed because it does not meet the objective of sustainable management.⁷⁷ We have not, however, found any conflict.

[66] Following the High Court decision of *New Zealand Transport Authority v Architectural Centre Inc^{78}* (referred to as the *Basin Reserve* decision) the phrase "subject to Part 2" as it occurs in s 171 is a specific statutory direction to consider and apply Part 2 in making a determination on a designation. It follows Part 2 is relevant, whether or not there are conflicting assessments under ss(1)(a)-(d).⁷⁹

[67] Mr Casey submits the law is now less clear with the recent High Court decision of *Davidson Family Trust v Marlborough District Council*, ⁸⁰ an appeal against a decision declining resource consent. He submits that Justice Cull having noted the similarities between ss 171 and 104 RMA in that they both list matters "subject to Part 2", does not explain why in *Davidson Family Trust* she adopts an interpretation of "subject to Part 2" that is inconsistent with the *Basin Reserve* decision. We suggest the observation made in *Basin Reserve* as to the different role that planning documents may play in RMA proceedings (in that case comparing and contrasting NOR and plan change

⁸⁰ [2017] NZHC 52.



^{76 [2012]} NZEnvC 95 at [33]-[36].

⁷⁷ Somerville, submissions 10 February 2017 at [2.56].

⁷⁸ [2015] NZHC 1991.

⁷⁹ At [112-7].

proceedings) may be pertinent to the interpretation taken in *Davidson Family Trust* which was considering an application for resource consent. In this case although we are to pay particular regard to the planning documents they do not determine the outcome of a notice of requirement; per *Basin Reserve*.⁸¹

[68] We are aware that *Davidson Family Trust* has been appealed to the Court of Appeal but regardless of the outcome we distinguish it on the basis that it is a resource consent appeal and deals with different provisions of the Act. We consider we are bound by the High Court decision of *Basin Reserve* since it is a designation proceeding.

[69] Ultimately the exercise of any decision-making discretion under s 149U(4) RMA is to be undertaken in a principled manner. The discretion is to be exercised for the purpose that it was conferred and unless the context clearly indicates otherwise, under the RMA this will be for the purpose of promoting the sustainable management of natural and physical resources.

[70] QAC's objective is to "provide for the expansion of Queenstown airport to meet projected growth while achieving the maximum operational efficiency as far as possible." In order to achieve that objective, operations at the aerodrome must, as "far as possible," be both safe and efficient.

[71] We conclude with the words of Whata J. The court, like QAC, cannot be bound to give effect to RPL's expectations where to do so is inconsistent with the requirements of s 171. Regrettably for RPL we have found the use of QAC land would not achieve the statutory criteria and achieve the statutory purpose.⁸²

[72] The matter does not end there. We have reconsidered our findings in light of the directions in Part 2, including the further planning evidence produced during the Separation Distance hearing (which we said we would return to in the final decision).⁸³ Having done so we are satisfied that the NOR, subject to the conditions we approved earlier, will promote the sustainable management of natural and physical resources.



⁸¹ New Zealand Transport Authority v Architectural Centre Inc at [117].

^{82 [2014]} NZEnvC 244 at [103].83 [2015] NZEnvC 222 at [34].

Admissibility of evidence called on behalf of RPL

[73] Finally, the Evidence Act 2006 sets out the fundamental principle that all relevant evidence is admissible⁸⁴ in a proceeding (s 7(1)). Evidence that is not relevant is not admissible in a proceeding (s 7(2)). Evidence is relevant in a proceeding if it has a tendency to prove or disprove anything that is of consequence to the determination of the proceeding (s 7(3)).

[74] While the Environment Court is not bound by the rules of law about evidence that apply to judicial proceedings (s 276(2) RMA), and may receive anything in evidence that it considers appropriate to receive (s 276(1)(a) RMA), that does not mean that it has no regard for the Evidence Act and that "anything goes". 85

[75] We have carefully considered the evidence Mr Douglas Sachman, Mr Eric Morgan and Ms Heather Selwyn called on behalf of RPL. To the extent that each of them respond to evidence given by Mr Michael Clay, General Manager, Operations and Safety for QAC, the evidence is relevant and is admitted.⁸⁶

[76] Our present enquiry does not necessitate an examination of alternative sites. We have found in earlier decisions that QAC gave adequate consideration under s 171(1)(b) RMA to locating the Code C taxiway together with a proposed new General Aviation (GA) Precinct to the north of the main runway.⁸⁷ The evidence on this issue is not relevant to any issue before the court, and we have not had regard to it.

[77] The balance of the evidence addresses the Aeronautical Study and in particular the absence of a risk assessment supporting detailed design of the aerodrome. This is relevant to the issue whether the works can be operationalised, and is admitted. Having had regard to the evidence, we place little weight on the opinions expressed by RPL's witnesses criticising the Aeronautical Study. The Study has been accepted by the Director of CAA, and RPL has not sought a judicial review of his decision. Second, and notwithstanding the witnesses' criticism, any residual safety risk is able to be addressed in the task specific safety cases.



⁸⁴ Subject to the two exceptions stated in s 7(1) of the Evidence Act.

⁸⁵ Re Meridian Energy Ltd [2013] NZEnvC 59 at [60].

Mr Clay addresses the issue presented by the court, namely QAC's asserted inability of progress the intended works until the designation is approved by the court.

87 [2015] NZEnvC 222 at [229] and [252].

RPL memorandum filed after the reserve of the court's decision

[78] After we reserved this decision RPL filed further submissions addressing the recent Court of Appeal decision *New Zealand Air Line Pilots' Association Industrial Union of Workers Inc v Director of Aviation* [2017] NZCA 27 and attaching a press release concerning QAC's purchase of land adjacent to Wanaka Airport. QAC objected as RPL did not seek the prior leave of the court and was concerned that RPL was endeavouring to delay the release of this decision and distract the court from the matters in issue. While it does not say RPL's conduct amounts to an abuse of the court's process, it has throughout these proceedings raised concern that RPL was prosecuting its interests without due regard to the matters referred back for reconsideration by the High Court and to the directions of this court.

[79] RPL should have sought prior leave of the court before filing its memorandum. That said, we have had regard to RPL and QAC's memoranda as, first, the earlier judgment of the High Court ([2016] NZHC 1528) was the subject of submissions and, second we heard evidence concerning the Wanaka land purchase. The evidence before us does not support an inference that the requirement for Lot 6 is no longer reasonably necessary as QAC has an alternative site for GA at Wanaka Airport. RPL also submits that the Director needs to carry out an Aeronautical Study on all aspect of relevant airport layout safety issues. We find this is what QAC has done (with an emphasis on "relevant" and of the Director's acceptance of the Study). The Court of Appeal decision is not authority for the proposition that the task specific safety cases must be included as part of an aeronautical study.

Decision

[80] Pursuant to s 149U(4) RMA we confirm the notice of requirement to extend Designation 2, subject to the conditions attached to this decision and approved by the court in its decision [2013] NZEnvC 95. The extent of the designation is shown on Figure 1 attached. For completeness, we confirm that the designation is to have a lapse period of five years from when it is included in the District Plan (s 184). 90



⁸⁸ Dated 17 March 2017.

⁸⁹ Dated 21 March 2017.

⁹⁰ [2013] NZEnvC 95 at [36].

[81] Costs are reserved, but not encouraged. Any application for costs is to be filed by 21 April 2017, with replies by 5 May 2017.

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For the court:

E Borthwick

Énvironment Judge



Annexure A Conditions of the extension to designation 2



A. Purpose of the Designation

[1] Insert into Designation 2 clause 1(f) the following statement of activities permitted within the Aerodrome Designation:

Within the General Aviation Precinct located on Part Lot 6 DP 304345:

- general aviation operations, including private aircraft traffic, rotary wing and helicopter operations, and
- hangars, including those for Code C aircraft; and
- associated activities, offices, aircraft servicing, fuel supply and storage, maintenance, buildings, signage and infrastructure, navigational aids and lighting, vehicle access, car parking, and landscaping.

B. Approved conditions for Traffic/Access Arrangements to Lot 6

- [1] In the event that the Eastern Access Road (EAR) is formed and operational from Hawthorne Drive through to Glenda Drive, and access from the EAR to the eastern end of the General Aviation Precinct (the GAP) is constructed and operational then the eastern access shall become the primary access to the GAP. The eastern access shall have a controlled intersection with the EAR approved by the road controlling authority and allow all movements from all approaches. Any access arrangement at the western (Hawthorne Drive) access shall revert to left-in access only.
- [2] In the event that a connection to the GAP is constructed and operational from a northern extension of Red Oaks Drive, then the western access from Hawthorne Drive shall be closed and full access and egress to the precinct shall be made from the Red Oaks Drive connection, irrespective of whether an eastern access to the precinct is constructed and operational.
- [3] <u>If development within the GAP occurs prior to the construction and operation of an eastern access, and no extension from the current termination of Hawthorne Drive</u>



toward the western access has occurred, then access to the GAP shall occur through an extension of Hawthorne Drive by the QAC to the western access point, in a manner generally consistent with Figure 1.

- [4] If development within the GAP occurs prior to the construction and operation of an eastern access, and Hawthorne Drive has been extended beyond its current termination past the western access but not as far as Red Oaks Drive, then full ingress and egress will be allowed at the western access.
- [5] If development within the GAP occurs prior to the construction and operation of an eastern access and Hawthorne Drive is extended to or beyond Red Oaks Drive (which is to be either a roundabout or signal controlled at the discretion of the road control authority) then the western access at the connection with Hawthorne Drive shall operate on a left in and left out basis with pre-signals controlling traffic travelling east on Hawthorne Drive to enable egress from the western access in a manner generally consistent with Figure 2.

Advice Note: all intersections and roading improvements shall be designed and constructed to Council standards and be subject to Council approval as road controlling authority.

C. Approved Landscape and Design Conditions

[1] Not less than three (3) months prior to an outline plan for the GAP being submitted to the territorial authority pursuant to section 176A of the Act, the requiring authority shall prepare and submit to the territorial authority for certification an "Integrated Design Management Plan". The purpose of the Integrated Design Management Plan shall be to provide a structure plan showing the general configuration of roading, parking and areas of landscaping, open space and key view corridors and to determine the approach to be adopted to for the design and development of buildings and infrastructure (including signage). No outline plan shall be submitted by the requiring authority until such time as the territorial authority has certified that the Integrated Design Management Plan achieves the following objectives:

Qutstanding Natural Landscapes:

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Identify and maintain key—views to the surrounding mountains including and Outstanding Natural Landscapes identified in the District Plan, and including those referred to in the Remarkables Park Zone. This may be achieved by:

- (i) providing sufficient separation between buildings and infrastructure to ensure that identified views to the mountains from neighbouring land to the south and north of the GAP are maintained;
- (ii) Interspersing earparking and/or open space with buildings and infrastructure with carparking and/or open space;
- (iii) Clustering of buildings.

Landscaping:

- (b) Provide landscaping within the GAP that achieves a high level of onsite and offsite amenity and ensures that any adverse effects on neighbouring land arising from development of the GAP are appropriately mitigated. This may be achieved by:
 - (i) landscaping of buildings, infrastructure and carparking areas that softens, integrates and where possible screens built form when viewed from neighbouring land and from the airport passenger terminal;
 - (ii) where necessary, planting along the boundary of the GAP to provide for the screening of buildings and infrastructure within the site and/or visual integration within the surrounding landscape;
 - (iii) a planting palette with sufficient range to enable the creation of character areas, but with elements that remain consistent throughout the GAP so as to create a consistent theme;
 - (iv) a hard <u>landscaping</u> element palette including paving, retaining <u>structures</u>, drainage <u>grates</u>, kerb profiles, bollards, fencing, light standards and any other <u>public GAP</u> infrastructure. More than one paving type may be included to enable the creation of character areas but all other hard elements should be consistent so as to create a consistent theme;





(v) a consistent carpark design, including soft and hard landscaping in all locations but allowing for some variation to enable the development of character areas.

Buildings and Signage:

- (c) Design and locate buildings so they are recessive and integrated within the surrounding landscape (including the immediately adjoining Remarkables Park Zone), whilst recognising and providing for the buildings' function and use. This may be achieved by:
 - (i) avoiding linear arrangements of buildings where practicable;
 - (ii) varied rooflines that avoid uniformity, particularly when viewed from the south and elevated viewpoints;
 - (iii) limiting roof colours to mid-browns, mid-greens and mid-greys with a reflectivity of less than 36%, with no signage permitted on the roofs of buildings;
 - (iv) limiting the external colour of the material used for walls of reflectivity of all external colours and materials used on buildings to a natural range of browns, greens and greys with a reflectivity of to-less than 36%, with the exception that the trims, highlights and signage totalling up to 10% of the façade area may exceed this level and be of contrasting colours in order to add visual interest;
 - (v) ensuring variation in the bulk, form and scale of buildings;
 - (vi) providing interesting detailing and articulation of building facades, particularly when viewed from the south;
 - (vii) the identification of signage platforms on buildings.

Infrastructure:

- (d) Mitigate any adverse visual and amenity effects of infrastructure for visitors to the airport and users of neighbouring land. This may be achieved by:
 - (i) locating aviation related infrastructure on the airside part of the GAP land where practicable and where <u>possible</u> not significantly impractical, ensuring such infrastructure is integrated into the development by appropriate landscaping measures;





[5]

P COUNT OF

- (ii) providing details of methods for managing stormwater and earthworks <u>for</u> the purpose of avoiding, remedying or mitigating any relevant adverse effect.
- [2] The Integrated Design Management Plan shall allow for staged implementation of development within the GAP. If staged development is provided for then an overall plan showing the various likely stages and the method for ensuring a consistency of design and landscaping approach across the development of the entire GAP shall be included in the Integrated Design Management Plan. If the development is to be staged then the development of a precinct accessway the road corridor shall be part of Stage 1.
- The requiring authority shall ensure that all outline plans submitted pursuant to section 176A of the Resource Management Act 1991 shall demonstrate that the works subject to it are to be developed in a manner that achieves the objectives of the Integrated Design Management Plan. Outline plans shall contain a detailed landscape design plan including planting and maintenance plans to achieve objectives (a) and (b) of the Integrated Design Management Plan on an on-going basis. Each outline plan shall also contain details of buildings, signage, parking, and other built infrastructure to demonstrate how objectives (c) and (d) of the Integrated Design Management Plan are to be achieved. Each outline plan shall be accompanied by a report from a suitably qualified and experienced landscape architect addressing how the outline plan achieves the objectives of the Integrated Design Management Plan.
- [4] The requiring authority may seek the approval of the territorial authority to make any necessary amendment to the Integrated Design Management Plan, without an application under the Resource Management Act 1991 to make such a change, provided that such amendments do not result in changing the purpose, or derogating Ofrom the purpose and the objectives of the Integrated Design Management Plan set out in condition [1]. without an explicit application to make such a change.

If a review of the Integrated Design Management Plan is undertaken by the requiring authority then that review shall be undertaken in consultation with the consent authority.



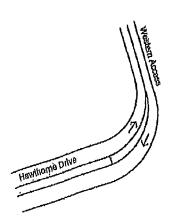


Figure 1

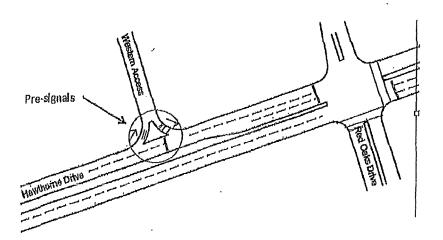
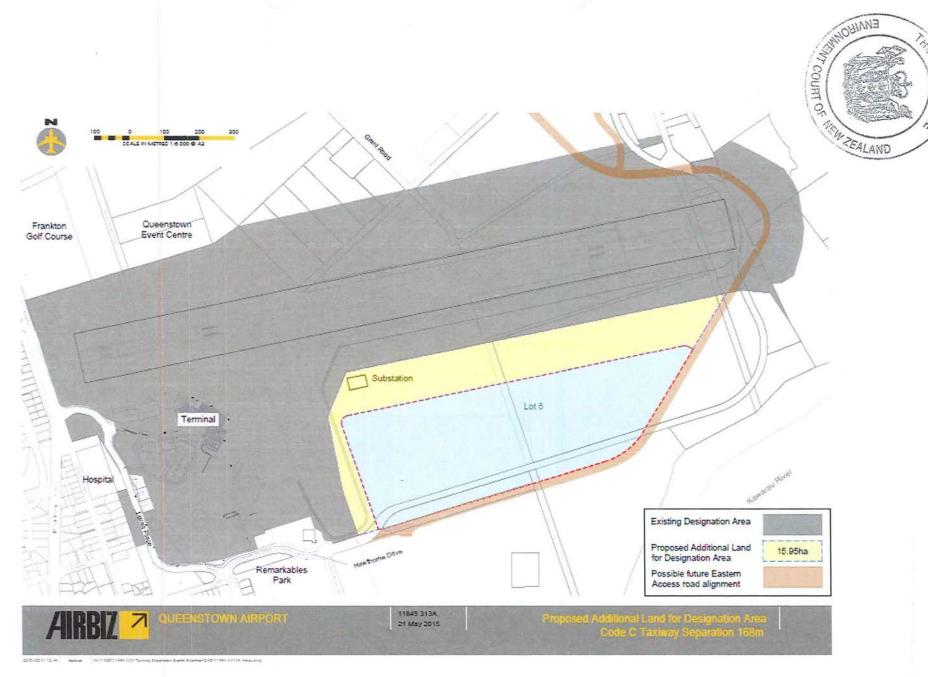


Figure 2

Traffic Management Conditions





BEFORE THE ENVIRONMENT COURT I MUA I TE KOOTI TAIAO O AOTEAROA

Decision No. [2020] NZEnvC 114

IN THE MATTER

of the Resource Management Act 1991

AND

of a Notice of Motion under Section 87G of the Act requesting the granting of resource consents to SUMMERSET VILLAGES (LOWER HUTT) LIMITED for construction and operation of a retirement village at 32A Hathaway

Avenue, Boulcott, Lower Hutt

BETWEEN

SUMMERSET VILLAGES (LOWER

HUTT) LIMITED

(ENV-2018-WLG-000128)

Applicant

AND

HUTT CITY COUNCIL

Consent Authority

Court:

Environment Judge B P Dwyer

Environment Commissioner K A Edmonds Environment Commissioner D Kernohan

Hearing:

At Wellington on 17-19 June 2019

Counsel/Appearances:

R Bartlett, QC & F Lupis for the Applicant S Quinn & C Wills for the Consent Authority R Fowler, QC for Ray Wallace and David Bassett

D Page appears in Person and for Boulcott Preservation

Society parties

I McLauchlan appears in Person N Miller appears in Person

Date of Decision:

28 July 2020

Date of Issue:

28 July 2020

FURTHER INTERIM DECISION OF THE ENVIRONMENT COURT ON CONDITIONS

REASONS

Introduction and Background

- [1] On 23 March 2020 the Court released its Interim Decision on a direct referral application by Summerset Villages (Lower Hutt) Ltd (Summerset) for resource consents to develop and use a site situated at 32A Hathaway Avenue, Boulcott for a retirement village.¹
- [2] Counsel for Summerset had agreed during our hearing that it would be better to leave the final form of conditions for a later stage in our decision-making (although we had draft conditions attached to the Planning JWS updating those in the s 87F Report).

[3] In our Interim Decision:

- We indicated that we had a concern that adverse amenity effects of the proposal on 3/3 Boulcott Street (3/3) had not been properly recognised and addressed.² We directed Summerset to reconsider a number of issues pertaining to effects on 3/3. We have since been advised that Summerset has purchased 3/3 and we do not consider the matter of effects on it:
- We also directed Summerset to address a number of questions regarding conditions:
- We set a timetable for revised conditions and responses to be provided.
- [4] Summerset prepared a draft of the proposed conditions and some parties provided written comment with Summerset then considering the comments and providing what it proposed as the final set of proposed conditions with supporting reasons on divergences from the comments of other parties.
- [5] We have considered the material initially provided by Summerset and comments from the following parties:

Summerset Villages (Lower Hutt) Limited v Hutt City Council [2020] NZEnvC 31 (Interim sion)

This property was also referred to as 3C Boulcott St on occasions.



- Mr P Jenkin sent 25 April 2020;
- Boulcott Preservation Society Inc (BPS) sent 30 April 2020;
- Boulcott School Board of Trustees (the School) sent 5 May 2020;
- Mr M Bain sent 5 May 2020 and;
- Summerset's reporting memorandum on this matter with appendices, including the revised condition set and a supplementary statement from Mr I Munro³ with accompanying plans sent 14 May 2020.
- [6] This Further Interim Decision takes the form of a series of comments and observations on various proposed conditions. We will refer to relevant comments from Summerset and the other parties as we proceed through this decision. Before addressing specific conditions we comment briefly on the matter of solar amenity which we raised in our Interim Decision and make a general observation regarding management plans whose use is widely proposed in the conditions.

Solar amenity

- [7] In our Interim Decision we referenced Mr Munro's acknowledgement during questioning that the provision of north-facing communal areas associated with Buildings A and F would enhance amenity for occupants of south-facing units in these buildings. We required consideration of what could be achieved to improve the proposal in this regard.
- [8] We accept the response in the supplementary statement from Mr Munro and the plans identifying existing and new proposed amenity areas (to be included in Condition 1 and to be complied with).

Management Plans

[9] As management plans are used throughout the conditions it is appropriate to deal with the principles that are to inform their use early in our consideration of the conditions.

10] Our Interim Decision was clear on the role of management plans when



dealing with the effects of dust:4

As a general principle it is important that the conditions of a consent set out the outcomes required and how these outcomes are to be achieved. Management plans provide a way to identify what steps are to be taken to ensure that clear, certain and enforceable outcomes contained in conditions of consent are achieved. They are not a substitute for conditions locking in the standards that are to be met to ensure environmental effects are kept within an acceptable level.

The same principles apply to all management plans.

[11] We are particularly concerned about the comments on 'School specific concerns' contained in Summerset's comments on the draft conditions in its response:

Boulcott School is particularly concerned around the effects from dust, noise and traffic on its students, teachers and staff and their learning and work environment.

The further details that the School seeks will be provided in the context of the relevant management plans (noting that the CNVMP is required to include specific details relating to any steps to be taken to minimise effects of construction noise on the Boulcott School). The School will be provided with copies of the management plans for comment well in advance of works commencing in accordance with Condition 62.

That response demonstrates a misunderstanding of the function of management plans, as exemplified throughout the proposed conditions.

- [12] We consider the approach to conditions and management plans does not align with good practice. In particular we find that there are insufficient clear conditions setting out requirements/standards (requirements) that must be achieved, with many such requirements buried in lists of items to be covered in yet to be prepared management plans.
- [13] We are not prepared to sign off on the conditions as drafted. A full and considered review of those conditions is required to:
 - Ensure requirements are set out in stand-alone conditions;
 - Recognise that the proper function and purpose of management plans,



Interim Decision at [156].

to be certified by named Council officers, is to set out how the requirements contained in conditions are to be met;

• Redraft the Management Plan conditions to align with the above.

[14] We also question the usefulness and the potential for mixed messages to be sent by the general purpose added to each management plan:

...to provide measures to appropriately avoid, remedy or mitigate any adverse effect on [] associated with the construction and operation of the retirement village (and similar).

That could be interpreted to indicate the potential for a management plan not to have to comply with the outcomes specified in other conditions (even including Condition 1?).

[15] We return to these matters when dealing with specific conditions and generally in relation to management plans. We now identify issues arising out of specific conditions.

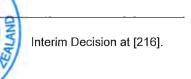
General

[16] Our Interim Decision said:5

An important step in the revision of conditions process is to address condition 1. That condition should be clear on what the proposal is and how it is to be carried out, not simply list all the documentation that was involved in the application process.

Preamble

- [17] The Summerset response is to add a preamble to Condition 1 and amendments to the start of it, to clarify the activities authorised by the consent. That includes a description of the key elements of the proposal including the number and breakdown of different types of accommodation (villas etc) and 233 on-site parking spaces.
- [18] This is helpful but does not derogate from the need to be clear what the proposal is under Condition 1.



Condition 1

[19] A category of 'further documentation provided' is added but otherwise the condition retains the approach of listing under a heading 'General' the following subheadings and background material:

- All documents and reports in the resource consent application;
- Application drawings;
- Addendum received in response to the s 92 request; and
- Further documentation provided (2019 and 2020).

[20] The further documentation includes new documentation in response to the Interim Decision, with the landscape concept plan redesign described as in response to paras [129]-[130], High Street/Boulcott Street Intersection Upgrade – Traffic Signals Concept Design 15 June 2019, Drawings dated 31 March 2020 said to be in response to para [63] and one dated 9 April 2020 accompanying the solar amenity response to para [92] which we have approved above.

[21] The difficulty with listing everything is that many of the documents referred to have limited relevance to the requirements in the conditions given the evolution of the proposal, including through the hearing process. We consider that there needs to be one coherent, accessible and readily understandable package of consent documents reflecting the approved proposal as applied for but as varied or evolved during the consent and hearing process.

Substantially in accordance with

[22] Our Interim Decision also asked:6

What is meant by the qualification 'substantially in accordance with' and what certainty does that provide to those relying on the outcome of the consent process?

The response in the conditions is to add:

Note: "Substantially in accordance with" does not include changes in the overall bulk and form, including roof form, of any of the buildings comprising the retirement village, including their height, location and setback from boundaries, for which an application under section 127 of the RMA would be required. Minor amendments to the design and external appearance of the buildings may be approved upon request to the Team Leader Resource Consents, providing any amendments demonstrate



that:

- the outcome is not materially different than; and
- any adverse effects will be no greater than; and
- no person would be adversely affected beyond what was granted consent.

We consider that this is a good clarification. In our view it is of such significance in operation of the condition that it should be part of the condition itself rather than a footnote.

Condition 2

[23] The School sought that in addition to the Council's Environmental Officer being contacted by the consent holder at least 48 hours prior to any physical work commencing on site, the School should also be advised to manage any necessary school preparation and school community communication. BPS sought the same so that it could advise members and in particular those properties bordering the development of imminent activities on a 'no surprises basis' to give people time to prepare.

[24] The Summerset response was to add Condition 62B to require all members of the Community Liaison Group (CLG) to be provided with this period of notice prior to any physical work commencing on the site. The CLG includes one representative for the School (Condition 61). We concur with Summerset's response.

Boundary Noise Fence

Condition 5

[25] We concur with the amendment requiring the consent holder to either construct a new fence or upgrade the existing boundary fence, in order to comply with the requirements of the condition for an acoustic fence (given the existing fence is only a boundary fence with gaps). Condition 5A now contains a process for the consent holder to replace the windows (constructed at the request of School management) with close-board fencing, if requested to do so by the School.



Construction Management Plan

[26] In our Interim Decision [142] we said:⁷

We accept that there is a need for a thorough review of construction conditions to ensure they are fit for purpose and provide a follow-up process for that.

Condition 6

[27] This condition is for a Construction Management Plan (CMP). It provides that the CMP 'must be based on the draft Construction Management Plan prepared by Beca, dated 14 February 2018'. It also specifically refers to information on:

- (c) Details of the sediment and dust control measures to be implemented on the site to meet Conditions 16, 17 and 18 ...
- (d) Any necessary acoustic mitigation measures that will be adopted in accordance with Condition 19.
- (f) Complaints procedures and protocols for liaison with the community to be implemented to meet Conditions 61 and 62.
- (j) Processes for establishing the baseline condition of the properties listed in Condition 24

Paragraphs (h) and (j) also refer to standards or outcomes that are capable of being objectively ascertained and can be described as requirements. We query whether these might better be in separate stand-alone conditions.

[28] We find there are significant omissions. We do not see that the reference that 'the CMP must be based on the draft Construction Management Plan prepared by Beca, dated 14 February 2018' to be a satisfactory approach, particularly when we look at that document.

[29] That document is titled Summerset Lower Hutt – Civil Works Construction Management Plan prepared by Beca Ltd 14 February 2018 (draft CMP). It is clear that this document was intended to cover construction of civil site works only, including earthworks, installation of in-ground services and construction of a roading network. The proposal before the Court involves much more than that in terms of construction effects. The draft CMP also appears to have been prepared for the regional consent, with the references to Contractors Environmental Management Plan (CEMP) to be submitted for approval to the (Engineer and) Greater Wellington

Interim Decision at [142].

Regional Council before work begins on the site.

[30] There is a note in Condition 6 (really a condition) that states certification is only to be satisfied that the CMP is broadly consistent with the CMP submitted with the application. Are they one and the same? The Court could not locate another CMP directed at the land use consent application, although we appreciate that it may be among the many documents filed.

[31] The draft CMP document is said to provide background information about the proposed site works and outlines the minimum requirements to which the Contractor must adhere. The chosen Contractor(s) will be required to prepare a CEMP which will be specific to the methodologies proposed, and to address specific activities, prior to physical works commencing.

[32] The draft CMP describes the site and project in very broad outline. Then it has a table under a heading Construction Methodology outlining an indicative construction methodology for completing the Stage 1 methodology and states that the Contractor will be responsible for preparing a comprehensive construction methodology prior to establishing on site. It also says that the CMP has been prepared as a guideline for civil contractors to use in developing their own CEMP.

[33] When we look at the very general draft CMP we find there are no requirements setting the outcomes and standards for a number of key matters, particularly standard hours of work and construction noise limits. At minimum these must be included as specific requirements in one form or another. We will comment further on the parties' positions in that regard.

Hours of Work

[34] BPS sought that restricted construction hours be specified rather than 'made up on the fly'. BPS submitted that reasonable construction working hours on the site would be:

	Period	Winter (NZST)	Summer (NZDST)		
	Week Days (Mon - Fri)	Vehicle warm-up: 7.30 - 8am	Vehicle warm-up: 7.30 - 8am		
		Construction: 8.00am - 5pm	Construction: 8.00am - 6pm		
1	Saturdays	Vehicle warm-up: 8 - 8.30am	Vehicle warm-up: 8 - 8.30am		
1		Construction: 8.30am - 12.30pm Construction: 8.30am -			
1	Sundays and Public	No work	No work		

Holidays

[35] BPS's reasons were:

These times would allow neighbouring members and residents time to have breakfast and for work preparation in peace and quiet, and without disruption from noise and vibration. The experience of BPS members during the earthworks conducted on the site during January — May 2019 was that noise and vibration carried some distance from the site boundary and were discernible even to those who were not in dwellings proximal to the site. For Saturdays, a slight delay in starting would afford a bit of extra rest in the early morning and would ensure members and residents do not have the entire day disrupted by construction and activities; especially for activities that are to be undertaken in outside yards.

- [36] The School also requested these work hours in conditions. It noted that the school operates from 7am until 6pm Monday to Friday with school hours from 8.55am to 3pm and before and after school services provided from 7-8.30am and 3-6pm.
- [37] The Summerset response was that this would result in a considerable extension to the overall construction project timeframe. Summerset and the Council considered this unwarranted given the compliance with noise standards required by the conditions which impose restrictions on the hours in which noisy construction activities can occur.
- [38] We are unclear as to what is actually required and secured by the noise conditions. In particular, we are not assisted by the fact that the conditions themselves do not set out the 'long term' duration noise limits and the days and hours to which these apply.
- [39] Conditions that import by reference material from NZS must be clear on their face to all users of conditions. The copyright position of NZS and the cost of NZS means that we cannot assume that such fundamental documents are accessible to all. The substantive requirements of standards like noise limits should have been set out in full in the conditions circulated to the parties. (It is not sufficient to only have extracts from a NZS included in material attached to the application such as a draft management plan and in the s 87F report and in evidence.)

We understand that the relevant provisions of the NZS are:

"Long term" duration is for construction work with a duration of more than 20 weeks with the limits:

Table 1: Recommended upper limits for construction noise received in residential zones (from New Zealand Standard NZS 6803: 1999 "Acoustics - Construction Noise" Table 2)

Time of week	Time period	Duration of work		
		***	Long-term duration	
			(dBA)	
			Leq	Lmax
Weekdays	0630-0730		55	75
	0730-1800		70	85
	1800-2000		65	80
	2000-0630		45	75
Saturdays	0630-0730		45	75
	0730-1800		70	85
	1800-2000		45	75
	2000-0630		45	75
Sundays and	0630-0730		-45	75-
Public	0730-1800		55	85
Holidays	1800-2000		45	75
	2000-0630		45	75

[41] The Marshall Day Assessment of Noise Effects, Section 9.1, accompanying the application states that:

For conventional construction methods operating within normal operating hours (as identified by the un-shaded areas of Table 2 above) it is expected that construction activities can comply with these limits.

[42] We note that the two Residential Zones are within Noise Area 3 using the L_{10} descriptor (around 3dBA higher than L_{eq}) and that means permitted noise levels from non-residential activities must not exceed on any day of the year:



Time	L 20 noise level	
7am – 10pm	50 dBA	
10pm - 7am	40 dBA	

[43] The maximum sound level is not to exceed L_{max} 75dBA during the hours 10pm-7am measured anywhere within a residential activity area (14C.2.1 Permitted Activity – Conditions).

[44] In the District Plan chapter 14C on Noise under the heading 14C 1.1 Maintaining or Enhancing Health and Amenity Values there is an Objective:

To maintain or enhance the amenity value of all activity areas by ensuring that the adverse effects of excessive noise on the environment are avoided or mitigated.

[45] The implementing Policy includes:

- (f) To recognise that noise levels may be different through a construction phase.
- (g) To recognise that Noise Management Plans may be appropriate to manage matters beyond those addressed in this District Plan.

[46] Both acoustic experts referred to these policies. Neither of these policies support the omission of clear, certain and enforceable requirements in conditions that set the acceptable limits to the activity (and allow it to be approved). Once these limits have been set the Noise Management Plan can deal with procedures for ensuring these limits are complied with.

[47] We have considered the trade-off between shorter working days and weeks and the period construction will take. We conclude that there should be a condition setting working hours and those hours of work on the site should be 7 am – 6 pm weekdays and Saturdays with no work on Sundays and public holidays to provide respite from not just the work on-site but traffic coming to and from and in the vicinity of the site. The construction noise limits are to be included in a stand-alone condition and are to be complied with at all times.

Other

[48] There are several matters included in the condition (and relevant to other management plan conditions) addressed here as this is the first management plan in the suite of conditions we have considered. Equivalent provisions in other management plan conditions need to be addressed as well.

Broadly consistent with CMP submitted with the application

For CMP:

Note: The Team Leader Resource Consents will certify the CMP when they are

satisfied that the CMP is **broadly consistent** with the CMP submitted with the application, that it adequately addresses each of the topics and requirements in the condition above, and that it includes measures to appropriately avoid, remedy or mitigate any adverse construction effects associated with the undertaking of earthworks and building construction throughout the earthworks and construction period. (emphasis added)

Each of the management plan conditions contains a similar note, but with wording specific to the management plan and the effects to be addressed by that plan. Each of the notes requires that the management plan is "broadly consistent" with the corresponding application version of the management plan.

[50] A draft management plan may be outdated. It may not be based on the requirements of the conditions and particularly those substantive conditions added and amended during the hearing and decision making and in line with our Interim Decision and our further directions. In many instances the draft management plans may do very little other than provide a list of (possible) contents for a management plan that is yet to be prepared.

[51] Additionally, what is intended by 'measures to appropriately avoid, remedy or mitigate any adverse construction effects'? Might it give a signal that certification can go beyond the parameters and requirements set in the other conditions?

Certification

[52] The CMP condition reads:

Any proposed amendments to the CMP shall be submitted to the Team Leader Resource Consents for certification, at least 15 working days prior to those amendments being implemented.

Again, each of the management plan conditions contains a similar requirement.

[53] Certification is to be a prerequisite to implementing amendments to any management plan and the condition is to be amended to make that clear. There could be an implication in the way the condition is drafted that implementation could occur in the absence of certification (i.e. on or after the 16th day).

Monitoring, reporting and record keeping

[54] Mr Bain considered that the monitoring, reporting and record keeping requirements similar to that provided in Condition 22 for a Construction Noise and Vibration Management Plan should be added to the CMP (and to Condition 9 Construction Traffic Management Plan).

[55] Summerset's response was there are differences in that there are no specific standards to be measured against for construction management (and construction traffic management). We have already identified the problems with the lack of requirements in conditions on construction management that would inform the procedures to be developed through a construction management plan to ensure compliance with those conditions.

Condition 8

[56] Why does the condition specify the certified CMP is only required to be made available, on request, to any owners or occupiers of the properties listed in Condition 24 Condition Assessment Surveys and Land Stability? Is it not possible that owners and occupiers beyond those listed in Condition 24 for a specific purpose might have a legitimate interest in requesting and receiving the certified CMP?

Construction Traffic

Condition 9

- [57] This condition is for a Construction Traffic Management Plan (CTMP). It specifically refers to conditions to:
 - (d) Parking arrangements for construction staff ... as required by Condition 50
 - (e) Construction access, egress and site circulation ... to meet Conditions 53 and 54.
 - (g) Measures for avoiding any carry of soil or any other material onto public roads to meet Condition 17.

Monitoring, reporting and record keeping

[58] Mr Bain considered that monitoring, reporting and record keeping requirements similar to that provided in Condition 22 for a Construction Noise and Vibration Management Plan should be added.

Summerset's response was there are differences in that there are no specific



standards to be measured against for construction traffic management.

[60] We note that there are requirements in conditions such as Condition 50 Contractors' Parking, requiring contractors' vehicles associated with site earthworks and construction activities to be parked on the site and not the surrounding street network whose practical enforcement, maintenance and supervision needs to be addressed.

Contaminant Management

[61] With the exception of Condition 14 (deposition off-site of contaminated soil to be to a Council approved landfill) all other requirements are part of a Contaminated Soil Management Plan (CSMP).

Condition 12

[62] On contaminated soils, our Interim Decision said:8

Mr Gardiner testified that a detailed site investigation had concluded that risks to environmental and human health from the proposal can be managed with an appropriately developed Contaminated Soils Management Plan (CSMP). A draft Plan was included with the application. Proposed Conditions 12 to 15 address contaminated soil and require a CSMP to be prepared. Condition 12 states that the purpose of the CSMP is to 'manage' any potential effects resulting from the disturbance of any potentially contaminated land on the site. 'Manage' is a neutral word that gives no direction to the outcomes to be achieved. A requirement of the soil management procedures to be specified in the CSMP is that 'all site soils meet the site contaminant standards for high-density residential use'. The conditions should require that outcome (and perhaps others where the standards to be met can be specified) in a new condition before those conditions that relate to the CSMP setting out how that standard is to be achieved for certification by a Council Officer.

... Subject to improved conditions we accept that the risk of adverse effects from disturbing any potential contaminated land on the site can be satisfactorily managed.

[63] The set of conditions submitted by Summerset has not addressed the fundamental point we raised. There is to be a stand alone requirement in a condition that all site soils are to meet the site contaminant standards for high-density residential use. The CSMP will then set out the procedures and approaches to

ensure that these standards are met. Condition 15 will need to be clear that this is a requirement to be covered in the site validation report and not just refer to outcomes in the CSMP.

Erosion, Dust and Sediment Control

[64] On earthworks our Interim Decision said:9

As to earthworks we have a concern that the approach to preventing and mitigating potential adverse effects on neighbours is robust, and is reflected in enforceable conditions, as we refer to elsewhere in our decision.

[65] On sediment runoff the Interim Decision said:10

Mr Gardiner testified that during the earthworks phase most of the site will be cut or filled and areas of bare soil will be exposed to the weather, giving rise to sediment runoff. He said that the Construction Management Plan required by Condition 6 will include erosion and sediment control measures to manage effects within acceptable limits. We require the Applicant and Council (at least) to consider whether the conditions that set those limits are clearly set out elsewhere in the conditions. The role of the Construction Management Plan is not to set the limits but to set out how the limits are to be achieved. (emphasis added)

[66] As to dust management the Interim Decision said:11

As a general principle it is important that the conditions of a consent set out the outcomes required and how these outcomes are to be achieved. Management plans provide a way to identify what steps are to be taken to ensure that clear, certain and enforceable outcomes contained in conditions of consent are achieved. They are not a substitute for conditions locking in the standards that are to be met to ensure environmental effects are kept within an acceptable level. We ask that there be a thorough review of the evidence and the conditions to specify the outcome required and ensure the certainty of that outcome. A dust monitoring programme, the reporting of the results of that programme to neighbours and a requirement to stop work and take remedial action if the outcomes are not being achieved are also important elements to be included in conditions.



Condition 16

[67] Condition 16 reads:

All earthworks shall be undertaken in accordance with the sediment control measures within Greater Wellington Regional Council's erosion and sediment control guidelines.

Summerset's response to the Interim Decision direction that the applicant and the Council consider whether the conditions that set erosion and sediment control limits were set out clearly in the conditions was a note to Condition 16 as follows:

Note: The consent holder has also obtained resource consent from the Greater Wellington Regional Council for the bulk earthworks on the site (GWRC reference WGN190217 granted 21 June 2019). That consent sets out the required sediment control measures to be implemented on the site and these measures have not been duplicated within this consent.

We were provided with a copy of that consent.

[68] In addition Summerset submitted:

As this regional consent sets out the required sediment control measures to be implemented on the site, and as erosion and sediment control is not a matter of discretion in the District Plan for the activity for which consent is sought, we respectfully submit that duplication in the Revised Conditions is unnecessary.

[69] The submission begs the question as to why the condition is necessary at all. We are uncertain what (if any) sediment control might be required around the building work to come. Would that also be dealt with by a Regional consent?

Condition 18

[70] Dust is dealt with by Condition 18. Summerset submitted that its review of Condition 18 has resulted in amendments to identify the outcome sought and how it is to be measured.

[71] The Summerset version now reads:

All earthworks shall be carried out in a way that prevents nuisance dust blowing beyond site boundaries at any time. During earthworks, all necessary action shall be taken to prevent dust generation such as the use of a water cart, limiting the vehicle speed to 10 km an hour, applying water to exposed or



excessively dry surfaces, or applying a coating of geotextile, grass, mulch or other suitable measures that will prevent dust nuisance beyond the site. The consent holder shall ensure that dust management generally complies with the Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions, MfE (2016).

[72] BPS commented that:

(emphasis added)

The conditions proposed are light on enforcement and prevention measures with respect to dust blowing beyond the site boundaries. The site is very windy and exposed to prevailing winds from the north and west – these prevailing winds mean that the existing residential areas on the eastern (Hathaway) and southern (Boulcott) boundaries are particularly vulnerable to dust nuisance. The comments that the BPS has made with respect to the boundary fence are also applicable here since the fence will serve as some form of dust control (at least at lower height levels). With respect to wind impact, even moderately gusty winds of 25-35 km/hr will dry out soil or aggregate and thence disperse dust. The proposed conditions make no mention as to when water carts will be used and how frequently – from the BPS's past experience, one or two cart-loads of sprinkling per hour is insufficient.

There is no reference made as to what other alternative dust controls could be implemented such as erection of hessian fences (such as those found on kiwifruit orchards which are higher but still permit light to permeate through) coupled with sprinkling systems on the boundary. To mention that dust should not traverse over the site boundary but then make no real attempt to offer workable solutions gives BPS members and surrounding residents little comfort that what is proposed will be adequate. One form of dust monitoring that could be implemented would be to erect sticky 'fly-paper' mats at strategic locations just across the boundary (e.g. on neighbouring residential walls) — Such sticky mats are common in clean containment areas in manufacturing plants, and in hospitals, and capture dust/dirt off foot traffic entering into them. If these were in place before construction commenced (including before top-soil stripping), there would at least be a background base comparator on which to assess the degree of dust nuisance post the construction start date.

[73] The response from Summerset was:

The BPS recommended a number of additional dust measures that could be applied in addition to those specified in this condition.

The condition as amended in response to the Court's comments in the interim decision does not prevent additional measures, such as those the BPS has



suggested, being implemented if it transpires that these are required in order to achieve the requirement in the condition that "all earthworks shall be carried out in a way that prevents nuisance dust blowing beyond site boundaries at any time": The CLG will have an opportunity to provide input into the Construction Management Plan in accordance with Condition 62.

[74] The Good Practice Guide for Assessing and Managing Dust, MfE (2016) included by Summerset as part of the condition states:

Management plans can be used to show how an activity will comply with the conditions of resource consent and manage adverse effects.

The Quality Planning website provides guidance on the role of management plans, and states:

Critical actual or potential adverse effects need to be identified, appropriately avoided, remedied or mitigated with conditions before a decision to grant is made and not left to be addressed via a future management plan. Management plans should be limited to non-critical operational processes that lie behind a performance or operational standard.

- [75] It is hard to see how a condition requiring compliance with the Good Practice Guide for Assessing and Managing Dust is clear, reasonable and enforceable (recognised as a requirement in the document, in Section 3.2).
- [76] Is it merely intended that the CMP cover the matters in the Good Practice Guide in Appendix 4: Dust management plans described as outlining the issues that should be included in a management plan designed to address dust? These include key personnel and contact details, a complaints process, methods of mitigation and operating procedures, monitoring, staff training and system review and reporting procedures.
- [77] We refer to our earlier comments on the deficiency of the CMP. We direct Summerset to "go back to the drawing board" and devise conditions that are fit for purpose to ensure that:

All earthworks shall be carried out in a way that prevents nuisance dust blowing beyond site boundaries at any time.



Construction Noise

Condition 19

[78] We have already set out our concern that Condition 19 is not clear on its face as to the noise limits to be met. Those noise limits should not be able to be 'otherwise specified for in the Construction Noise and Vibration Management Plan (CNVMP) specified in Condition 22'. That is to misunderstand the function of management plans and to effectively unlawfully delegate decision-making.

Condition 20

[79] What are the relevant provisions of BS 5228-2:2009 (referred to in the condition)? These are to be at least appended to the consent and available to all so it is clear on its face.

[80] Again this condition should not allow the CNVMP to 'otherwise specify' (and potentially override) vibration limits to be set out within the condition.

Condition 22

- [81] The CNVMP is to include:
 - (f) Community and stakeholder project liaison to implement Conditions 61 and 62
 - (j) Non-compliance reporting and contingency measures to address any non-compliances with Conditions 19 and 20.
- [82] A major concern is that (g) purports to override the noise and vibration standards:

Include specific details relating to methods for control of noise and vibration associated [with] the works, demonstration to a reasonable level in accordance with section 16 RMA 1991 and, as far as is practicable, comply with the recommended upper limits for construction noise specified in New Zealand Standard NZS 6803: 199 "Acoustics – Construction Noise" and upper limits for construction vibration specified in DIN 4150-3:1999 "Structural Vibration – Effects of Vibration on Structures" which meet Conditions 19 and 20.

[83] It also introduces two uncertain elements – 'a reasonable level' for noise and as far as practicable'.

There is also (e):

Specific vibration mitigation measures ... to meet Condition 20.

The note also implies that override may occur.

<u>Note:</u> The Team Leader Resource Consents will certify the CNVMP when they are satisfied that the final CNVMP is broadly consistent with the CNVMP submitted with the application

[85] The adequacy of this document is not something we have addressed but it is not likely to align with our Interim Decision and this decision.

[86] BPS made the following comment:

Construction Noise (19), (20) (22d-i): BPS asks the question: 'How are these conditions, as currently proposed, to be monitored and calibrated with hard data?' Will recorders or data-loggers be set up at selected sites across from the Applicant's site boundaries? If data-loggers are to be used, can they be linked to a website so that residents and council staff can log in and verify that conditions are being met? The BPS submits that if relevant data cannot be recorded, tracked and quantified, then any complaint or observation made will be merely based on anecdote.

[87] These are questions that come up frequently with respect to construction activities. Condition 22 refers to a (non-exclusive) list of matters to be addressed in the CNVMP. Matter (c) is:

The hours of operation, a description of the main stages of work proposed, noise and vibration sources, the equipment to be used and the predicted noise levels at nearby sensitive sites.

While there is:

- (i) Noise and vibration monitoring; and
- (j) Non-compliance reporting and contingency measures to address any noncompliances with Conditions 19 and 20

there is no requirement at minimum for monitoring and reporting to provide validation of whether the noise levels comply with the limits to be set in the conditions.

Condition Assessment Surveys and Land Stability

Condition 24

[88] BPS listed a number of properties it considers should also be subject to condition assessment surveys under Condition 24.

- Under (a), the BPS requests that in addition to the properties already listed, the following also be added: 22, 24, 26, 28A and 30 Hathaway Avenue.
- Under (b), the BPS requests that in addition to the properties already listed, the following also be added: 3a, 3b, 5, 7 and 7/2 Boulcott Street.

[89] BPS requested the addition of these further properties because they are on subdivided sites and comprise dwellings immediately behind the previously documented sites. BPS contended that they are sufficiently close to the site boundary edges to experience the same vibrational effects of construction as the immediately adjacent properties and that baseline monitoring should therefore be expanded to include these properties.

[90] Summerset responded that there was no evidential basis for this contention. It noted that the properties presently in the condition were identified on the advice of Council's expert Mr M Hunt that building condition surveys should be carried out for dwellings or school buildings located in whole or in part within 20 metres of the site boundary. Mr B Wood (Summerset's expert witness on this topic) agreed with Mr Hunt's views.

[91] In the absence of other evidence we accept Summerset's response.

Condition 26

[92] Mr Bain requested that, based on experience with dust on neighbouring properties from previous developments in the area (stop bank works, golf course redevelopment and golf club new building) there should be a condition that, on an annual basis, the consent holder is to pay for the cleaning of properties if their condition worsens during construction for that year i.e. due to the consent holder breaching conditions 16-18.



Summerset does not specifically respond to that point.

[94] We do not consider that it is appropriate to impose such a condition which seems to contain an acceptance that there will be breaches of the dust conditions. There appear to us to be difficulties in policing such a condition on an annual basis.

Stormwater

Condition 31A

[95] This condition allows the Council to agree that there be no requirement for an operation manual for the pump station to be prepared and submitted and then certified by the Council and Wellington Water prior to the commencement of the operation of the retirement village.

[96] Following mediation, these amendments were agreed between Mr A Aburn and Ms G Sweetman and were made in the supplementary planning JWS dated 12 June 2019. It is not clear why there is a need for such a condition in the first place as it is assumed the Council and Wellington Water have sufficient powers and requirements under other legislation to prevent the retirement village building and operating a pump station that is not fit for purpose.

Landscaping

[97] Our Interim Decision said:12

There are conditions proposed for landscaping of the site ... These include addressing the tree species to be used along the residential and school boundaries of the site and how these species will minimise adverse effects that may arise from vegetation shading dwellings and yards. Several submissions ... expressed a concern about this issue and so it is desirable that the design and conditions deal with it adequately.

The adequacy of the design and conditions for landscaping of the site is to be further considered to address this concern.

[98] Summerset responded that Messrs D Kamo and B Coombs considered this matter and agreed it would be appropriate to identify trees to be planted along this boundary that had a mature height of no more than seven metres. The landscape plan has been revised accordingly. Ms J Williams, the landscape witness for the

Council, was satisfied with the revised landscaping proposals and associated conditions.

Condition 33

[99] We approve the revision of the landscape plan 4735/07 Rev 4 dated 9/4/20 and its reference in Conditions 33 and 36 and new Condition 36A. However, we note that it is described in the addition to Condition 1 as 'Landscape Concept Plan 07, prepared by Kamo Marsh dated 9 April 2020'.

[100] There is specific detail in the landscape plan submitted with the application and its revision, and the matters included in (a) and (b) referenced in this condition. That detail, along with the requirements of amended Conditions 36 and new Condition 36A, appear to provide sufficient parameters and certainty as to what the updated landscape planting and management plan based on those documents is to contain and be certified against.

[101] However, the Note that refers to certifying the Landscape Planting and Management Plan (LPMP) when satisfied that the final LPMP is broadly consistent with the LPMP submitted with the application is not correct given the revised landscape concept plan. Is this note necessary?

Condition 36A

[102] We approve the new Condition 36A, added on the advice of Messrs Kamo and Coombs, to require the consent holder to maintain all specimen trees identified on this boundary so that they do not grow taller than seven metres.

Wind monitoring and treatment

Condition 37

[103] Mr Bain requested that as it will take many years before the retirement village is fully operational wind monitoring reporting should be linked to the completion of each stage of the development as is required under landscaping Condition 34.

[104] Summerset responded that while there may be internal wind effects generated by the various stages of development it would not be appropriate to respond to these with additional planting, screening or fencing prior to completion of

the village as such mitigation may not be necessary long term and could preclude the completion of the village. We concur.

Operational Noise

Condition 40

[105] We refer to the BPS comments under Construction Noise above. We ask how operational noise will be monitored (e.g. data-loggers) and how can BPS members and residents have access to this monitoring to receive assurance that the standards are being met?

[106] Condition 40 requires a Mechanical Services Design Report (MSDR). The MSDR is to demonstrate that mechanical plant does not exceed noise limits (at or within the boundary of any neighbouring site zoned residential activity area) of 50dBA L₁₀ between 7am-10pm and 40dBA L₁₀ otherwise. It seems reasonable that the MSDR be provided to the Community Liaison Group. However, we see a need for the condition to address what is required in the way of validation post-construction.

Operational Traffic

Conditions 48 and 49

[107] BPS asks how the conditions (restriction on hours for entering the site for service deliveries except for emergencies and 'as far as practicable' staff or service vehicle traffic activity during school drop-off and pick-up times) are going to be monitored to ensure that they are not merely aspirational.

[108] How are these conditions to be monitored? What does 'as far as practicable' mean in this context?

Contractors' Parking

Condition 50

[109] Our Interim Decision said:13

A question from the residents was on the impact of traffic from the carparking area in Hathaway Avenue and whether it is likely to overflow onto the street. ...



Interim Decision at [69].

We were advised that if construction parking over and above what can be provided on the old golf club parking area is needed then it would be absorbed into the body of the development site itself. That will be monitored and if it is not working in practice there is provision for action to be taken. We seek clarification of how the conditions will ensure that this occurs.

[110] Summerset's response in revised Condition 50 was to add <u>at all times</u> so that it reads:

Contractors' Parking

50. All contractors' vehicles associated with site earthworks and construction activities shall be parked on site <u>at all times</u> and not on the surrounding street network.

(emphasis added)

<u>Note</u>: for the purpose of this condition 'on site' includes the hard-surfaced car park at 10, 12 and 14 Hathaway Avenue.

[111] We accept that any parking not in accordance with that condition will be a breach of the resource consent and that residents and the Council will have the usual enforcement mechanisms available. The question asked by residents – how is that condition to be monitored and enforced by the consent holder (and the Council) – remains unanswered.

Staff and Visitor Parking

Condition 51

[112] The On-site Traffic and Parking Management Plan (OTPMP) recognises that the function of the management plan is to identify:

(d) Measures to ensure a 15km/hr speed limit is adhered to ... to meet Condition 41.

Site Access During Earthworks and Construction

Condition 54

[113] Condition 54 specifies hours during school drop-off and pick-up times to 'avoid as far as practicable any other earthworks and construction vehicle traffic activity in Boulcott Street'.

[114] BPS asks how the conditions proposed in this section are going to be monitored to ensure that they are not merely aspirational. How is this going to be achieved? That question remains unanswered. Who is to assess whether avoidance has been achieved as far as practicable and how is that to be assessed?

Boulcott Street/High Street Intersection

[115] Our Interim Decision required what is now Condition 54A on the Boulcott Street/High Street Intersection traffic signals to specify the requirements of the level to be achieved and against which certification is to occur.¹⁴ That has been done satisfactorily.

Military Road Entrance - Pedestrian Access

Condition 56

[116] Mr Bain commented that at this stage there are no designs for the Military Road entrance which involves creating a difficult 'blind' T-intersection. Given the complexity of this aspect he requested sign-off by the Council's Traffic Asset Manager should be a minimum requirement. Given the potential impact on neighbouring properties he also requested sign-off by adjacent property owners should also be required – 2 Hathaway plus 34 and 34A Military Road.

[117] We accept Summerset's point that it is not appropriate to require third party approval of adjacent land owners before it could be finalised. We accept as adequate a reference to the Team Leader Resource Consents' ability to seek advice from the Council's Traffic Asset Manager when reviewing the detailed design of the Military Road entrance, included by Summerset in response to Mr Bain's concern.

Community Liaison Group

[118] We note the additions to conditions 61 and 62 and new conditions 62A and 62B that give the Community Liaison Group:

- A role and the opportunity to raise any issues in respect of the proposed planting and its growth;
- Information on construction noise readings (although BPS had requested this be publicly available);



Interim Decision at [63].

 All members to be given 48 hours' notice before works commence (BPS and the School had requested that notice).

[119] BPS said it would be happy to contribute representatives as part of this group and appreciated the opportunity for further input. The School said that as an integral part of the local community, the School would appreciate the opportunity to be part of the CLG.

[120] Mr Bain considered that while the establishment of a CLG is positive, it is not clear how the CLG will operate nor what its input will add. He contended that it should be the role of the consent holder to 'provide communication' to all 'organisations and interested parties' and that responsibility should not be delegated to two volunteer resident representatives. From a practical standpoint he had questions about its formation, process to address comments raised by the CLG i.e. requests to modify plans, what if members have differing views and how it will change over the many years of development.

[121] We do not see the need to add to this condition. We note that the CLG is to have an independent facilitator and has a broad brief. We expect that it will evolve over its lifetime which extends to 12 months after the occupation of all of the retirement village.

[122] The Court has had some experience with the operation of community liaison groups as a conduit for information and feedback between consent holders and interested parties. They have the obvious advantage of providing a central communication point between these interests rather than trying to communicate between multiple persons and parties. We are aware of some that have worked well and others that have become dysfunctional. How any particular group works depends on a number of factors beyond the ability of the Court to control such as the degree of enthusiasm/activism of the groups, the ability of their members and the extent of co-operation by consent holders. Ultimately, the best protection that interested parties can have is a set of coherent, enforceable conditions and a local authority which rigorously monitors adherence with those conditions.



Review condition

Traffic and Parking

[123] Our interim decision questioned what and how review conditions would work in practice to deal with any situation that arises where predictions are not in line with the reality of the development construction and operation. We also required further consideration of what monitoring would be required to compare traffic predictions with what occurs in practice and how a review condition could result in action to deal with unanticipated adverse effects from the additional traffic from the retirement village.

[124] The Summerset response is:

Mr Georgeson ... and Ms Fraser ... have confirmed that they are comfortable with the revised review condition and do not see any need for conditions to require traffic monitoring. It is Mr Georgeson's opinion that additional monitoring is not warranted given the expert consensus reached on traffic numbers and mitigation measures and noting that the village traffic will be minimal in comparison with the observed traffic intensities and variations of the school and golf club.

Given the expert consensus on this matter ... the review condition as drafted by the planners is appropriate to address any potential adverse effects.

[125] Review condition (a) deals with any adverse effect that may arise and which it is most appropriate to deal with at a later stage and while not limiting (viii) specifically refers to traffic generation. There is also a general (b) to deal with any unanticipated adverse effect which it is appropriate to deal with at a later stage. We accept Summerset's response in that regard.

Monitoring of conditions

[126] BPS questioned how conditions 40, 48, 49 and 54 will be monitored. Summerset's response was that local authorities are required by s 35 RMA to monitor the exercise of resource consents and that the Council's standard monitoring conditions for similar scaled projects, used as a drafting basis, are appropriate. We accept that as a general approach except to the extent that we have raised specific queries in preceding paragraphs of this decision.

Interim Decision at [71].

Letter of 19 June 2020

[127] The Court received a letter dated 19 June 2020 from Mr I McLauchlan (a s 274 party) complaining about aspects of the Interim Decision. It is not the function of this decision to debate those matters. Any parties dissatisfied with our decision have rights of appeal to the High Court and should take competent legal advice regarding that, including advice as to the issue of admissibility of evidence which was a feature of Mr McLauchlan's letter.

Directions

[128] Summerset is to review the proposed conditions generally having regard to the queries raised in this decision with a view to achieving a clear, certain and enforceable set of conditions. It is to respond as soon as it is able and to circulate its response to all other parties.

[129] The Council shall have a period of 10 working days after receipt of Summerset's response to review the proposed conditions in order to satisfy itself as to the clarity, certainty and practicability of their monitoring and enforcement and to file and serve any comments it may wish to make regarding those matters. The Court may determine the matter on the papers thereafter.



BEFORE THE ENVIRONMENT COURT

Decision No. [2015] NZEnvC 🔍

IN THE MATTER

of an appeal under Sections 120 and 174

of the Resource Management Act 1991

(the Act)

BETWEEN

SUSTAINABLE MATATĀ

(ENV-2014-AKL-000103)

(ENV-2014-AKL-000109)

Appellant

AND

BAY OF PLENTY REGIONAL

COUNCIL

WHAKATĀNE DISTRICT COUNCIL

Respondents

AND

WHAKATÄNE DISTRICT COUNCIL

Applicant

Hearing at:

Tauranga on 27 - 30 January 2015; 9 - 10 February 2015;

13 February 2015 and 16-19 February 2015

Site visit 11 February 2015

Court:

Environment Judge JA Smith - Chair

Alternate Environment Judge CL Fox

Environment Commissioner JA Hodges

Environment Commissioner ACE Leijnen

Appearances:

VJ Hamm and BL Bailey for Whakatāne District Council as Applicant (the Applicant)

AMB Green and BP Milo for Whakatāne District Council (the District Consent Authority)

RC Zame and RM Boyte for the Bay of Plenty Regional Council (the Regional Council)

Mr N Harris for Sustainable Matatā Incorporated (the Residents' Group)

RB Enright and RJ Haazen for Matatā Lot 6A Papakainga Komiti Incorporated (the Komiti)

D Potter for Ngāti Rangitihi Raupatu Trust Incorporated (the Raupatu Trust)

Date of Decision:

1 2 MAY 2015

DECISION OF THE ENVIRONMENT COURT

- A. The resource consent for discharge to air at Lot 6A is cancelled. The Appeal is allowed to this extent.
- B. The three designations relating to Lot 6A for a Wastewater Treatment Plant, Buffer zone and access are cancelled. The Appeal is allowed to that extent.
- C. The application for designation and discharge consents to air and water relating to the Land Application Field are adjourned to allow the Applicant to consider whether it wishes to pursue consent on appropriate conditions. The Applicant will also need to conclude whether applications for other consents for the Land Application Field have been applied and are being pursued. The applicant is to file a memorandum within twenty (20) working days of the date of this Decision.
- D. The balance of the proceedings are adjourned for further directions. Costs are reserved.



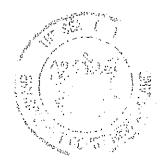
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REASONS FOR DECISION

Introduction

- [1] For more than a decade the Whakatāne District Council (the District Council) has grappled with whether to reticulate wastewater at Matatā. The debris flow of 2005 interrupted that consideration. From 2008 various further investigations and reports have been prepared.
- [2] In 2011 a funding line from the Ministry of Health's Sanitary Works Subsidy Scheme approved a provisional sum of some \$6.7 million, with a later funding line of some \$1.88 million from the Regional Council now shown in its 2014-2015 Annual Plan.
- [3] There is funding pressure on the District Council, given that the Works Subsidy Scheme has to be confirmed by 30 June 2015 (unless a further extension is granted), and no request had been made for an extension from the Regional Council by the conclusion of the hearing in February 2015.
- [4] Although funding was committed in 2011, the District Council in its capacity as Applicant (the Applicant) did not make application for designation and resource consent until November 2013. The District Council then appointed Independent Commissioners, and a hearing was held 11 and 12 June 2014, with a decision issuing on 16 June 2014, and appeals being filed during July 2014.
- [5] Notices of interest were filed through August 2014, with the Court conducting interlocutory steps, commencing a three week hearing on 27 January 2015. The matter has been addressed promptly by the Council appointed commissioners and by the Court, particularly given the Christmas break. In fact, the Applicant and s274 parties felt the Applicant was too precipitous.
- [6] Although no application for priority was pursued, the Court convened its first pre-hearing conference in August and set a timetable by the end of September for hearing in January. The delay in making application, and then moving so soon to hearings on appeal, may have affected the preparation of the Applicant's case.

Overview

- [7] The proposal is encapsulated in two "consenting" regimes:
 - (a) a Wastewater Treatment Plant site (the Treatment Plant), proposed to be situated on land just east of Matatā on State Highway 2 known as Lot 6A, Matatā (Lot 6A);
 - (b) a land application field (the LAF) to be sited on District Council reserve on the dune formation several kilometres east of the Tarawera Cut, the current outlet of the Tarawera River.
- [8] As we understand the position, the installation of the units on individual properties (grinder units) and the piping work within the public reserve are permitted activities.
- [9] Although presented as a simple infrastructural development, significant issues became evident from reading the evidence. Much of the evidence was repeated or did not address the substantive issues in this case, as we will examine in due course.
- [10] At Lot 6A the Applicant has resolved to proceed by way of three separate designations in respect of:
 - (a) the wastewater Treatment Plant itself;
 - (b) a 20m buffer surrounding that; and
 - (c) the access road across Lot 6A.
- [11] The construction of the plant itself on the Lot 6A land is covered by the designation.
- [12] The Regional consents associated with Lot 6A are unclear, but seem to be for a discharge of odour consent only. In addition we were told consents will be required for:
 - (a) earthworks associated with the construction of the plant;
 - (b) discharge of stormwater with sediment.

- [13] There was no evidence of any intention to discharge wastewater to land at Lot 6A, or that any vegetation clearance is required given the site is in pastoral grasses. There is a designation sought for the LAF covering some four hectares (4 ha) on the District Council dune reserve, with a buffer area beyond that which does not require a consent, nor covered by the designation.
- [14] Regional consents relevant to the LAF appear to be:
 - (a) the discharge of wastewater to land in circumstances where it may enter water;
 - (b) discharge of odour for the pump station;
 - (c) land use consent for earthworks consent sought for up to 5500m³,
 - (d) we do not understand how such a resource consent is required at the LAF.

 This may relate to the access road and Pumphouse, given they are in the coastal environment, but this was not clear; and
 - (e) temporary discharge of stormwater containing sediment (again very limited evidence was received); and
- [15] In addition we were told consent for disturbance of land and soil resulting from vegetation clearance would be required, although an application was yet to be made.
- [16] For reasons that will become clear through the course of this decision, the conditions of consent do not clearly identify which consents relate to which site, or the extent to which certain activities, such as earthworks and sediment discharge, are authorised as a result of the designation itself.
- [17] The granted Regional Council resource consents on appeal are global, and relate to both sites. It is unclear as to the relationship between the applications, the evidence to this Court and the consents under appeal. For example, we heard no evidence of odour in relation to the LAF pump building. We attach as **Annexure A** consent 67708, to show the significant difficulties which arise.
- [18] Given the global nature of the Regional Council consents, it is curious that the Applicant has decided to break down its designation into four components, three of which relate to Lot 6A and one authorising the LAF and its associated pumping works on the Council reserve.

Core issues

Lot 6A

- [19] In relation to Lot 6A, the issues could be summarised as:
 - (a) the designation of Lot 6A and the power of Trustees to enter into an agreement with the Council;
 - (b) whether there was a proper consideration of alternative sites for the Treatment Plant; and
 - (c) the impact of potential odour on any future Papakainga on Lot 6A or Lot 7A.
- [20] We outline each in turn briefly.

The designation of Lot 6A

- [21] In respect of Lot 6A, we accept that at the time the designation application was made, occupation rights had not been secured from the Trustees. We acknowledge that the Council did not hold any interest in land at the time of notification of the designation. Accordingly, the designation process was appropriate. However, in considering the requirement for consideration of alternatives under s 71(1) of the Act, the Applicant relies on the fact that it now holds an interest in the land, and thus the Court is not required to consider alternatives.
- We will deal with this issue in more detail when we reach our consideration of section 171(1). Suffice it to say the use of a designation process in respect of Māori land was the subject of extensive criticism from Mr Enright for the Komiti. In this particular regard, Mr Enright referred to the Privy Council decision *McGuire v Hastings District Council*. Although this was a case relating to the powers of the Māori Land Court to issue injunctions in relation to a proposed designation on Māori land, the Privy Council did go on to discuss the RMA, in particular regarding the question of designations. In particular, the Privy Council noted at paragraph [21]:

The Act has a single broad purpose. Nonetheless, in achieving it, all the authorities concerned are bound by certain requirements and these include particular sensitivity to Māori issues. By s6, in achieving the purpose of the Act, all persons exercising functions and powers under it, in relation to managing the use, development and protection of natural and physical resources, shall recognise and provide for various matters of

¹ [2001] NZRMA 557, paragraph [21]

national importance, including "e[t] the relationship of Māori and their culture and traditions with their ancestral lands, water sites, waahi tapu (sacred places) and other taonga [treasures]." By s7 particular regard is to be had of a list of environmental factors, beginning with "Kaitiakitanga [a defined term which may be summarised as guardianship of resources by the Māori people of the area]." By s8 the principles of the Treaty of Waitangi are to be taken into account. These are strong directions, to be borne in mind at every stage of the planning process. The Treaty of Waitangi guaranteed Māori the exclusive and undisturbed possession of their lands and estates, forests, fisheries and other properties which they While, as already mentioned, this cannot exclude desired to retain. compulsory acquisition (with proper compensation) for necessary public purposes. It and the other statutory provisions quoted do mean that special regard to Māori interests and values is required in such a policy decisions as determining the routes of roads. Thus, for instance, their Lordships think that if an alternative route not significantly affecting Māori land, which the owners desire to retain, were reasonably acceptable, even if not ideal, it would accord with the spirit of the legislation to prefer that route. So, too, if there were no pressing need for a new route to link with the motorway because other access was reasonably available.

[emphasis added]

[23] Although all counsel acknowledged that this dicta was still binding on this Court, there was disagreement as to its application in this case, and in particular whether it amounted to the statement from the decision Observation at page 558:

Accordingly, where Māori land was proposed to be significantly affected by a proposed designation, then it would "accord with the spirit of the legislation" for the requiring authority to prefer alternative routes, even if those alternatives were not ideal. The Board also suggested that the need for the project would have to be carefully established in such circumstances as well (see paragraph [21]).

This then moved into a significant attack by the Komiti on the Applicant's selection method that had been utilised to identify Lot 6A. There is a significant disagreement between a number of the beneficial owners of Lot 6A and the Trustees who have the legal responsibility for administering the property (granting leases and the like). Though a collateral attack had been mounted in the Māori Land Court, the Trustees were confirmed as empowered to enter into the lease. This matter has been settled, and for current purposes it was acknowledged that there was a valid lease agreement in place by the time of the hearing.

Consideration of alternative sites for the Treatment Plant

- [25] The major focus of the Komiti was on the site selection method for Lot 6A. We discuss this matter at considerable length in due course.
- [26] In brief, Mr Enright argued that the selection of this Māori land next to a Māori reservation required particular attention to alternatives.
- [27] He attacked the site selection method for the Treatment Plant, describing it as arbitrary and a failure to consider other sites reasonably available. These issues of alternatives and reasonableness were intertwined with historic grievances and Treaty of Waitangi issues. Mr Enright argued that the selection of Lot 6A breached both the Treaty and the Designation objectives, because it was unreasonable, arbitrary and failed to take account of information on Lot 6A and its purposes.

Odour effects

- [28] Finally the Komiti, supported by Mr Harris, argued the potential odour effects of the activity would prevent construction of Papakainga on Lot 6A and Lot 7A in the future, and that this:
 - (a) prevented the land being used for its clear purpose (intent), and
 - (b) was also a breach of the Treaty principles, and
 - (c) adversely affected cultural relationships of Māori beneficial owners with this land.

We deal with these issues in detail later in this decision.

The LAF

- [29] The LAF has a different range of issues. No witness suggested that there were any odour or visual issues that could not be addressed by conditions. However, issues raised included:
 - (a) given the application of the wastewater to the sand dunes, were the levels of contaminants which reach the nearby farm drains and waterways, acceptable?
 - (b) cultural impacts.

Again, we outline these briefly.

Wastewater reaching surface water

- [30] There is common evidence that discharged wastewater will percolate through the ground and enter groundwater. There was some dispute as to whether some of this would reach the ocean, but there seems to be an acceptance by the majority (if not all) of the wastewater experts that wastewater would travel via groundwater or the Vados zone and enter the farm drains to the south of the LAF.
- [31] As the case developed, it became clear that there was some misunderstandings, even by the Applicant, as to the way in which this area functioned. By the end of the hearing the Regional Council had clarified the position as follows:
 - (a) historically the Old Rangitaiki Channel (the ORC) (referred to also as the Orini Stream by a number of parties) is either part of or within the bed of the Old Rangitaiki River, which was cut off during land drainage works in the early 1900s. It formerly connected the Rangitaiki and Tarawera rivers, but is now separated from the Rangitaiki, and drains to the Tarawera River;
 - (b) the ORC is part of the Rangitaiki drainage system established by statutes in the early 1900s and subsequently protected by transitional provisions in the RMA. This essentially makes the flow of the farm drains (and arguably their pumping) to the ORC a permitted activity. The pumping to surface water is also a permitted activity under Rule 22 of the Bay of Plenty Regional Water and Land Plan (2008);
 - (c) over the decades, the ground peat beds adjacent to the water ways have consolidated. This has lowered the general ground level of the paddocks surrounding the drainage channels, of which the ORC is one. This has essentially made the ORC perched above many farm drains;
 - (d) This situation was exacerbated by the 1997 Edgecumbe earthquake;
 - (e) for current purposes, the ORC water level is higher than that in drains adjacent to the LAF (Robinson's Farm) and water has to be pumped from the drains into the ORC at the position adjacent to the LAF known as SW4;

- (f) the ORC discharges via a controlled structure with a flap gate, meaning water only exits from that channel on the lowering tide, and is closed by the incoming tide. There is an exception to this in that there is a pump available for emergencies. It avoids the ordinary tide action and pumps water directly into the Tarawera River;
- (g) the outlet of the ORC into the Tarawera River is within the Coastal Marine Area (CMA), and the River outlet is several hundred metres from the outlet itself. Bird colonies and inanga hatchery areas are adjacent;
- (h) the Tarawera River itself is subject to significant issues, including wastewater contamination from the wood and paper mills at Edgecumbe/ Kawerau. This has been the subject of a recent appeal and decision, and conditions of consent imposed seeks to reduce the levels of contaminant into that river. This has also led to the creation of the Tarawera Catchment Plan, which does not apply to the CMA area (where the outlet of the ORC is), but the ORC is identified on the plans as the old Rangitaiki Channel and part of the catchment area, as are other farm drains.
- [32] The key issue in relation to the LAF is the evidence of the Applicant that, in a worst-case-scenario, there will be no attenuation of nitrogen (N) and phosphorus (P) before the wastewater surfaces in the farm drains, and that there could be a significant increase of both N and P being pumped from the farm drains into the ORC and thus entering the Tarawera River.
- [33] The evidence for the Applicant is that there would be no ecological change within the ORC, and the impact on the Tarawera River (given the levels of dilution) would make the addition negligible within a very small mixing area (which was undefined).
- [34] To add further complication to the situation, extensive restoration work in and around the LAF was intended, with pest treatment. The benefits of this, however, were not quantified and it was not clear from the Applicant's case that they were intending to look at some form of offset for the ecological benefits from this work against the water quality impacts in the ORC.

This surface contamination brings into play both the New Zealand Coastal Policy Statement (NZCPS) provisions in relation to the CMA, and the provisions of the new 2014 National Policy Statement for Freshwater Management (Freshwater Policy Statement) and the Tarawera Catchment Plan. Furthermore, that late in the hearing the Court identified that one of the provisions of the Tarawera Catchment Plan may prohibit the discharge of increased levels of contaminants from human waste to the ORC.

Cultural impacts

[36] The location of the LAF gives rise to a number of cultural issues beyond potential wastewater contamination. Settlement lands have been revested nearby, including nohonga (fishing sites) near the Tarawera River mouth. The Raupatu Trust was concerned at the potential for disturbance of Māori sites or koiwi. These matters are dealt with in some detail later in this decision.

S290A - the Commissioners' Decision

- [37] The Court must have regard to the Commissioners' decision. We have found that decision unhelpful in addressing the many complex issues in this case for the following reasons:
 - (a) the submission of the Raupatu Trust was disregarded, with no adequate reasons given. The Commissioners seem to have been under the misapprehension that only oral evidence could be considered;
 - (b) the decision was prior to the 2014 Freshwater Policy Statement;
 - (c) there is no analysis of issues or reasoning to justify the decision. For example, in the 12-page decision, the analysis of issues suggests

by the conclusion of the hearing there were relatively few matters of significance that remained in contention.

This overlooks the consent authority's obligation to give reasons for its decision under the Act (\$171(3) for designations);

(d) some conclusions as to the Applicant's case before the Council's Independent Commissioners were different from the Applicant's evidence before us. For example, the Independent Commissioner's decision states:

The water quality and in-stream ecology of the Orini Stream (and subsequently the lower Tarawera River) is unlikely to be affected.



The evidence before us was that there would be a degrading of water quality in the ORC. We accept that the evidence might have been the same before the Commissioners, but subject to weighing given their conclusion that the adverse effects were no more than minor;

- (e) many statements are made that requirements are met without any reason provided for such statements.
- [38] The Commissioners' decision is heavily reliant on the s 42A report which was not made available to the Court. This does not assist us understanding what applications the Independent Commissioners thought they had before them. The decision is jointly that of the Regional Council and the District Council through a panel of independent hearing commissioners. It is one decision pertaining to all four of the NOR and the resource consent applications. It purports to relate to 5 regional resource consent applications, although it would appear four resource consents were actually applied for.
- [39] The decision does not set out the actual NOR or Resource Consent applications. The Regional Council has combined the applications received by it under one reference number (67708) a copy of which is annexed to this decision as Annexure A. The District Consent Authority has lumped the NORs under one reference number (DS-2013-8212-00). While the Wastewater Treatment System is described in the decision (reference paragraph [2]), this does not set out the matters requiring consent or the relevant status of the various components. In short one cannot see from the decision what the applications before the hearing panel were.
- [40] The conditions of consent for regional matters set out their purpose as:

Purpose

- For the purpose of discharging treated wastewater (TWW) by way of subsurface irrigation for a wastewater Treatment Plant (Treatment Plant)) to the land application field,
- 2. For the purpose of discharging contaminants to air from the Treatment Plant and Land Application Field,
- 3. For the purpose of authorising earthworks associated with the construction of the land application field.
- [41] There is confusion among the members of this Court as to whether this constitutes the consents granted, given the statement in the decision at 11.1 of the Commissioners' decision:

We therefore grant the resource consent applications sought by the Whakatāne District Council for the Matatā wastewater treatment system subject to the imposition of the conditions set out in Appendix 2.

- [42] This approach has made its way through to the granting of the consents, such that there is one determination pertaining to the NORs (paragraph 11.2) and one determination relating to all of the other resource consents (parall.1). One can then understand how the Independent Commissioners came to a suite of conditions that traverse the various applications. There are instances of uncertainty as to which consent or condition relates to which consent, and whether one is connected to another. The nature of the activities allowed by the resource consents appear in the conditions pertaining to those applications which sets out three purposes. These do not encompass the stormwater discharge consent that was applied for as an addendum (Tab 5 Vol One Common Bundle). The decision refers to a total of five resource consents. There is only evidence of four being applied for.
- [43] On one view the consents are void for uncertainty given the applications are vague in the extreme.
- [44] Taking the view that a decision cannot grant more than that which has been applied for, the outstanding consents mean that in reality the project cannot be implemented until important pieces of the project are resolved, namely around earthworks, vegetation clearance consents and stormwater management. The issue for the Court is whether these consents are important to understanding the effects of what is proposed. Should they have been considered together? What are the cumulative effects? Are we able to understand the proposal and its effects without them?

Flexibility in applications

- [45] A fundamental issue which arises in this case is a desire on the part of the Applicant for maximum flexibility. This is not uncommon; many cases before the Court are prepared on the basis that the final design is not known. In this case there is a desire to use a design-build-operate system, and thus retain maximum flexibility for the successful tenderer.
- [46] In many cases there are other contingencies that may lead to variations in the design. The designation process itself recognises this need for flexibility, and utilises the concept of Outline Plans. Nevertheless, the Act recognises that effects which are identified can be dealt with as part of the designation process, and in

general consents require sufficient details for the Court to accurately be able to understand the nature and scale of effects created.

[47] In recent years there has been a tendency of consultants to park significant issues utilising the devices of management plans and generalised conditions to address effects. The Court has repeatedly noted its concern that it must, in terms of both designations and resource consents, be able to understand both the scale and significance of the various effects. Generalised conditions and an outline Management Plan often do not achieve this outcome.

[48] In this particular case the Applicant has suggested that odour can be addressed by a simple condition that there is no objectionable odour beyond the boundary, supported by an Odour Management Plan. As we will discuss, the difficulty is that there was no design, or possible design, suggested to us that could achieve this, and the exemplar that was given to us of the Maketū Wastewater Treatment Plant demonstrated clearly the contrary position at the time of our site visit when there was objectionable odour beyond the boundary observed.

[49] It is also necessary to point out that the Court has wide experience with these type of developments, including *Puke Coal v Waikato RC*,² and one of its Commissioners is a very experienced wastewater engineer. Evidence in answer to cross-examination and questions by the Court of the relevant odour experts confirmed the Court's concerns that best practice would involve a separate buffer distance of between 100-160m. In the absence of a full and proper design, the concerns of the Court become obvious if there is residential housing intended. In this regard, the Court then turned to whether or not the use of this land for Papakainga can appropriately be taken into account.

[50] The other critical issue for the purposes of this decision is the intent to allow the Nitrogen (N) and Phosphorus (P) contaminants from the treated wastewater to reach surface water with minimal attenuation after discharge. Again, the evidence from the experts is that significant attenuation could be achieved by treating surface water areas, either by special planting, riparian planting or otherwise, turning the area into a wetland or destocking it. Again, the argument of the experts then turned not upon best design or best practice, but rather whether or not an increase in contaminants to the ORC was an adverse effect. There was a conflation of the issues of water quality with ecological effect.

² [2014] NZEnvC 223

- [51] Another example is the question of vegetation clearance. That could only be relevant to the LAF given Lot 6A is in pastoral grass. It is not mentioned in the regional consents, or in the conditions beyond:
 - 58. During construction of the Land Application Field the consent holder shall:
 - (a) Ensure that no stripping of grass sward or topsoil is to occur on the land application field.
- [52] Yet the Applicant's Assessment of Environmental Effects (AEE) refers to vegetation clearance required (page vii, page 21). However, there is no application for consent or consent granted, and we have no jurisdiction to grant such consent on this appeal. Accordingly, it appears such a consent would be required prior to works commencing.
- [53] The Court must confine its consideration to the matters that have been applied for. There is scope for the Court to make a correction where a status identification has been made in error, but it can't expand the scope of the applications.
- [54] In applying for resource consents and designations, the Applicant has referred to relevant parts of the AEE filed contemporaneously. However, these are large complex chapters and do not always deal with the issues fully. In some cases the relevant chapter does not provide the information sought on the Council application form. One must derive the parameters of the Application from the detail of the AEE. For instance:
 - (a) Maximum discharge of wastewater at the LAF is in a Table at Section 5 of the AEE at 605m³. Is that a limit? (ie a condition as to maximum discharge);
 - (b) Buildings are described on Lot 6A as being a maximum of 3.5m in height. The height for permitted activities is 7m. Is the height limit in the AEE a condition?
 - (c) The AEE shows bunds within the designation for the Treatment Plant.

 There is no bunding described for the Buffer zone NOR. Yet evidence to the Court suggested bunding within the Buffer zone.
 - (d) The bunding is described in the AEE as containment for spills. Yet the conditions of consent has a section headed Wastewater Treatment Plant/Environmental Buffer (Condition 21(c) could apply to both), thus permitting bunding in the Buffer area.

- (e) The AEE limits potential odour discharge to the Pumphouse at the LAF, whereas consent conditions grant an odour discharge consent for the LAF. There was no suggestion of odour elsewhere on the LAF so there may be a simple error.
- [55] The Conditions for each application group (ie NOR and resource consents) are encapsulated in the one document for each group. The group then segregates activities, giving scope for anomalies of the type we have discussed. Although we had originally intended to address the conditions of consent in a separate annexure, the redrafting required is simply too onerous for the Court if we are to deliver a timely decision.
- [56] Overall the Applications and consent conditions are ambiguous, and would be difficult to enforce. The Independent Commissioner decision relies on the AEE and consent conditions, and as a result is unclear and potentially ultra vires in some respects. Considerable work would be required to generate an appropriate and enforceable set of consent and NOR conditions if consents are to be granted.
- [57] Overall, this reinforces a fundamental concern of a lack of information as to the intentions of the Applicant and the effect of the applications. Furthermore the Independent Commissioners' decision is brief in the explanation of issues or reasons for the consented conditions imposed.

Application preparation

- [58] We cannot help wonder if this case would have benefitted from mediation. We note the refusal of the Applicant to engage in such mediation. More careful thought should have been given to the issues in front of the Environment Court. These fundamental failures have made this case extremely complex. Whilst we recognise that the process before this Court is iterative there are limits to the extent to which this Court can or should be required to remedy a situation of the Applicant's own creation. Mr Enright submitted the Court should be reluctant to repair major errors and omissions in the Applicant's case.
- [59] Many of the issues are not assisted by the way in which the case has been presented to the Court, or the draft conditions of consent prepared. We have found a mis-match between the application for consents and the consents granted. The heavy reference back to AEEs in the original application has made it difficult for the Court

to identify what matters have been modified by evidence before the Court, and what matters may remain at large although not identified by any other party. Examples of matters that weren't addressed in any evidence before the Court include:

- (a) the water bore on the waste Treatment Plant site;
- (b) the discharge of sediment-laden contaminants (for which no application seems to have been made, though consent has been granted);
- (c) the question of the quantity of earthworks required; and
- (d) whether the earthworks are within the NoRs or will extend to the Māori roadway, and what the effects will be.
- [60] This list is not exhaustive and is intended to indicate the types of problems this Court has had to grapple with in trying to understand these applications.
- [61] To the extent that there are conflicts between the AEE documents and the evidence given to this Court, we have taken the evidence before this Court as the most contemporaneous and disregarded the conflicting information in the AEE. We can see no other choice, given that we would otherwise need to examine many hundreds of pages of the AEE where there are apparent conflicts with evidence given to the Court or there has been a modification of proposal or conditions. Accordingly, if consents and NOR were to be granted, reference to the AEE in any conditions would be inappropriate and clearer conditions must be drafted.

The Court's approach

[62] This scene-setting has, of course, been particularly long, but it will be clear that the issues in this case are significant, with some not only regionally important but nationally important. The particular concerns in relation to the Treatment Plant need to be understood in light of the history of land confiscation and re-grants that occurred in the nineteenth century, the subsequent drainage of the confiscated land and the creation of the cuts of the Tarawera and Rangitaiki Rivers. Moreover, the provisions of the Freshwater Policy Statement require interpretation and application in the circumstances and the regional documents applying in this case, and in reference to the NZCPS.

- [63] In discussing this matter we have concluded that we need to discuss the various major strands as follows:
 - (a) historical, including;
 - a. history of the area,
 - b. history of studies and applications,
 - (b) procedural, including;
 - a. consultation;
 - b. designation matters, including consideration of alternatives and reasonable necessity;
 - (c) matters relating to the wastewater Treatment Plant;
 - (d) matters relating to the LAF:
 - (e) the relevant National, Regional and District Plans;
 - (f) Reserve issues;
 - (g) Part 2 evaluation, including the integration of all issues;
 - (h) Outcome, Conclusion and Directions.
- [64] Within each of those categories significant sub-issues arise. We will address these at the beginning of each section. Because these will all integrate into a decision on the overall proposal, and the various consents and designations, it is appropriate that we draw these various strands together at the end of the decision, rather than trying to reach progressive conclusions. Although we may reach some conclusions on sub-issues, that will nevertheless still require an integrated decision to be reached.
- [65] This multi-strand approach might be criticised as appearing to park issues through the decision. We have carefully considered whether it is possible to progressively move through the issues. However, the Court is agreed that the matter is of such complexity that it is to be addressed in this manner to try and ensure we deal effectively with the many issues that have arisen. It is difficult for the Court to find an entirely satisfactory approach that is succinct, yet covers all aspects of key issues. There is a general desire to identify an issue, discuss the matters that bear upon it, and reach a conclusion. In this case, that would lead to many hundreds of pages of decision, and a great deal of repetition.

- [66] This means that under each head, a series of issues will be addressed, but final conclusions will be made later in the Decision. This recognises that the RMA process is not a liniar exercise of getting from A to B, but requires integration of many complex issues into a final Decision. Under section 5 of the Act, this Court must be satisfied that the purpose of the Act will be met in confirming the various designations and consents sought.
- [67] In doing so, we must evaluate scientific, sociological, cultural, ecological, public health, economic and practical issues across a broad spectrum. We must evaluate these in the context of numerous national, regional and district RMA documents.
- [68] Some matters could be considered under all headings, many under more than one. We have tried to adopt a logical and transparent methodology by which our conclusions are justified. In doing so we do not attempt to identify each piece of evidence from the thousands of pages of supporting documents and transcript that are relevant. Some evidence and documents are in conflict, and this has complicated our task. The Court represents a cross-section of skills, but we are nonetheless unanimous in our conclusions and reasoning. Given we appreciate this Decision is likely to be contentious, the Court has jointly signed the decision.

Historical matters

- [69] Historical matters include those from the pre-European period and involve:
 - (a) the original peoples;
 - (b) division and confiscation of the lands in the area;
 - (c) subsequent land grants made to Māori, particularly Lot 6 and Lot 7, and their subsequent subdivision, sale and disposition;
 - (d) Treaty of Waitangi reports;
 - (e) hydrology and geography of this area;
 - (f) the town of Matatā and its relationship to the surrounding area, including debris flows, flood plains and the Tarawera and Rangitaiki Rivers;
 - (g) wastewater Treatment Plant within the area and in particular septic tanks, including:
 - (i) problems with septic tanks;

(ii) solutions available and the history of investigations and reports prepared by the Council in relation to this issue.

The original peoples

[70] Ngāti Awa (the descendents of Awa) is the earliest recorded iwi in this region.³ Their eponymous ancestor, Awanui-a-Rangi, was the son of Toi-kai-rakau, and he lived in the Eastern Bay of Plenty area well before the major migration fleet from the Pacific.⁴ The Waitangi Tribunal has noted that by the time Mataatua Waka, captained by Toroa, arrived in this district, Toi's many descendents, including Ngāti Awa, populated the region.⁵ The crew of Mataatua intermarried with Te Tini-a-Toi⁶ and the modern tribe Ngāti Awa draw from this combined genealogy to reflect their status as tangata whenua, claiming a sphere of influence that extends south to Ōhiwa Harbour and north-west beyond Matatā to Maketū.⁷ Their names and stories for important land marks remain within the Matatā—Whakatāne district, including the original name for the Tarawera River.

[71] Ngāti Awa intermarried with other waka people including those of the Te Arawa Waka. Ngāti Tūwharetoa ki Kawerau, for example, while tracing their primary descent lines from Tūwharetoa-i-te-Aupouri, nevertheless have Ngāti Awa genealogy through Tūwharetoa's mother. While some of his descendants led the migration to Taupo, where that section of the tribe settled, others spread to the coast from Otamarakau to Matatā and at Kawerau. Significant links with the Matatā region remain as Tūwharetoa was a direct descendent of the tohunga Ngātoroirangi, who navigated the Te Arawa Waka under its captain Tama te Kapua.

[72] Together with the descendants of Tama te Kapua (known as Ngāti Rangitihi) also residing in the Matatā area, they maintain the influence of Te Arawa Waka in this region. Both Tūwharetoa and Ngāti Rangitihi claim tangata whenua status as a result.

³ Waitangi Tribunal *The Ngāti Awa Report* (Wai 46, Legislation Direct, 1999) p 14

⁴ Ibid

⁵ Ibid

[°] Ibid pp 14-15

⁷ Ngāti Awa Settlement Act 2005, Acknowledgements [16]

⁸ D Potter, Evidence-in-chief, Appendix B, p 1112

⁹ Waitangi Tribunal The Ngāti Awa Report (Wai 46, Legislation Direct, 1999) p 19

¹⁰ Ibid

¹¹Ibid

[73] The Environment Court has previously described the process of settlement at Matatā to Kawerau as follows:

"[25] The local tangata whenua have been in occupation for many centuries, moving into the area through a process of migration augmented by arrivals from the Pacific. The major influx of settlers occurred approximately 700 years ago with the arrival of the Te Arawa waka captained by Tama Te Kapua. The people who trace their origins to that waka include Ngāti Tūwharetoa ki Kawerau who descend from Ngātoroirangi, the tohunga on the waka. Ngātoroirangi is also associated with bringing geothermal fire to Aotearoa and the Tarawera River was named Te Awa o te Atua, literally "The River of the God" in reference to him. Rangitihi was the great, great-grandson of Tama Te Kapua. Rangitihi had eight children and they became "Ngā Pūmanawa e Waru o Te Arawa — The Eight Pulsating Hearts of Te Arawa" thus becoming the core of the Te Arawa Confederation of Tribes. Ngāti Awa enjoys different but related origins.

[26] Descendants of these early peoples settled in the vicinity of Matatā, enjoying a reputation for the quality and quantity of the feasts they were able to provide from the rich bounty of the swamps, rivers and sea. The waters of the river were one of the constants of their life, providing water, food, transport and spiritual connection.

[27] The waters of Te Awa o te Atua at the mouth – the combined waters of the Rangitaiki and Tarawera rivers as they flowed into the sea at Matatā, were their principal food source." ¹²

Division and the confiscation of land

[74] The rise of the Māori King movement from 1856-1858, and the coming of the Pai Marire movement in 1865, would have a profound effect on the settlement of land at Matatā. The Waitangi Tribunal has noted that impact in its Ngāti Awa Raupatu Report (1999). In 1864, Te Arawa supported and fought for the Crown against Ngāti Awa and other East Coast forces attempting to pass through their lands to fight for the Māori King. Tūwharetoa of Taupo supported Te Arawa at this critical time, but Tūwharetoa ki Kawerau remained neutral. 15

[75] Following the murder of CS Volkner in 1865, Pai Marire leaders attempted to impose a boundary line or aukati over the North Island, across which the Crown and its colonial forces were told not to cross. That line went from Taranaki in the

¹⁴ Archaeological Assessment of Proposed Matatā Waste Water Scheme, Matatā, Eastern Bay of Plenty (April 2014) Exhibit "H" pp 5-6

Waitangi Tribunal *The Ngāti Awa Report* (Wai 46, Legislation Direct, 1999) p 37

¹² Marr v Bay of Plenty Regional Council [2011] NZRMA 89, pp 98-99

¹³ Waitangi Tribunal The Ngāti Awa Report (Wai 46, Legislation Direct, 1999) Ch 4; see also Archaeological Assessment of Proposed Matatā Waste Water Scheme, Matatā, Eastern Bay of Plenty (April 2014) Exhibit "H" pp 5-6

west to Cape Runaway in the East. ¹⁶ Emboldened by their new faith, adherents in the Eastern Bay of Plenty took part in the sacking of the Te Arawa schooner, the *Mariner*, and the European owned *Kate*. Members of the crew of the *Kate* and passengers including Crown official 'James Fallon' were killed. ¹⁷ They were supported by a few members of Ngāti Awa, but Ngāti Rangihouhiri II and Ngāti Hikakino – two northern hapū of Ngāti Awa who lived in the vicinity of Matatā, were among those held responsible. ¹⁸

The Crown interpreted these combined actions as acts of rebellion and Ngāti Awa lands, and the lands of others deemed to be rebels were confiscated in 1865-1866 pursuant to the New Zealand Settlements Act 1863. The Eastern Bay of Plenty Confiscation District commenced at the mouth of the Waitahanui River (north of Matatā) travelling along the coast to the Araparapara River, east of Whakatāne and it traversed some miles inland to a point marked by Pūtauaki (Mount Edgecumbe). The effect of the confiscation was to extinguish all Māori customary title within that district.

[77] In 1868, a formal survey plan for the township of Richmond (now Matatā) was surveyed from the confiscated land and the township created. It continued as a base for the colonial forces after Te Kooti and his followers attacked Whakatāne.²¹ By 1870, following the withdrawal of troops, many native residents of the district returned. They were joined by a number of Te Arawa groups in 1886, following the Mount Tarawera eruption.²²

[78] By 1870 the port at Te Awa o Te Atua became central to the local economy, until direct cuts to the sea were made for the Rangitaiki River in 1913-1914 and the Tarawera River in 1917.²³ With the Rangitaiki Drainage Scheme, the diversions of

¹⁸ Waitangi Tribunal *The Ngāti Awa Report* (Wai 46, Legislation Direct, 1999) Chapter 5

²² D Potter, Evidence-in-chief, Appendix B, p 1114; Māori Land Court Record – 4 Whakatāne Minute Book 42-44 (1888)

¹⁶ Ngāti Awa Claims Settlement Act 2005, Acknowledgements [25]

¹⁷Ngāti Awa Claims Settlement Act 2005, Acknowledgements [25]; see also Archaeological Assessment of Proposed Matatā Waste Water Scheme, Matatā, Eastern Bay of Plenty (April 2014) Exhibit "H" pp 5-6; Ngāti Awa Claims Settlement Act 2005, Acknowledgements [25]

¹⁹ Ibid, Chapter 6

²⁰ Ibid at p 67

²¹ Exhibit "H" Archaeological Assessment of Proposed Matatā Waste Water Scheme, Matatā, Eastern Bay of Plenty (April 2014) pp 6-7

²³ Waitangi Tribunal *The Ngāti Awa Report* (Wai 46, Legislation Direct, 1999), pp 103-108; Exhibit "H" *Archaeological Assessment of Proposed Matatā Waste Water Scheme, Matatā, Eastern Bay of Plenty* (April 2014) p 7

these two major rivers ensured that much of the swamp land in the catchment was drained for farming and settlement.²⁴

Subsequent land grants made to Māori, particularly Lots 6 and 7 and their subsequent subdivision, sale and disposition

[79] Pursuant to the New Zealand Settlements Act 1863 and the Confiscation of Lands Act 1867, the Compensation Court ascertained and determined to whom land within the confiscation district should be granted. Land was either returned to local loyalist Māori or lands were awarded to other loyalist tribes who assisted the Crown. Land was also retained by the Crown for settlement by Europeans. All grantees received Crown grants. As a result of the work of the Compensation Court, the lands both east and north-west of Matatā along the coast were reallocated.

[80] By the 1880s, the Native Land Court was authorised to administer those titles still in Māori ownership following the enactment of legislation to enlarge its jurisdiction to deal with the Crown grants.²⁵ This was initially necessary to ensure all grantees, and not just those who held the land in trust, were accurately recorded on the titles. It was also given jurisdiction to determine successions where any grantee was deceased.

[81] On the eastern side of Te Awa o Te Atua, Parish of Matata Allotment 1 was allocated to Ngati Whakaue. We are not in a position to trace the former titles concerning this block, but today a small part of it is set aside as a Māori reservation for the purposes of a marae and burial ground for the common use and benefit of the Ngāti Umutahi tribe. 26 Umutahi Marae is particularly associated with both Ngāti Awa through Te Tarewa and Ngāti Tūwharetoa.²⁷ The Waitangi Tribunal has noted that while Umutahi was a descendent of Tuwharetoa and the left-hand amo (side carving) of the house is of Tūwharetoa-i-te-aupouri, the relationship with Ngāti Awa is demonstrated by the right-hand amo commemorating Awanui-a-rangi, the eponymous ancestor of Ngāti Awa.²⁸ The land upon which the Umutahi Marae is situated is administered by Marae trustees appointed by the Māori Land Court. It will benefit from free reticulation if the Treatment Plant application is granted.

²⁴ Exhibit "H" Archaeological Assessment of Proposed Matatā Waste Water Scheme, Matatā, Eastern

Bay of Plenty (April 2014) p 7
See for example the Native Land Court Act 1886 & 1894 and the Māori Land Claims Adjustment and Laws Amendment Act 1904

NZ Gazette, 21 May 1987, No 74, p 2251

Waitangi Tribunal Ngāti Awa Report (Wai 46, Legislation Direct, 1999) page 18; see also Application, common bundle Vol 1, 311

Waitangi Tribunal Ngäti Awa Report (Wai 46, Legislation Direct, 1999) page 21

[82] Parish of Matatā Allotment 3 was registered in 1874 in favour of Ngāti Rangitihi. The remnant of this block, formerly Lots 31 and 32 of Allotment 3, (now bearing the appellation Matatā 930) is where the Ngāti Rangitihi Marae (Rangiaohia) is situated, and from the car parking area and urupa the proposed Treatment Plant site can be clearly seen.²⁹ It was gazetted as a Māori reservation in 1974 for the purposes of a marae for the benefit of Ngāti Rangitihi Hapū and people of the district generally, and as such is administered by marae trustees appointed by the Māori Land Court.³⁰ This marae will also benefit from free reticulation if the Treatment Plant application is granted.

[83] The Crown grant for Allotment 6 was registered in June 1877, and it lists the 'Ngāti Raukawa Natives' to whom Awa o te Atua lands were awarded "in recompense for military service rendered during the year 1865." These people were Kiharoa Koha (described as an aboriginal chief) and others. Allotment 6 was subsequently partitioned into Matatā 6A, 6B and 6C in 1913. Lots 6B and 6C were sold. The owners also sold Matatā 6A in 1917 to Raharuhi Pururu of Te Arawa. The block was then transferred to Hakopa Haimona in 1920. The block is now Māori land administered as an ahu whenua trust by two trustees, Anthony Olsen and Robert Gardiner. As Māori land it is acknowledged to be taonga of special significance by the Preamble of Te Ture Whenua Māori Act 1993. This block (Lot 6A) is where the Appellant proposes to situate the Treatment Plant.

[84] We were told that, of the 404 beneficial owners of Lot 6A, many are descendents of Hakopa Haimona. We were told he was from Ngāti Tūwharetoa. It was the evidence for the Komiti that 45 owners are deceased and have not been succeeded to. Their estates hold approximately 30% of the total 2384 shares in the block. It was also the Komiti's evidence that owners (or descendants of owners) holding approximately 20-25% of the shares in Lot 6Aoppose the application. For our purposes, while we are not concerned with the actual figures, we consider the Komiti's evidence indicates that a significant number of beneficial owners oppose the application, a factor we discuss later in this Decision.

²⁹ Māori Land Court Record: 60 Whakatāne Minute Book 20

NZ Gazette, 24 Oct 1974, No 106, p 2483; Te Ture Whenua Māori Act 1993, ss 338 & 239; Māori Reservations Regulation 1994

³¹ R. No 135/27

³² Māori Land Court Record - 59 Rotorua Minute Book 144

³³ LTO SA275/265

³⁴ Exhibit "AA"

³⁵ Exhibit "AA"

[85] In terms of Allotment 7, the block was awarded to Ngāti Tūwharetoa ki Taupo represented by Poihipi Tukairangi, Hohepa Tamamutu and Ihakora Kahuao. They were described as aboriginal chiefs from Taupo on the Crown grant registered in June 1877. The grant records the names of the Ngāti Tūwharetoa natives to whom Awa o Te Atua lands were awarded "in recompense for military service rendered during the year 1865." Allotment 7 was partitioned in 1917 into Lots 7A and 7B. Lot 7B was subsequently sold. It now owned by the Burts. There are 516 beneficial owners of Lot 7A. The beneficial ownership lists for Lot 6A and 7A indicate that the ownership is significantly different, which accords with the blocks being allocated to different tribal groups.

[86] The Ōniao Marae situated on Lot 7A is particularly associated with Tūwharetoa ki Taupo and Te Kooti. Mr Olsen indicated that the house was originally located at Otaramuturangi and was moved to Lot 7A as a result of directions from Te Kooti. It was gazetted as a Māori reservation in 1971 for the purposes of a meeting place for the benefit of Tūwharetoa peoples, and as such is administered by marae trustees appointed by the Māori Land Court. As Māori land it is acknowledged to be taonga of special significance by the Preamble of Te Ture Whenua Māori Act 1993.

[87] The description of the beneficiaries of the Ōniao Marae now includes Ngāti Tūwharetoa ki Kawerau (Bay of Plenty). Again, as with Umutahi Marae, the relationship with Ngāti Awa is portrayed in the carvings. The house is called Tūwharetoa, the left-hand amo is called Hikakino (descendent of Tūwharetoa) and the right-hand amo is called Rangihouhiri (Hikakino's son). Both these ancestors depicted on the panels are associated with the hapū of the same names (claimed by Ngāti Awa) who were accused of being in rebellion and whose lands were confiscated. According to the Waitangi Tribunal they "more than any other hapū were deprived of their sacred sites and necessary land for their future wellbeing". 41

[88] As the sea-frontage of Lot 7A is occupied by the marae, only the rear of the block may be used in the future for Papakainga or other cultural uses. The rear of the site has direct and ready views of the Treatment Plant site. Ōniao Marae will also

³⁶ R. No 135/27

³⁷Mãori Land Court Record - 63 Rotorua Minute Book 362

³⁸ Mr Haimona, Evidence-in-chief, pages 1155-1167

³⁹ Mr Olsen, Evidence-in-chief, pages 430-431 [42]

⁴⁰ NZ Gazette, 15 July 1971, No 53, p 1430; Te Ture Whenua Māori Act 1993, ss 338 & 239; Māori Reservations Regulation 1994

⁴¹ Waitangi Tribunal Ngāti Awa Report (Wai 46, Legislation Direct, 1999) pages 21, 137-138

benefit from free reticulation if the Treatment Plant application is granted. It is not known what the formal position of the trustees is regarding this application, but 6 trustees are deceased and two of the 5 remaining trustees have opposed it before this Court.

Treaty of Waitangi Reports

[89] There have been at least three reports of the Waitangi Tribunal relating to the Matatā — Whakatāne district. The first and most relevant is the Ngāti Awa Raupatu Report (1999). That report details the traditional and contemporary history of the region, including the confiscations and the drainage of the Rangitaiki Swamp. The main opinion expressed in the report was that, contrary to the Treaty of Waitangi, ... Ngāti Awa land was confiscated without just cause, and, secondly, that affected hapū were left with insufficient land for their needs. The Tribunal recommended that the Crown negotiate settlements with Ngāti Awa and Ngāti Tūwharetoa ki Kawerau (Bay of Plenty). The other two Waitangi Tribunal reports deal with issues concerning cross-claims prior to the introduction of legislation giving effect to the Treaty settlements for these tribes.

[90] The second of these reports, the *Ngāti Tūwharetoa ki Kawerau Settlement Cross-Claim Report* (2003) concerned Ngāti Rangitihi cross-claims. In that report the Tribunal's key recommendation was to leave the door open for a Ngāti Rangitihi settlement, should their claims be well-founded and internal divisions resolved. The Crown appears to have had no issue with that, claiming that it has the capacity to provide equal redress to Ngāti Rangitihi. The mandate process for Ngāti Rangitihi commenced in 2014. 46

[91] The settlements for the other two tribes proceeded and the Ngāti Awa Claims Settlement Act 2005 and the Ngāti Tūwharetoa (Bay of Plenty) Claims Settlement Act 2005 were enacted. The governance entities for Ngāti Awa (Te Runanga o Ngāti Awa) and Ngāti Tūwharetoa (Ngāti Tūwharetoa (BOP) Settlement Trust) have provided CIAs in relation to this application.

⁴² Waitangi Tribunal Ngāti Awa Report (Wai 46, Legislation Direct, 1999)

⁴³ Waitangi Tribunal Ngāti Awa Report (Wai 46, Legislation Direct, 1999) Letter of Transmittal

⁴⁴ Waitangi Tribunal Ngāti Awa Cross-Claims Report (Wai 958, Legislation Direct) and The Ngāti Tuwharetoa ki Kawerau Settlement Cross-Claim Report (Wai 996, Legislation Direct, 2003)

⁴⁵ The Ngāti Tuwharetoa ki Kawerau Settlement Cross-Claim Report (Wai 996, Legislation Direct, 2003) Letter of Transmittal and see pages 34-42

⁴⁶ See Office of Treaty Settlements Web-Site

[92] Te Mana o Ngāti Rangitihi Trust and the Ngāti Rangitihi Raupatu Trust have also provided Cultural Impacts Assessment / Statements (CIA). Te Mana o Ngāti Rangitihi Trust signed a Deed of Mandate in 2014 with the Crown to settle all outstanding Ngāti Rangitihi historical claims.⁴⁷ It is likely that a settlement will be concluded in the near future.

[93] The settlement process is relevant to both the Treatment Plant on Lot 6A and the LAF. The Lot 7A reservation remains the last coastal block at Matatā, held for the collective known as Ngāti Tūwharetoa, where Papakainga may be developed. The only other coastal blocks, obtained under their settlement, comprise a nohonga (fishing site within the vicinity of the Tarawera River mouth) and a reserve Wahieroa adjacent to the land upon which the LAF will be situated.⁴⁸ We discuss these sites in more detail below.

Present day hydrology and geography

[94] Matatā is a small coastal township located approximately 24 kilometres to the north-west of Whakatāne in the Bay of Plenty region. It is situated on a sloping terrace at the base of the Manawhahe Hills. The hills are steep and bush-covered, and rise to 300 metres above sea level. Matatā town itself slopes from an elevation of around 20 metres at the railway line to three metres above sea level at Arawa Street. Part of the town at the western end is built on low-lying coastal dune land.

[95] To the east of Matatā are the low-lying and fertile dairy lands of the Rangitaiki Plains. The general locality immediately to the east is drained by two main rivers, namely the Tarawera and the Rangitaiki Rivers, with the Whakatāne River further east again. Three small streams flow through Matatā itself; the Waitepuru, the Awatarariki and the sporadically flowing Waimea Streams.

[96] The course of the Tarawera River has been modified to provide a direct outlet to the ocean, and the original outlet on the seaward side of Matatā is now a series of lagoons. The course of the Rangitaiki River has also been modified to provide a direct outlet to the ocean, and the original Rangitaiki River bed between the Rangitaiki and Tarawera Rivers has also been modified so that it discharges only to the Tarawera River, with no remaining direct connection to the Rangitaiki River. The modified part of the old river bed was variously referred to during the hearing as the

⁴⁷ See Office of Treaty Settlements Web-Site

⁴⁸ Ngāti Tūwharetoa (Bay of Plenty) Claims Settlement Act 2005

Old Rangitaiki River bed, the Orini Stream and the Bennett's Road Stream. We refer to it as the ORC, in part to avoid confusion with the Orini Stream between the Rangitaiki and Whakatāne Rivers.

[97] The ORC is important to the proposal, in that it is the freshwater receiving environment for groundwater containing treated wastewater from the LAF. It is part of the Rangitaiki Drainage Scheme and passes through land drained by a series of east-west and north-south oriented farm drains. It is controlled by flood gates at its junction with the Tarawera River, with the gates opening on the out-going tide to allow the stream to drain, and closing again on the incoming tide to prevent inundation of the drained farmland, which is now below high tide level. The water level in the ORC is above the surrounding ground level due to consolidation of the local peat soils when the land was drained. Water from the farm drains is pumped into it through a series of pumps along its length.

[98] The land directly to the east of the township, and south of the Matatā lagoons, is characterised by a sand dune ridge running parallel to Thornton Road, with land to the south of the dunes being undulating, and forming part of the Rangitaiki Plains. The proposed site of the Treatment Plant is located on land south of the sand dunes, at an elevation of approximately nine metres above sea level.

The town of Matatā

[99] The town of Matatā (formerly Richmond) was surveyed in 1868 and is at a suburban scale. The railway line is between the headland and the housing. Many houses are on small sites, around 800-1000m², and there are many unbuilt sections. SH 2 splits just after entering Matatā from the north, with the State Highway branch following the headland and rail line to Edgecumbe, the other road to Whakatāne following the frontage of the town facing the lagoon. None of the housing and other facilities (schools, marae etc) have reticulated waste water, although there is reticulated power and water.

[100] The town of Matatā comprises predominantly residential dwellings, with 243 occupied dwellings at the time of the 2006 census and a population of 640 people. In addition, Matatā has three marae, two primary schools, a general store, a pub, a small number of other local retail businesses and a rugby ground. A Department of Conservation camp ground is located on sand dunes on the other side of the lagoons from the Matatā township.

- [101] The town is underlain by shallow marine, estuarine, alluvial and beach deposits. In 2005 it was severely impacted by several large debris flows generated by intense rainfall within the adjacent hill country. Similar events have occurred in the locality previously.
- [102] The village has a largely permanent population with a number of retirees. The costs of the Matatā Lagoon restoration have been visited on the local population by way of special rating. Furthermore, the significant disruption of the 2005 debris flow, which damaged the railway bridge and destroyed a number of houses in the Clem Elliot Drive area, are still evident to the close observer. A number of houses have been rebuilt in the debris flow path on the foredune area.
- [103] After the cuts for the Rangitaiki and Tarawera Rivers, the lagoon area in front of the village languished until it was cut off from the Tarawera. Since then the lagoon has reverted to wetland. The surrounding area to Edgecumbe and Tarawera is low lying farmland. Although there are height variations, with land around the village at levels 6-9 metres above sea level, much of the wider area is around 1m above sea level. This means the area is subject to drainage (and pumping in places) to maintain the area as pastoral.

Wastewater treatment within the area, the septic tanks and problems with septic tanks

[104] Wastewater treatment and disposal in Matatā is currently by individual septic tanks and on-site disposal fields. There are approximately 265 existing individual systems. Various surveys of the existing septic tanks have been undertaken over the years, but the evidence did not provide us with a clear picture of their adequacy or the extent or seriousness of problems that have been experienced with them. We were advised that the most recent survey of septic tanks in 2012 showed that 70% did not comply with at least one requirement of the Regional Council's On-Site Effluent Treatment (OSET) Plan and 50% did not comply with two of the seven requirements.

[105] Mrs Krawczyk stated in evidence that in the majority of cases disposal fields are too small, and during questioning, advised that: ⁴⁹

disposal fields were too small and some of the areas are low lying and the issue is really with ground water and the leaking tanks surfacing.

[106] She also stated that: 50

The Matatā area is not well suited to septic tank effluent fields due to a high groundwater table in parts and poor soil drainage.

[107] While the evidence indicated there have been some problems associated with individual on-site soakage systems, these were not explained in any quantified way in terms of public health risk or effects on water quality or the environment generally. In addition, a 2011 public health assessment by Institute of Environmental Science and Research Ltd (ESR) and Beca found:

... there is not a compelling case for the introduction of a reticulated sewage disposal system in Matatā on the basis of risk to human health.

[108] The report confirmed that some septic tank systems were not functioning adequately and that:

...quantifying the proportion of properties with issues, and whether these can be adequately rectified will require individual on-site assessments.

[109] The report went on to note that the installation of a reticulated sewerage system would have benefits, including flexibility in land use, enhanced development opportunities and the removal of sewage disposal responsibilities from the local householder, but these would need to be balanced against significant costs.

[110] The evidence of Dr Miller, the Medical Officer of Health, stated that overall the Matatā wastewater scheme as proposed will promote good health, providing increased levels of protection for Matatā and the wider community. Dr Miller considers on-site effluent treatment systems such as septic tanks can be appropriate for small numbers of scattered dwellings that are distant from significant bodies of water, or well above ground water levels, but does not consider Matatā to be a small or remote settlement. Dr Miller disagreed with the findings of the ESR report that

⁴⁹ Transcript, page 51

⁵⁰ Mrs Krawczyk, evidence-in-chief, paragraph [20]

there is no compelling need for a reticulated system on public health grounds and considered the current systems will pose an ongoing risk to public health.

[111] Mr Bradley, a senior wastewater engineer called for the Applicant, highlighted that the existence of a safe, reticulated (piped) water borne sanitary wastewater system: ⁵¹

...is required to protect the public health of the community and that it is well established that the existence of a safe sanitary/wastewater system provides immense benefits to the well being of a community in terms of health and safety.

- [112] While we respect the expert opinion on public health issues, we were faced with conflicting views and very little factual information relating to Matatā to assist us in quantifying the risks and benefits. When we sought to understand the environmental benefits, we found the evidence to be largely silent. Responses to our questions did not assist us greatly either, leaving us with some difficulty in understanding the overall benefits of the scheme and how they compare to the proposed additional contaminant loads at the LAF.
- [113] Table 11 of the ESR report (Tab 21 of the common bundle) shows E coli levels are generally higher in the downstream monitoring sites of the Waitepuru and Waimea Streams, but this is not consistently the case.

Solutions available and the history of investigations and reports prepared by the Council in relation to this issue

- [114] Mr Harris was convinced that septic tanks were a more cost-effective option for this community and that the impost on ratepayers was unreasonable. His view was that the Districh Council had initially accepted the ERS advice, that there was no compelling health reason for a reticulated system, but had subsequently resiled from that position and proceeded with this application.
- [115] Mr Harris and others also criticised the District Council for not utilising the Kawerau plant (to which sludge from the Matatā Treatment Plant would go).
- [116] Mr Harris expressed suspicion that the construction of this Proposed Treatment Plant may lead to a long-term objective of processing waste from other areas through Matatā. At 15.6.1(g), the Tarawera Catchment Plant identifies possible

⁵¹ Mr Bradley, evidence-in-chief, paragraph [55]

pumping of treated effluent to Matatā and discharge to the Tarawera River mouth. This appears to discuss industrial (Mill) waste, and it is one possibility among many.

- [117] In relation to municipal sewage, four alternatives are identified at 15.4.6 of the Tarawera Catchment Plan. Of these, the alternate selected sees Kawerau and Edgecumbe municipal waste transitioning to an alternate discharge method after 2005.
- [118] We examine the relevant planning instruments later in the decision under our discussion of the LAF, and here we note that the Tarawera Catchment Plan does seek improvement to water quality. Discharges such as those from the Kawerau Plant are tightly managed under that Plan, with a regime which leads to the prohibition of human sewage entering the Tarawera River. The Tarawera Catchment Plan promotes a shift to land-based treatment and disposal systems. The Whakatāne District Plan also refers to the inadequacies of existing reticulated sewerage systems and encourages a move to best practice. We pick up these matters later in the decision.
- [119] In the Opus report of 15 July 2013 on Wastewater Treatment and Management Options, four options were identified at Chapter 4:
 - (a) Matatā and Edgecumbe each have independent treatment systems (4.2);
 - (b) Treatment and disposal at Kawerau (4.3);
 - (c) Treatment for Edgecumbe and Matatā at Matatā with two sub-options:
 - (i) combined effluent discharged via ocean outfall or land application field;
 - (ii) two Treatment Plants (Edgecumbe and Matatā) but combined ocean outfall or land application field
 - (d) Transfer to Whakatāne
- [120] The third scenario is therefore a possibility, but the current Application limits the volume that can be treated, and its source.
- [121] For current purposes, we cannot consider what future applications might be filed, but must consider this application on its merits.
- [122] Furthermore, and in practical terms, we consider that there are likely to be significant problems with this plant accepting waste from more distant areas, for the following reasons:

- (a) Long pumping lines can lead to septic waste, which is more difficult for this type of system to process.
- (b) The system is sized for a maximum of around 600 homes, and any extension of this is likely to lead to significant problems in obtaining consent, given the limited size of the designations and the sensitivity of the receiving environment.
- (c) There is a significant cost to pumping waste from Kawerau or Edgecumbe to Matatā.
- [123] The District Council considered three different methods of wastewater collection for Matatā; a conventional gravity system, a vacuum system and a pressurised small bore diameter pipe system using individual on-site grinder pumps. Various reports were obtained and the grinder pump system adopted. Again this is a question of District Council policy. Our role is to consider whether the applications meet the purpose of the Act and the various documents prepared under it.

Process of assessing alternative sites

- [124] At the time the District Council resolved to proceed with a fully reticulated wastewater system for Matatā, the site or sites at which wastewater treatment and disposal would take place were not known. Accordingly, as a matter of practical necessity, the District Council needed to identify and assess the suitability of possible sites for these two activities, regardless of any statutory requirements to consider alternatives under s171 or s105 of the Act. As wastewater Treatment Plants are generally known to have the potential to cause offensive odours beyond the boundary of the plant site from time to time, it would be reasonable for an applicant to anticipate that an assessment of alternative sites under s 171 of the Act might be a statutory requirement.
- [125] One of the key objectives of any site assessment and/or selection process (site selection process) must be to first identify sites that, as far as possible, avoid potential adverse effects from natural hazards and to minimise the potential for adverse effects on the environment, as these will be important considerations in any subsequent statutory process under the Act. Put another way, the site selection process is a fundamental building block used to support future decision making. In much the same way that solid or robust house foundations reduce the risk of future problems with the house itself, so a robust site selection process reduces the risk of

problems occurring with the site or sites chosen, in terms of suitability for purpose. The converse is also true, that were a site selection process is not robust, there is a greater likelihood of later difficulties, in one form or another, with the selected site.

[126] Further important considerations when undertaking a site selection process are transparency of decision-making, clear recording of the process so that it can be readily understood by others, and mechanisms for reviewing the process if basic assumptions change through initially unforeseen circumstances. In making these comments, we make it clear there is no requirement for an applicant to select the best possible site, or to consider all potentially available sites, but whichever site is eventually selected, it must be able to meet the relevant requirements of the Act.

Scope of the appeal

[127] Jurisdictional issues regarding the nature of this appeal were raised before us. It was argued, for example, that issues such as odour from the Treatment Plant, and some cultural and relationship matters were outside this appeal. This seems to rely on the wording of s274 1(e) and (f), and s274(4B). These sections deal with evidence that can be called only if it is both within the scope of the appeal, and is a matter arising out of the previous proceedings, or on any matter on which the person could have appealed.

[128] Ms Hamm directed this matter at the Raupatu Trust and possibly Mr Harris (although he is the Appellant). We note that the appeal is very broadly worded, and for clarity we conclude that all issues in this hearing were relevant at first instance and are covered in the appeal.

- [129] This case does raise some process issues, the key ones being:
 - (a) whether the Komiti could be a party;
 - (b) consultation; and
 - (c) consideration of alternatives.

The Komiti as a party

[130] Only Mr Harris appealed the decision. The Raupatu Trust and Komiti joined as s274 parties.

[131] The Raupatu Trust had submitted and appeared at the initial hearing. No issue was raised as to their status.

[132] The Komiti had not submitted separately. Some evidence for them was produced by Mr Paterson, but was given no weight by the Council-appointed Commissioners. Nevertheless, the Komiti represents persons (and is an entity under the Act) having an interest greater than the general public. Given they are beneficial owners in Block 6A, and some of 7A as well, their relationship with the land as Māori beneficial owners is recognised by s 6.

[133] Status to appear was not pressed by Ms Hamm, but for clarity we conclude the Komiti is entitled to be a party under s274(1)(d) and (da). None of the restrictions under s308 apply.

Consultation

[134] In terms of s36A of the Act there is no duty to consult when seeking resource consents or notices of requirement, but that provision does not prevent consultation if an applicant or local authority elects to do so. In this case, the District Council elected to consult, and having chosen to do so it was obliged to conduct the process in accordance with well established principles.⁵²

[135] In terms of the broader Matatā community, the application indicates that the District Council commenced consultation with the community in 2004, but that the debris flow disaster in 2005 interrupted the consultation process. In June 2012, a questionnaire was sent out to all property owners. The results indicated that 41% of respondents believed that a reticulated system was required, 45% believed that it was not required and 14% did not know. The results of the survey were communicated to the Matatā community by newsletter in June 2012.

⁵² See Air New Zealand & Ors v Wellington International Airport [1993] 1 NZLR 671 for principles ⁵³ Application for Resource Consent & Notice of Requirements, Common Bundle, Vol 1, Tab 1, page 112

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[136] In March 2013 the District Council made the decision to consider three options for wastewater disposal and proceeded to develop a consultation strategy.⁵⁴ That consultation strategy carried out by the Applicant from 20 May 2013 included:

- Meetings with individual owners of properties neighbouring the Treatment Plant and LAF sites,
- Community Updates newsletters. We understand these were sent to every home in Matatā;
- Community meetings and forums;
- Meetings with key stakeholders;
- Newspaper articles and radio interviews;
- Press releases;
- The Applicant's webpage and social media;
- Annual Plan consultation process
- Field trips.⁵⁵

[137] We need to comment briefly on the roles of the District Council as both the Applicant and the Consent Authority. Both can consult, but matters become murky where the parties promoting the application are also the consent authority. When it comes to dealing with Māori particularly, there was not clarity as to whether a consultation was by the Applicant or by the Consent Authority. All evidence on consultation was given for the Applicant and it is unclear if the Consent Authority considered any issues for consultation separately.

[138] The Applicant and / or Consenting Authority claims that through the Annual Plan process and the special consultation process, it received 101 submissions in total on the Wastewater Scheme. Of these, 88 were received from the Matatā community. Of the 88 respondents, 84% were in favour of full reticulation, 5% in favour of partial reticulation and 11% did not want any reticulation. ⁵⁶

[139] It is not clear to us from the surveys held in 2012 and 2013 whether a majority of residents support full reticulation, but what has been demonstrated is that a significant number of the residents do support it.

⁵⁴ Application for Resource Consent & Notice of Requirements, Common Bundle, Vol 2, Tab 7

⁵⁵ Ms Krawczyk, Evidence-in-chief, paragraph [51-53]

⁵⁶ Application for Resource Consent & Notice of Requirements, Common Bundle, Vol 1, Tab 1, page 112

[140] In terms of the Māori community of Matatā, it was the evidence for the Applicant that a special consultation strategy was developed for consultation with iwi/hapū represented by:

- Ngāti Rangitihi Te Mana o Ngāti Rangitihi Trust (TMONR) & Ngāti Rangitihi Raupatu Trust Incorporated (NRRTI);
- Ngāti Tūwharetoa Ngāti Tūwharetoa (BOP) Settlement Trust (NTST);
- Ngāti Awa Te Runanga o Ngāti Awa (TRONA);
- Ngāti Umutahi Umutahi Marae; and
- Ngāti Mākino Ngāti Mākino Heritage Trust (NMHT).

[141] TMONR and the NRRTI both produced separate CIAs. CIAs were produced for Ngāti Awa and Ngāti Tūwharetoa ki Bay of Plenty (Kawerau). Ngāti Mākino left the issues for the local "hau kainga" people (Te Arawa whanaunga/relatives) to address, namely, Ngāti Rangitihi.

[142] In addition, the Applicant's cultural consultant held meetings with iwi representatives, and a plenary session was convened on 2 December 2013 to finalise her draft cultural report.⁵⁸

[143] Consultation with local iwi was conducted but not all interested hapū and beneficial owners were identified. Nor were all cultural issues identified or addressed. In particular the Māori Reservation on Lot 7A and the prospect of Papakainga on Lot 6A do not seem to be addressed, although marked on Council plans used for site selection purposes. Another example relates to the cultural landscape at the LAF site, the impact, if any on the Māori land in the vicinity of the LAF and the concept of Te Mana o te Wai found in the Freshwater Policy Statement—given it is a term dependent on tangata whenua values. However, these issues have now been identified as a result of these proceedings and are covered where relevant in this judgment.

[144] In terms of local marae, three on-site consultations took place at Umutahi, Rangiaohia (Rangitihi) and Ōniao (Matatā 7A) between the Applicant representatives, the consultants, and the marae trustees "responsible for property maintenance,"

Ms Krawczyk, Evidence-in-chief, paragraph [54-56]
 Ms Hughes, Evidence-in-chief, paragraph [28-29]

including for on-site effluent disposal systems" at each marae. ⁵⁹ These meetings were held on 5 November 2013 and 26 March 2014.

[145] In terms of Matatā Lot 6A Ahuwhenua Trust, it is common ground that the trustees, Anthony Olsen and Robert Gardiner, were consulted and that they have approved a lease in favour of the Applicant.

at meetings organised by the Trustees, held on 21 August 2013 and 10 August 2014.⁶⁰ These publically notified meetings were attended by the Applicant's staff involved with the Treatment Plant and LAF project but no other beneficial owners attended.⁶¹ At a subsequent AGM held on 14 September 2014, the lease proposal was discussed, and of those 20 people present Mr Olsen told us that the majority "appeared to support the lease proposal." The Komiti have since demonstrated that a reasonable number of owners oppose the application, but that is a different issue and we discuss that further below.

[147] Mr Enright for the Komiti pursued the issue of whether consultation measures were adequately conducted by the Applicant and / or Consent Authority with the owners of Lot 6A, given their default to and reliance on the Trustees to facilitate consultation. We note the usual process for notifying the beneficial owners of Māori land blocks is to send letters to the beneficial owners, for whom addresses can reasonably be ascertained from the Trustees, the Māori Land Court and/or the Electoral Roll.

[148] However, we conclude that sufficient opportunity has now been accorded to Komiti members to express their views on the Treatment Plant and the LAF. We also note that all relevant issues have been identified as a result of these proceedings and are covered where relevant in this decision. In other words, any consultation defects have now been cured by this appeal process.

Consideration of Alternatives

[149] Prior to the 2003 amendments to s 171, when territorial authorities were considering the effects on the environment of allowing the requirement, they were to

⁵⁹ Ibid, paragraph [35]

⁶⁰ Mr Olsen, Evidence-in-chief, paragraph [38-39]

⁶¹ Ibid, paragraph [38-39]

⁶²:Ibid, paragraph [38-39]

have particular regard to whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work in all cases. However, this obligation is now subject to two criteria and s 171(1)(b) now reads as follows:

- (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—
- (i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or
- (ii) it is likely that the work will have a significant adverse effect on the environment;...
- [150] In the case of this designation, two questions arise in relation to s 171(1)(b). The first is whether the District Council as the Applicant, was obliged to give adequate consideration to alternatives. In other words, does this case fall into either of the categories set out in s 171 (1)(b)(i) and (ii)? The second is, if they were obliged, did they give adequate consideration to those alternatives?

Must the Territorial Authority consider alternatives?

- [151] The Applicant submits that they have a sufficient interest in the land to complete the works. The land for the LAF is on a Council administered recreation reserve. There has also been an agreement to lease entered into with the Responsible Trustees for Matatā Parish Lot 6A Ahu Whenua Trust. This would cover the proposed site of the Treatment Plant itself as well as the buffer and the access road. In terms of access to the LAF, the District Council as both the Applicant and District Consent Authority points to the deed of agreement to create an easement over that land, owned by R and S Robinson Family Trust. This deed is conditional on investigation of risk of contamination and compensation in the event of contamination.
- [152] In their submission in reply the Applicant insists that the interest in the land is sufficient to remove the onus in s 171, because the unfulfilled conditions are for the benefit of the District Council and because the agreement to lease attached the final form of lease, so it cannot be argued that the form is not finalised.
- [153] The Applicant further submits that the work is not likely to have significant adverse effects and so they are not required to consider alternatives under s 171. In the alternative, they submit that alternatives were extensively assessed and that the consideration of alternatives has been more than adequate.

[154] The Regional Council submits that the project will not produce adverse effects and so the Applicant is not required to consider alternatives. In the alternative, they submit that the applicant has considered alternatives. Their submissions do not address whether or not the Applicant has sufficient interest in the Lot to exclude the need to consider alternatives.

[155] The Komiti submits that the Applicant does not have sufficient interest in land, pointing out that it is not a tenant and the lease is conditional on the NOR being confirmed. Furthermore, the Komiti submits that there are likely adverse effects from the work. In reference to the Nelson Intermediate School v Transit New Zealand⁶³ case, they submit that consideration of alternatives should be conducted early in the process and should be considered by reference to expert evidence. The Komiti submit that the deed regarding the lease was only entered into in December of 2014 and so at the time of the Independent Commissioners' Decision the Applicant did not have any interest in the land whatsoever. They submit that the consideration of alternatives was not genuine and that the appraisal of sites was weighted to ensure a predetermined outcome.

[156] The Raupata Trust submits that the Applicant could not have reasonably excluded certain sites because of a high water table when they did not have a design yet for the Treatment Plant. Their submission is less concerned with the interest in Lot 6A and more with the consideration of alternative methods and the effect that those matters had on site selection. We are mindful that the Court must look at the intended relationship between the two criteria that limit the obligation to consider alternatives under s 171. Was it the intention that, to be excused from the obligation, the requiring authority must possess both a sufficient interest in the land, and be able to show that there will not likely be significant adverse effects? Alternatively, was the bar intended to be lower than that, with one or the other being sufficient to relieve the Requiring Authority of the obligation to consider alternatives?

[157] We note also the obiter comment in the Supreme Court *Environmental Defence Society Inc v King Salmon*⁶⁴ at paragraph [88], where the Court noted (in discussing the NZCPS):

...Moreover the obligation in s8 to have regard to the principles of the Treaty of Waitangi... will have procedural as well as substantive implications, which decision makers must always have in mind, including when giving effect to the NZCPS...

64 [2014] NZRMA 195

⁶³ Nelson Intermediate School v Transit New Zealand [2004] ELRNZ 369

[158] We agree with Mr Enright that, when combined with the other citations given, and in light of the commentary in *McGuire v Hastings District Council*, ⁶⁵ we should expect a rigorous and robust consideration of alternatives where Māori land (which is limited in this area) has been selected.

[159] This issue was considered by the Board of Inquiry into the *Men's' Prison at Wiri.* In that case, counsel for Auckland Council and the Manurewa Local Board submitted:

... that an obligation to consider alternatives arises where it is likely that the work will have a significant adverse effect on the environment, regardless of whether or not a requiring authority has the requisite interest in the land. ⁶⁷

[160] Counsel for the Department of Corrections did not did not disagree and the Board accepted this as the correct interpretation of s 171. The consideration of alternatives is required if either of the prerequisites in s 171(1)(b)(i) and (ii) are met, not both. We agree with the Board's reasoning in that case and adopt it here.

Is it likely that the work will have a significant adverse effect on the environment?

[161] In considering this limb, the question arises as to whether likely significant adverse effects are to be measured before or after mitigation.

[162] As is clear from other parts of this decision, the Court does not agree with the Applicant's submission that there are not likely to be potentially significant adverse environmental effects. This finding alone is enough to oblige the territorial authority to adequately consider alternatives. This makes the discussion of interest in the land sufficient to carry out the works somewhat academic in nature, but given the role that the deed of lease has played in this proceeding the Court will turn to that question now.

Is there interest in the land sufficient for undertaking the work?

[163] At what point does an interest of a sufficient nature have to be acquired in order for it to excuse the requiring authority from the obligation to consider alternatives?

⁶⁵ [2001] NZRMA 557

⁶⁶ Final Report and Decision of the Board of Inquiry into the Proposed Men's Correction Facility at Wiri, September 2011

⁶⁷ Toid, at paragraph [135]

[164] In this case the Komiti submitted that, although the parties may have been in negotiations at the time of the Independent Commissioners' decision, there was no deed to lease yet and therefore no interest in land. In the *Final Report and Decision* of the Board of Inquiry into the Proposed Men's Correction Facility at Wiri the Board suggests that the consideration of alternatives can be ongoing but typically it will be undertaken prior to the notification of the NOR.⁶⁸ Therefore, if an interest in the land is not acquired until after the notice of requirement, it would not typically act to excuse the requiring authority from the obligation to consider alternatives. In this case the deed was not signed until after the NOR was notified and so would not have acted to relieve the requiring authority of their obligation to consider alternatives. That being said, the willingness of the owner to enter into such a deed could be relevant to this site being chosen in preference to other alternative sites.

[165] Regardless of findings on this point, potentially significant adverse effects would oblige the territorial authority to adequately consider alternatives. Assuming there are such potentially significant adverse effects we go on to consider the evaluation of alternatives.

Alternative sites evaluation

[166] In Queenstown Airport Corporation Ltd v Queenstown Lakes District Council⁶⁹ at [18] Whata J set out what is required of an evaluation under s 171(1)(b) of the Act:

- [18] The Court observed that the central issue under s 171(1)(b), dealing with the assessment of alternatives, is whether QAC gave adequate consideration to alternative sites, routes or methods. The Court then adopted the principles stated in the final report and decision of the Board of Inquiry into the Upper North Island Grid Upgrade Project as follows:
- "a) the focus is on the process, not the outcome: whether the requiring authority has made sufficient investigations of alternatives to satisfy itself of the alternative proposed, rather than acting arbitrarily, or giving only cursory consideration to alternatives. Adequate consideration does not mean exhaustive or meticulous consideration.
- b) the question is not whether the best route, site or method has been chosen, nor whether there are more appropriate routes, sites or methods.
- c) that there may be routes, sites or methods which may be considered by some (including submitters) to be more suitable is irrelevant.
- d) the Act does not entrust to the decision-maker the policy function of deciding the most suitable site; the executive responsibility for selecting the site remains with the requiring authority.

⁵⁹ [2013] NZHC 2347

⁶⁸ Final Report and Decision of the Board of Inquiry into the Proposed Men's Correction Facility at Wiri, paragraph [140]

e) the Act does not require every alternative, however speculative, to have been fully considered; the requiring authority is not required to eliminate speculative alternatives or suppositious options."

[167] When determining whether alternatives have been adequately considered, the question before the Court is narrow. In essence the question is whether or not the decision was reached arbitrarily. The Court is limited to the process that the authority undertook, rather than whether or not *all* alternatives were considered and whether the outcome was the *best* option. The criteria applied in assessing alternatives are policy matters, and therefore rightly a matter for the local authority process.

[168] In *Minhinnick v Minister of Corrections*⁷⁰ the Court had this to say about the requiring authority's choice to limit alternatives considered based on the nature of the property rights that they could acquire:

[235] We find that consideration of properties for the corrections facility site was limited to those whose owners were willing sellers. Where the site suitability factors for a public work limit the range of possible alternatives, compulsory acquisition has sometimes to be considered. But the factors making a site suitable for the corrections facility are not so constraining. A requiring authority might then properly make a policy decision to exclude from consideration properties that would have to be taken compulsorily. The authority is accountable in the political arena for that policy. In such a case the Environment Court, whose role is restricted in the way mentioned in the preceding paragraph, should not substitute a policy of its own.

[169] We have already quoted from both *McGuire* and *King Salmon* on the obligation to consider alternatives and Treaty of Waitangi obligations. Thus, while we acknowledge that the District Council should not exclude land from consideration simply because it is Māori land, the selection of Māori land brings with it the need for a robust and definable selection procedure.

Was the selection of Lot 6A arbitrary?

[170] We had considerable difficulty in understanding the process used by the Applicant to assess alternative sites for treatment and disposal of treated wastewater. No overall summary of the process was provided, and we had to search for and navigate our way through many different documents, briefs of evidence and responses to questioning at the hearing before we were able to understand the process. We had particular difficulty in understanding who had overall responsibility for managing the

⁷⁰ A043/2004

process, the timeline and sequencing of the process, the basis of certain conclusions and decisions, and the reasons why certain things changed at particular times.

- [171] It is clear from the evidence and the supporting documentation presented to us that the Applicant focused on a LAF as its preferred method of returning treated wastewater to the environment. While we are not aware that there was an explicit decision by the Applicant, it is common to all sites considered and in the comparison of the long list of options in Table 6.4 of the AEE (Page 157 of Volume 1 of the common bundle) it is stated that Discharge to land is Ngāti Rangitihi Iwi's preferred method as outlined in the Iwi Management Plan.
- [172] The Applicant's initial intention was that, where possible, the Treatment Plant should be located within or nearby the LAF. While we consider this to be a reasonable starting point, this was not clear to us from the evidence. Based on the intent to co-locate the Treatment Plant and LAF the Applicant used the slope of the site, ground elevation and size of the site as its criteria for its first broad assessment of potentially suitable sites. These are of obvious relevance for the LAF, but of less relevance to a much smaller Treatment Plant if it was remote from the LAF. An outcome of this initial decision is that the criteria used to select the Treatment Plant site may not be appropriate.
- Based on the Applicant's initial intention for co-location, the information shown nn Figure 7 of the Map Book (attached here as Annexure B) is an adequate starting point for a site evaluation process with a LAF and Treatment Plant on the same site or in close proximity to each other. As addressed by questions from the Court, the title on the figure which says it shows sites under consideration 20/08/2013 is incorrect. The information on the plan must have been available prior to the Extraordinary meeting of the Council on 20 May 2013, when it unanimously voted to proceed with a full reticulated wastewater system at Matatā, and only a small number of sites were under consideration by 20 August 2013. In short, those sites were identified on the basis of co-location. However, we do not know who selected them and why certain sites were excluded.
- [174] Ms Krawczyk advised that the Applicant decided not to proceed with analysis of sites which were not available. We are still unclear how that decision was reached. There is no evidence of any enquiry in relation to the inclusion to several sites not owned by the Council. In particular, how site P was offered is a mystery rather than Q, R and S etc.

[175] Ms Krawczyk and Mr Shaw obliquely suggested that the sites considered were derived from a map of over 40 sites attached as **Annexure** B. Yet nowhere in the evidence or the voluminous records can we find how these 40 sites were identified, or how the short list of 4 sites considered by URS was reached. Moreover, that shortlist of sites did NOT include Lot 6A.

[176] We found that in addition to Sites A, 8, W and X, site C was listed as being under consideration in the report considered by the Council at its meeting of 20 May 2013. However, this was not carried through to subsequent documents or referred to in evidence. When the Council instructed URS to undertake a more detailed constraints analysis of the four initially shortlisted sites, it included Site P as a site to be considered as a potential Treatment Plant site, but not for a LAF. We have seen no information on the process used or the reasons why P was included. Nevertheless, site P was included in an assessment undertaken by URS New Zeland Ltd (URS) to identify any obvious fatal flaws with the sites from a land use and natural hazards perspective only.

Alternative sites for the waste Treatment Plant

[177] We are left then with a significant issue raised by the Komiti about the selection of Lot 6A for the Treatment Plant only. The AEE produced to the Court makes several statements at 6.5 in relation to treatment and disposal options. Firstly, the options list identifies treatment in a packaged Treatment Plant and LAF in a location close to Matatā. That gives the impression that the Treatment Plant and LAF site were to be co-located. Paragraph 6.5 goes on to say a desktop study was carried out using Geographic Information System (GIS) information to prepare a long-list of possible local land disposal sites as shown in figure 6(2). The criteria used to identify these sites were the slope of the site, ground elevation, and the size of the site.

[178] Following the GIS analysis, the red-hatched sites shown on Annexure B were selected for further evaluation for treatment and disposal locations. There is no doubt in our mind that, in this part of the AEE, there is a conflation of the issue of a disposal (LAF) site with a Treatment Plant. Given the use of the singular earlier, the GIS evaluation considered only a single site to co-locate both the Treatment Plant and LAF. Four sites were identified including that where the LAF is now proposed (sites A, W, X, and 8) but not site G (Lot 6A). In fact the table of the long-list options assessment relied on only five sites:

- (a) Sites A and C;
- (b) the western inland sites, shown on Annexure B, as W and X; one situated near Waitepuru Stream, the other in a more southerly position near the escarpment;
- (c) site 8, the western dune Recreation Reserve (western reserve site) which in fact encompasses the LAF area within it.
- [179] Paragraph 6.6 of the AEE provides different information again, and notes that following the assessment of the long list options in section 6.5 above, the following sites were shortlisted for further consideration

[180] These are:

- (a) five potential sites for the Treatment Plant -A, G, W, X and the western reserve site denoted as site 8;
- (b) four potential sites for the Application Field -A, W, X, or the western reserve site denoted as site 8.
- [181] We have concluded that the statement is factually incorrect and misleading for the following reasons:
 - (a) Site G was not in the long list options in paragraph 6.5, nor is Site P. Both were added later.
 - (b) Figure 6.2 shows only A, W, X and 8.
 - (c) The list referred to in AEE 6.6 is the shortlist, not the long list of sites.
- [182] The Council subsequently instructed URS to undertake additional risk assessment work. A URS memorandum dated 6 September 2013 was prepared at the request of Council to further develop the register for the technical, constructability, operability and cost risk criteria in addition to the natural hazard risks previously covered. As part of this further assessment, site P was dropped as a potential site and Site G added. This memorandum addressed a constraints analysis of sites A, 8, W and X and Site G, including Site G for both a Treatment Plant and a LAF.
- [183] The GIS analysis undertaken is tabulated in Table 6.7 of the AEE. Site G (Lot 6A) was identified as having the lowest risk score and the lowest weighted criteria score, slightly lower than site 8 (the LAF site).

[184] We were advised by Mr Shaw⁷¹ and Ms Krawczyk that Site P was dropped after WDC engineers undertook a site visit, which confirmed the site was low lying and therefore prone to flooding.

[185] The inclusion of Site G (Lot 6A) occurred sometime between the dates of the two URS reports, between 17 June and 16 September. We understand this came about as a result of a meeting between the Council and Mr Anthony Olsen in his capacity as CEO of Ngāti Rangitihi on 17 July 2013 when Mr Olsen indicated use of Site G (Lot 6A) might be possible.

[186] There is no explanation within the AEE as to how site \mathbb{G} (Lot 6A) was substituted for site \mathbb{P} , and the evidence of the witnesses was singularly silent on this issue. Niether was in the original list and the inclusion of either is a mystery. Nevertheless, documents buried in the four volumes of documents provided to this Court do elucidate this issue further. The URS report prepared on 17 June 2013 and disclosed in the second volume of documents at page 571, indicates that the GIS constraints analysis undertaken by URS was limited by instruction to an inspection of five sites for Treatment Plant; \mathbb{A} , \mathbb{P} , \mathbb{W} , \mathbb{X} and \mathbb{S} ; and four sites for a disposal field; \mathbb{A} , \mathbb{W} , \mathbb{X} and \mathbb{S} . Importantly, site \mathbb{P} identified in that report appears to be a different site to site \mathbb{C} identified in the AEE. Curiously, site \mathbb{P} was selected as the preferred site after the first GIS analysis but removed by August. The reason for the inclusion of \mathbb{P} later, and the exclusion of all the other sites from $\mathbb{A} - \mathbb{Z}$ and 1-12, was not explained.

[187] Mr Enright questioned Ms Krawczyk closely regarding these issues. It appears that at least one of W or X was Māori-owned freehold land. She acknowledged that other plans and notifications to the public prior to September 2013 had indicated other sites, and there was no mention of the property in the vicinity of site G. She described the green areas in Annexure B as based upon land contours, steepness and very general information. Nevertheless she was able to give no insight as to who made that selection and why sites C, G and P were chosen. It is very clear from her answer to a question that G was included after July 2013, after a preliminary discussion with Mr Olsen.

[188] In answer to a question from the Court, Ms Krawczyk confirmed that there is not documentation to establish why C was removed from the July report and P substituted (see page 61 of the Transcript). From this we have concluded, and we understand that Ms Krawczyk acknowledged, that there was no overall constraints

⁷¹ Mr Shaw, Evidence-in-chief, paragraph [27]

analysis and URS was simply asked to comparatively evaluate five identified properties. They did so and were then asked in August to substitute site G for site P, when P at that time was the most preferred option for a Treatment Plant.

[189] Accordingly, from this we conclude as facts:

- (a) There was no overall comparative analysis of the sites identified in Annexure B through any robust selection process. We are not satisfied the original map identified sites for a Treatment Plant only, as opposed to a combined site.
- (b) The Council officers confirmed that no general enquiries as to availability of land were made. Accordingly the availability of the sites was not tested and cannot be claimed as a valid site selection criterion.
- (c) There was no comparison between site P, the preferred site selected in round one, with site G, which was substituted for P and became the preferred site in phase 2 August 2013.
- [190] The exclusion of P and the inclusion of G appear to be unrelated to any explicit analysis. We were not assisted by the evidence of Mr Shaw who stated that the long list of sites was selected on the basis of three GIS criteria; slope, ground elevation and size of site. He then says that in May 2013 A, C, V, W, X and Y were visited. Again, there is no explanation as to why other sites were omitted, for example C is not identified in the initial report. He then goes on to say that five potential sites were selected. The only explanation contained in paragraph [27] of his evidence is that, between phase 1 and phase 2, the applicant undertook a visit to site P and confirmed that the site was low-lying and therefore prone to flooding.
- [191] Curiously, the phase 1 report produced by URS explicitly considered the question of flood hazard, and at page 587 of Volume 2 of the produced documents, as part of the appendix A1 of the GIS layers, site P is shown to be unaffected by the flood extent in 2004. Even more interesting is the fact that Lots 6A (site G) and 7A (site J) are identified in that GIS constraints analysis as being Māori land (Lot 6A) and Māori reservation (Lot 7A) but this is given no particular attention in the overall constraints analysis.
- [192] Furthermore, contour maps produced to the Court, although not fully encompassing Area P, seemed to show it varying between 2-4 metres in height, compared with surrounding land contour of around 1.

[193] We cannot help but observe that of the 4 sites originally short listed by the Applicant (A, W, X and 8):

- (a) Site A is a well known historical site of cultural significance.
- (b) Two, W and X, are in areas of debris flow reach.
- (c) Site 8 is subject to Tsunami risk.

These matters should have been considered in preparing the original short list.

Was there a proper consideration of alternative sites?

[194] In practical terms the question for this Court is whether the Council properly considered alternative sites for a Treatment Plant. It is quite clear that initial reports were based upon the co-location of the Treatment Plant with the LAF. There is no transparency whatsoever as to how the Council came to identify site G, or in fact site P, for a Treatment Plant.

[195] There was no general robust comparative analysis of sites, and in fact G was substituted for P again on the instruction of the Council. Looking at the relevant case law as discussed in *Minhinnick v Minister of Corrections*⁷² whether the Council has acted in an arbitrary or cursory way, or in *Takemore Trustees*⁷³ satisfactory or sufficient consideration of alternatives, we have concluded as a fact that there was not a proper consideration of alternative sites for a Treatment Plant. In the evidence before us that selection process appears to have been cursory and arbitrary.

[196] At an earlier time when alternatives were being considered, co-location of both the Treatment Plant and the LAF were clearly the focus. It appears the Council may have entered into the evaluation process with that in mind for site 8. How P was substituted for C in that instruction to URS is a mystery, as is its replacement with site G. There is a failure in the later report to properly identify the land as Māori land, and it is identified as private land, notwithstanding that the earlier report clearly identified it as Māori land with a Māori Reservation next to it.

[197] In *Queenstown Airport*⁷⁴ Whata J indicated that the greater the impact on private land, the more careful the assessment of alternative sites not affecting private

⁷² A 43/04

⁷³ W23/02

⁷⁴ [2013] NZHC 2347, paragraph [121] Wata J

land will need to be. This must be said to be particularly of moment when the land identified is Māori freehold land adjacent to a Māori reservation. In those circumstances we consider that the Privy Council's discussion in *McGuire v Hastings District Council* becomes of particular importance. Even if such an examination needs to be no more robust than that for ordinary freehold land, there is no doubt in our minds that in this case there was a cursory and arbitrary selection of site G, based apparently upon an indication from the Trustee that the site would be available for lease.

[198] We have already identified that the Council might properly reject a site because of difficulties with acquisition, or compulsory purchase in particular circumstances. There was no evidence given to us that Site P had become unavailable, or that many of other sites identified as A to Z or 1 to 12 were unavailable for whatever reason. During the course of this hearing Mr Burt advised the Court that Lots 10-12 were currently on the market for sale. According to Mr Burt this is on higher land, back from the immediate fore-dune area.

[199] It is clear from the GIS constraints analysis overlay that this land was Māori land and was next to a Māori reservation (in terms of that overlay). In the absence of any proper explanation as to how the sites identified on Annexure B were narrowed down to the five the subject of the original investigation, or the substitution of G for P, there is no clear evidence before us as to any robust or clear consideration of alternative sites prior to the decision to notify the Treatment Plant activity on Lot 6A by way of designation.

Conclusions on alternative sites

[200] Ms Hamm's primary position was that, whether or not these alternatives were considered is irrelevant as there was no obligation under s171 to do so. We have already discussed this matter in brief terms. Given our factual conclusions, a few things to us are clear:

- (a) there was not a robust and contestable consideration of alternatives, especially for a standalone Treatment Plant, and site G (Lot 6A) was substituted at a late stage,
- (b) it was already identified as subject to constraints relating to Maori land; and

(c) at the time of the preparation of the application for consent, the Applicant acknowledged the potential for significant odour issues, and proposed that the relevant activities would be entirely covered and fully ventilated, through a biofilter system. There was still clearly potential for significant adverse effects and thus an odour management plan was proposed

We discuss the question of odour effects later, but s 171(1)(b)(ii) uses the [201] wording of significant adverse effects. This wording could either mean before or after mitigation conditions are applied. If before, then the evidence was clear that odour was a potentially significant adverse effect. If it is to be assessed after all mitigation are applied then there is a difficulty in knowing at the time of the application whether alternatives need to be considered. The judgement as to whether the conditions adequately address the effect, so that they are no longer significant, will always be assessed by the consent authority after the evaluation of alternatives has occurred. Thus it would vitiate the requirement to consider alternatives. Given that effects include potential effects, we have concluded that the obligation arose in this case in respect of the Treatment Plant and the LAF to consider alternatives prior to seeking consent. Whilst this seems to have occurred for the most part in respect of the LAF site (cultural issues being an obvious point for further discussion below), the late substitution of site G (Lot 6A) and the exclusion of the majority of alternative sites leads to a considerable issue for the Applicant in relation to the Treatment Plant.

Do the reports as a whole show adequate consideration of alternatives?

[202] Clearly, as we have already noted, ongoing consideration of alternatives can occur, but in circumstances where that might lead to the selection of another site, as in this case, it does not appear that the process that the Applicant adopted is curable before this Court.

[203] We have carefully considered whether, if the matter is looked at on a holistic basis, we can conclude that there has been adequate consideration of alternative sites, even if not in a well-documented fashion. Various sites have been considered and excluded, including areas within the township, site A being the District Council reserve at the western end of Matatā, and for a Treatment Plant at site 8. We also need to keep in mind that the District Council has also acquired an interest in Lot 6A since the time of the notification, and thus would be able to undertake the works on the basis of resource consent. However, we are still left with only a limited understanding of why Lot 6A was chosen over any of the possible alternatives. Thus

we find overall that the review of alternatives was cursory and the site selection was arbitrary.

Treaty principles when using Māori land

[204] Mr Enright contended that, because the Applicant and / or the Consent Authority delegated the consultation process to the Trustees of Lot 6A, they did not adequately consult with the owners. As a result of this inadequate consultation process, Mr Enright submitted that the District Council was not in a position to adequately have regard to the principles of the Treaty of Waitangi, particularly the principle of partnership. The District Council thus breached the principles of the Treaty, which are referred to in s 8 of the Act and in the NOR application objectives. This submission appears to relate to both its role as the Applicant and the Consent Authority.

[205] Mr Enright also referred to the principle of rangātiratanga which together with the principle of partnership raise the following duties:

- (a) To be well informed;
- (b) To actively protect lands and taonga;
- (c) To act with the upmost good faith and reasonableness; and
- (d) To promote Māori development.

[206] Considerable evidence was then given in relation to the effects on the beneficial owners and others in respect of the potential establishment of Papakainga on Lot 6A. For current purposes, the evidence was overwhelming, and uncontested, that it had always been intended that one day community facilities and Papakainga housing would be constructed on Lot 6A.

[207] However, despite inquiry by some beneficial owners around 15 years ago no construction has resulted. We also understand that the land has been moribund, given that it is leased to Mr Burt (a neighbour) for the cost of the rate payments and thus has no return to the Trustees or beneficial owners. The position of the Trustees is that by entering into the agreement to lease this land they not only release a sum of money, which can be used in respect of the property, but also provide essential infrastructural facilities at no cost to the Trustees or the beneficial owners. Thus there is a difference

 $^{^{\}hat{7}\hat{5}}$ Application, common bundle, Vol 1, Tab 1, page 103 & 104

between the Trustees and the beneficial owners as to whether or not the placement of the wastewater Treatment Plant on this site will enable or disable the establishment of Papakainga housing.

[208] In addition to that, the Komiti and the Raupatu Trust identified issues in relation to both odour and visual impact, which they say are significant and are not adequately addressed by the proposed conditions. We consider these matters below in more detail.

[209] In our view, if regard had been given to the principles of the Treaty of Waitangi, and in particular the duty of active protection of taonga (in this case Māori land) a more fulsome process, including identifying the full history of these blocks, should have identified the cultural and Treaty constraints associated with Lot 6A. This was not done to any transparent degree, as we have had to piece this history together ourselves from the evidence.

[210] The issue is highlighted in *King Salmon* where the Supreme Court stated that the obligation in s 8 will have procedural as well as substantive implications, which decision-makers must always have in mind. As we noted above, we consider that all that was done in terms of consultation with the owners was reasonable and or cured by this appeal process.

[211] What is not clear to us is why the Applicant, knowing the land was Māori land situated next to a Māori reservation, did not undertake a more review of its site selection process, given that even on its own matrix the site had cultural constraints. Thus we agree that the approach to site selection adopted by the Applicant raises issues regarding s 8 in failing to adequately consider the cultural constraints and Treaty principles.

The RMA provisions in relation to the Application

[212] In relation to the applications for regional consents, these are discretionary and s104 guides their consideration:

104 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—

⁷⁶ Environment Defence Society Inc v The New Zealand King Salmon Company Ltd [2014] NZSC

- (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.
- [213] This will be the focus of consideration of resource consents for both sites.
- [214] In relation to the discharge to land consents at the LAF, s105 and 107 are also relevant:

105 Matters relevant to certain applications

- (1) If an application is for a discharge permit or coastal permit to do something that would contravene <u>section 15</u> or <u>section 15B</u>, the consent authority must, in addition to the matters in <u>section 104(1)</u>, have regard to—
 - (a) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and
 - (b) the applicant's reasons for the proposed choice; and
 - (c) any possible alternative methods of discharge, including discharge into any other receiving environment.
- (2) If an application is for a resource consent for a reclamation, the consent authority must, in addition to the matters in <u>section 104(1)</u>, consider whether an esplanade reserve or esplanade strip is appropriate and, if so, impose a condition under <u>section 108(2)(g)</u> on the resource consent.

107 Restriction on grant of certain discharge permits

- (1) Except as provided in subsection (2), a consent authority shall not grant a discharge permit or a coastal permit to do something that would otherwise contravene <u>section 15</u> or <u>section 15A</u> allowing—
 - (a) the discharge of a contaminant or water into water; or
 - (b) a discharge of a contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water; or
 - (ba) the dumping in the coastal marine area from any ship, aircraft, or offshore installation of any waste or other matter that is a contaminant,—
 - if, after reasonable mixing, the contaminant or water discharged (either by itself or in combination with the same, similar, or other contaminants or water), is likely to give rise to all or any of the following effects in the receiving waters:
 - (c) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials:
 - (d) any conspicuous change in the colour or visual clarity:
 - (e) any emission of objectionable odour:
 - (f) the rendering of fresh water unsuitable for consumption by farm animals:

- (g) any significant adverse effects on aquatic life.
- (2) A consent authority may grant a discharge permit or a coastal permit to do something that would otherwise contravene section 15 or <u>section 15A</u> that may allow any of the effects described in subsection (1) if it is satisfied—
 - (a) that exceptional circumstances justify the granting of the permit; or
 - (b) that the discharge is of a temporary nature; or
 - (c) that the discharge is associated with necessary maintenance work—
- and that it is consistent with the purpose of this Act to do so.

 (3) In addition to any other conditions imposed under this Act, a discharge permit or coastal permit may include conditions requiring the holder of the permit to undertake such works in such stages throughout the term of the permit as will ensure that upon the expiry of the permit the holder can meet the requirements of subsection (1) and of any relevant regional rules.
- [215] These provisions were not the focus of the parties' cases, and many aspects are subsumed within our broader discussion of effects and the relevant plans. However, both sections are mandatory and require us to evaluate the matters in 105(1)(a) to (c). As will be seen, the receiving environment includes the nearby surface drains, the ORC and the Tarawera River, as well as the coastal outlet and foreshore. We also discuss potential environmental offsets, including riparian planting, wetland creation and retrieval of land for dairying.
- [216] However, we do not consider that any party was suggesting that any of the criterion s 107(1)(c) to (g) was likely in relation to the LAF. It appears that the Applicant may have assumed that compliance with the s 107(1)(c) to (g) criteria meant s105 was not relevant. There is no basis for that assumption, and although we accept the application at the LAF does not give rise to concerns under s107, it still requires assessment under s104 and s105 for the discharge to land where it makes its way into water under s15(1)(b).
- [217] There is no discharge of contaminants to land or water from the Treatment Plant, and accordingly s107 does not apply.

[218] Section 171 provides:

171 Recommendation by territorial authority

- (1) When considering a requirement and any submissions received, a territorial authority must, subject to <u>Part 2</u>, consider the effects on the environment of allowing the requirement, having particular regard to—
 - (a) any relevant provisions of-
 - (i) a national policy statement:
 - (ii) a New Zealand coastal policy statement:

- (iii) a regional policy statement or proposed regional policy statement:
- (iv) a plan or proposed plan; and
- (b) whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work if—
 - (i) the requiring authority does not have an interest in the land sufficient for undertaking the work; or
 - (ii) it is likely that the work will have a significant adverse effect on the environment; and
- (c) whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and
- (d) any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the requirement.
- (2) The territorial authority may recommend to the requiring authority that it—
 - (a) confirm the requirement:
 - (b) modify the requirement:
 - (c) impose conditions:
 - (d) withdraw the requirement.
- (3) The territorial authority must give reasons for its recommendation under subsection (2).
- [219] This section requires us to consider effects having particular regard to a number of matters. In particular, s 171(1)(b) seems to require us to consider these matters in relation to effects. In relation to odour, this requires the Court to not only consider odour as an effect under s104 in relation to the Regional Air Discharge Consent, but whether the adequate consideration of alternatives has led to any effects in respect of the designation.
- [220] Importantly, both the discretionary applications and designation consideration is subject to Part 2 of the Act. Furthermore, both must consider the effects of the activity. We conclude nothing turns on the use of actual or potential effects in s104 compared to effects in s171. The s 3 definition of effects includes actual or potential effects, and accordingly is redundant in s104.

Reasonable necessity

[221] A corollary to alternatives in relation to the designation is s 171(1)(c) — whether the designation is reasonably necessary to achieve the objectives of the work. Given the stated overall project objective was stated in 2.1.5.1 of the AEE as:

Overall Project Objective

To work in partnership with the community and Tangata Whenua to achieve a sustainable, long term solution for the collection, treatment and disposal of Matatā's wastewater. The solution shall achieve a high level of public health protection, safeguard the life-supporting capacity of natural

resources, be the best practicable option, and meet the following objectives.

[222] Although referred to in the notice as 8.17 of the A.E.E this refers back to 2.1.5.1.

[223] The objectives are as follows:

Environmental Objectives

- To provide the natural character, indigenous biodiversity and visual amenity of the coastal environment.
- To ensure that the water quality of the Tarawera River is not degraded through the land application of treated wastewater.
- To enable the appropriate disposal of treated wastewater by land application rather than discharge to coastal waters.
- To ensure that the visual impact on the environment of the Wastewater Treatment Plant and Land Application Field is minimised.
- To ensure a high level of compliance with recreational, ecological and water quality standards and guidelines, and Regional and District Planning requirements.
- To promote the efficient use and development of natural and physical resources, and if appropriate the sustainable reuse of wastewater products.
- To avoid, remedy or mitigate significant adverse effects on natural and physical environments including communities within those environments.

Social Objectives

- To ensure that the Matatā Wastewater Scheme achieves the greatest practicable protection of public health.
- To ensure the Matată Wastewater Treatment Scheme supports development and growth while continuing to meet the needs of existing residents and wider community including their recreation activities in the area.
- To work in partnership with the community, Project Control Group and key stakeholders to achieve a good understanding of the Matatā
 Wastewater Consents Project, so as to enable genuine and effective consultation
- To achieve more sustainable wastewater management for the Matatä Community.

Economic Objectives

- To maximise the cost effective use of the Ministry of Health subsidy and BoPRC grant.
- To provide an economically sustainable future Wastewater Scheme which will match the anticipated growth in the area, - i.e. affordable for both the existing and growth communities and businesses now and in the future.
- To promote outcomes that ensure sufficient flexibility to adopt appropriate technology and more sustainable solutions in the future, including treated wastewater reuse, where they provide more effective solutions.

- To apply appropriate technology that will protect public health and meet environmental standards and tangata whenua and community aspirations while achieving lowest whole of life costs.
- To meet the current and future needs of the community in a way that is most cost effective for households and businesses, as required by the LGA.

Tangata Whenua Cultural Objectives further being developed in consultation associated with Cultural Impact Assessment (CIA)

- To recognise and provide for tangata whenua as kaitiaki.
- To work in partnership with tangata whenua to share knowledge and achieve a good understanding of this Project, so as to enable genuine and effective consultation, engagement and participation.

Technical Objectives

- To promote outcomes that ensure sufficient flexibility to adopt new appropriate technology and more sustainable solutions in the future, including treated wastewater reuse where that provides more effective solutions.
- To provide a Scheme that can be maintained and efficiently operated to best practice standards.
- [224] In particular we note that the Tangata Whenua Objective includes enabling genuine and effective consultation.
- [225] These objectives were not so much disputed in description but their realisation. It was argued:
 - (a) There was not a partnership with tangata whenua. The use of this land was not appropriate or in accordance with partnership principles.
 - (b) No evidence of public health protection, at least in a quantifiable way. Odour from the Treatment Plant was a public health issue.
 - (c) The Treatment Plant did not sustain the Papakainga potential of Lot 6A or Lot 7A. The LAF did not mention the existing water quality of the ORC.
 - (d) There was no genuine effective consultation with the beneficial owners of Lot 6A or Lot 7A.
 - (e) Mr Harris was of the view that septic tanks remained the best practicable option for waste treatment at Matatā.
- [226] In short, the Komiti contended that there was no reasonable need to place this Treatment Plant on Lot 6A, particularly if it had the adverse effects contended. Thus, this argument turns on a connection between alternatives and effects. This is a substantive or evaluative test <u>reasonable</u>, involving questions of appropriateness and balance relevant to our overall evaluation under Part 2.

[227] We now turn to consider the Treatment Plant and its effects.

The Wastewater Treatment Plant Application and Lot 6A

- [228] The Wastewater Scheme consists of three main components, namely:
 - (a) Individual property low pressure grinder pump systems (LPGP) and the pressure sewer collection and wastewater conveyance system.
 - (b) The wastewater treatment system and conveyance to the LAF.
 - (c) The treated wastewater LAF.
- [229] Each property, including dwellings, businesses, the camp ground and marae will have its own Grinder Pump system. This consists of an on-site polyethylene or fibreglass chamber with a single grinder pump in it, a piped connection from the house, a small diameter pumping main to the street and various valves and electrical controls. Chambers are constructed mainly below ground, with the top of the access lid typically 100mm above ground, and provide a minimum of 24 hours storage. System design provides very limited opportunity for stormwater to enter the system, which reduces peak flows to the Treatment Plant. The Grinder Pumps will have no discernible odour.
- [230] The Council will construct and own the Grinder Pumps, and be responsible for system operation and maintenance, including pump replacement. Electricity costs will be the responsibility of the property owner and the Applicant's consumption expected in the range of \$20.00-\$50.00 a year for individual households. Owners will be responsible for monitoring system alarms and for any system misuse or wilful damage.
- [231] From the property boundaries, ground up wastewater will be conveyed to the Treatment Plant by 50 to 100mm welded polyethylene pipes and no booster pumping is expected to be required.
- [232] The Treatment Plant will be located as shown on Annexure C. It will be designed and constructed under a design, build and operate contract to meet performance standards specified by the Applicant and the conditions of any designations and resource consents granted. The Treatment Plant will be provided in two stages to serve an ultimate population of approximately 2,200. It will be designed for biological nitrogen removal and with the provision to add additional treatment to

meet more stringent nutrient removal requirements, and to provide UV disinfection to improve bacterial and virus removal, if shown to be necessary in the future.

[233] Key components of the Treatment Plant will be:

- An inlet storage tank or basin to manage flows into the Treatment Plant, which provides flexibility to store flows for a maximum of two hours in the event of a localised power failure at the Treatment Plant, or other emergency;
- An inlet works to remove grit and large solids, with facilities to store and take solid materials off site;
- A biological treatment stage followed by settling to remove sludge solids;
- An aerated sludge storage tank;
- A sludge dewatering facility, with dewatered sludge transported in sealed containers to Kawerau;
- A filter to remove finer solids from the treated wastewater prior to discharge to the LAF;
- Two treated wastewater holding ponds, one of which could be used to store partially treated wastewater in an emergency;
- A range of mechanical, electrical and flow metering equipment, including pumps and provision to connect and/or install standby power generation;
 and
- A treated wastewater pumping station and an approximately four-kilometre long and approximately 150mm-diameter treated wastewater pipeline to the LAF.
- [234] The Treatment Plant will be fully covered and air extracted and treated in bio filters.
- [235] A 20 meter buffer area will be provided around the Treatment Plant.
- [236] Access to the Treatment Plant will be via a designated road from the existing Māori road.
- [237] Approximately 10,000m³ of earthworks will be required to construct the Treatment Plant and access road from Thornton Road to the Treatment Plant. As the

design of the works has not been completed, the actual quantity of earthworks is not known, meaning that any necessary resource consents will need to be applied for at a later time.

The physical features of Lot 6A and the locality

[238] As we noted already earlier in this Decision, the Tarawera and Rangitaiki Rivers originally flowed past Matatā and exited in the area now known as Clem Elliot Drive at the western end of town. Subsequent to the creation of the Cuts and the Rangitaiki Drainage Scheme, the Matatā reach of the river has been closed off, even from the Tarawera. Now, through recent remedial work for the debris flow, it is part of a lagoon system and wetland from the Awateririki Stream towards the Tarawera from which it is cut off. This has meant that the Lot 6A site itself gives the impression of being sand dune near the foreshore, whereas in fact it is landward of the now-Matatā Lagoon, with another fore-dune beyond that to the north that fronts the sea. We attach an overhead photograph of the site with the Treatment Plant identified on it Annexure C.

[239] State Highway 2 has been constructed on the edge of the lagoon, and Lot 6A rises sharply from that road (which is around 3m above sea level (ASL)) to a peak of 13m ASL. Behind those peaks the area flattens out into a relatively even area for around 100m before dropping down an escarpment around 2-4m to the back part of Lot 6A which is approximately 8-10m ASL. The rolling sand dunes in the front half of Lot 6A are contrasted to the more regular agricultural land at the rear of Lot 6A.

[240] This dune formation carries on from Matatā Township itself and the Rangitihi Marae and Urupa are built on the same fore-dune complex and overlook the rear of Lot 6A. The formation continues through the Burt land, Lot 6A and Lot 7A and then further to the east to the Tarawera River. Behind this dune formation the land drops and is then undulating, regular farmland. It appears to be the edge of the Rangitaiki Swamp in this vicinity. This land is still somewhat higher than other portions of the plain, which seem to be closer to 1-3m than 6m, according to contour data. The Tarawera River and Cut is over a kilometre to the east, and none of the other streams in the area appear to flow through Lot 6A. None of the site is within the flood plain, and we understand that the water table is in general at around less than 2m ASL, and thus well below the level of this property.

[241] Lot 6A itself is a bare site, in pastoral grasses, and shows signs of being irregularly grazed. It is fenced, but beyond this there is little in the way of improvement, trees or other features to the property. To the immediate west is a fenced strip of land, which we have identified as the Māori roadway. Beyond that is land belonging to the Burts, which looks very similar to the subject site and is farmed in the same way. Behind 6A is further land owned by Mr Burt and farmed. Although somewhat slightly lower-lying than the subject site, it still appears to be above the water table and highly productive land. The same can be said of the land to the east of the site; including the area where Mr Burt has a milking shed, barns and farm housing.

[242] To the north of this fronting the State Highway next to Lot 6A, is Lot 7A. The Öniao Marae, which is in fairly poor condition showing little sign of use. There is a house on the eastern side of this property accessed, as far as we can see, from the Burt's tanker track. There are subdivided properties and housing further to the east on the top of the dune ridge overlooking the lagoon and towards the river.

[243] Although State Highway 2 in this vicinity is open road, the noise on Lot 6A is significantly attenuated by the initial dune height, and is not noticeable from the rear of the site, at least at the time we were visiting. There are significant views from Lots 7A and 6A towards the south, particularly towards Mt Edgecumbe (Pūtauaki) and the hills around Matatā. Nevertheless there are partial sea views from the dune ridge on the front of both lots, and it is apparent that other houses on this ridge have been built to take full benefit of the sea, lagoon and river views. The dune ridge prevents northerly views from the rear of Lots 6A and 7A.

Beyond the State Highway, which provides in a broad sense access to these properties, there seems to be little in the way of council infrastructure. It is unclear whether there is water supply, but there is clearly no wastewater treatment to the properties beyond the town boundary. The access to the site from State Highway 2 directly does seem problematic, given that it is a 100km/h zone and there are very steep rises onto the property. Currently there is no vehicular access directly to Lot 6A, and Lot 7A uses an oblique angle to the State Highway – Thornton Road. Improvements to the state highway, to widen it to allow a pull-off area and to turn into site, are likely to be required.

[245] The Māori roadway on the site has not been developed, but appears as a paper road on the title to Lot 6A.⁷⁷ The relevant Native Land Court minutes of 1913

⁷⁷ LTO SA275/265

recording the partition of the block into Lots 6A, 6B and 6C indicate that the roadway was laid off at the same time. However, no formal order appears to have been drawn for the roadway. Roadways such as this, by virtue of various statutes concerning Māori land, could be laid out upon partition for the benefit and use of the owners of the new parcels of land created. They were restricted to such owners and/or their invitees unless declared by proclamation to be a public road. No record of such a proclamation being made has been referred to us. Where there has been no proclamation, they are often referred to as Māori roadways. Given that the Applicant now has a lease, there should be no issues raised regarding rights of access over this roadway.

There was some dispute as to what development is permitted on the Māori roadway, which is currently unformed paddock. The Applicant's view was that they could construct it as road without further consent. They did acknowledge that, in the event that the earthworks went over the Regional Council limits an earthworks consent would need to be obtained. It also appears that part of the formation would occur in the Coastal Environment overlay in the Regional Plan, which may also trigger a consent requirement, but the evidence was unclear on these matters. We note that the rear portion is already used as a farm access road by Mr Burt, and the formation of this portion of the road on the rear farmland appears to be relatively straightforward.

[247] We do acknowledge the point raised by Mr Potter in his submissions and questions to witnesses, that the front portion of the site, over the ridge dunes, rises very steeply. Again, no dimensions were given, but it appears that the peak is within 50-60m of the road, and the maximum gradient permitted under the plan is some 1:10. The question of the earthworks required to construct this road, and whether they required consent was unresolved at the hearing. It is certainly not part of the application for consent, and Mr Potter argued that such a consent should have been included within this suite so that the full effects of the activity could be considered.

[248] We acknowledge that the front portion of Lot 6A is within the coastal environment, and accordingly we accept that the entry to the Māori roadway would be within the coastal environment and therefore considerations under the NZ Coastal Policy Statement would arise. Any consents necessary have not been sought for this

³⁰ Thic

⁷⁸ Māori Land Court Record - 59 Rotorua Minute Book 144 -147 and see in particular Folio 147

⁷⁹ See generally Māori Land Court Record — *Butler v NF Fraser & Co Ltd - Mangawhati 3B1 & Takahiwai* (2013 Chief Judge's Minute Book) 59

aspect of the activity, nor can we assume that consent to enable access along the Māori roadway, if required, would necessarily be issued.

[249] It follows logically that we should now discuss, briefly, the access road (subject of a NoR) from the Māori roadway to the proposed wastewater Treatment Plant. Annexure C shows the designations on Lot 6A, including the access way.

[250] The wastewater Treatment Plant is situated on the eastern side of the site because of a fault line that passes through the site. The exact reasons for the access road's placement part way through the rear of Lot 6A were not explained. The Applicant seemed to accept that an alignment along the southern boundary would have less impact upon use of 6A. Although Mr Burt did not object to this course of action, he did note that it was lower-lying, and any liquid escaping from the operations of the plant might pond on his property.

[251] The nearest house to the Treatment Plant site is the Burt farmhouse, which is around 200m from the boundary. Mr Burt's home itself is off State Highway 2, near the Māori roadway, and is around 220m from the site. A map showing the site and the surrounding properties is annexed hereto as **Annexure D** (being Figure 20 from the common bundle). As can be seen, Öniao Marae is also around 200m, and the Ngāti Rangitihi urupa and other residences are beyond 300m, with the Ngāti Rangitihi Marae and nearest residential homes in Matatā itself being beyond the 400m radius shown on **Annexure D**.

[252] For current purposes it would be useful to note that a core issue is the likely adverse effects on any buildings within the 100 and 140m radius, which would include the majority of Lot 6A, part of Lot 7A and some Burt land, all of which is currently used for farming.

The relationship of the site to the coastal environment

[253] The regional plan shows the coastal environment as terminating on the escarpment part way through Lot 6A and adjacent properties — that is probably in the region of 30-50m north of the Treatment Plant and follows the step in the contour visible in Annexure C in the approximate position of the fenceline. We have considered carefully the arguments around coastal environment and the various provisions of the plan.

[254] We acknowledge immediately that there is something arbitrary in identifying a line for the coastal environment, but we acknowledge that the NZCPS requires such an approach. We are unanimous that there is a step-wise change in the nature of the environment from the top of the dunes on 6A to the area of the Treatment Plant. We agree that the area of the dunes is within the coastal environment, whereas the area to the rear is farming in nature and more properly located within the rural area, although it does have some coastal influences. Accordingly we are unable to see any problem in the Regional Council's approach to the coastal environment and adopt that line for the purposes of this case.

Cultural Landscape Issues

[255] Before discussing the potential effects of this proposal, we consider the cultural landscape and issues associated with this location. We note the background to the cultural landscape of this location has been fully canvassed above. However, it is important to reiterate that Lot 6A and Lot 7A are associated with owners and beneficiaries who, through their various genealogical connections, hold these Māori land blocks as taonga and that in the case of Lot 7A it remains the last coastal block of land for Ngāti Tūwharetoa that is available at this time for development.

[256] According to Mr Marks and Mr Tamihana, Trustees of Ōniao Marae, they also consider Lot 7A is pivotal in their role as kaitiaki of Ngāti Tūwharetoa's takutaimoana (coastal zone).

[257] The cultural issues asserted from this landscape include:

- (a) The need to have regard to the integrated nature of the Māori world view. We note Maanu Paul's statement "Noku te Ao, ko te Ao ahau." Loosely translated it means "I am the world and the world is me." That world is translated through the relationships that Māori have with the sky father and earth mother from whom they determine their identity as tangata whenua. We understand him to believe that the land Māori acquire by discovery, conquest and occupation cements that relationship with the natural world.
- (b) A concern for the mauri of the land and the mana or authority of the tangata whenua of both Lot 6A and Lot 7A. This concern relates to the processing of human waste on the land without the necessary ceremonial removal of tapū associated with that waste. When the mauri is affected in

⁸¹ Mr Potter, Evidence-in-chief, Appendix D, page 1137

this way, it was claimed that this would nullify the use of the land for Papakainga. That is essentially because human waste, not generated by the owners, is being processed on the land and thus the earth of the ancestors is being desecrated.

- (c) Impacts of any earthworks on waahi tapu identified in the CIAs and by witnesses before us.
- (d) Impacts on places such as pito (umbilical cords) and taonga burial areas. There was some suggestion that personal items of Tüwharetoa were buried on Lot 6A.
- (e) Proximity to Rangiaohia (Ngāti Rangitihi) Marae and Ōniao Marae, with particular concerns regarding views, sewage overflows/leaks and odour and effects on manuhiri (visitors). The evidence was this could have consequences for the esteem of the marae and the people.
- (f) A reduction in the mana of the ahikaa as kaitiaki to look after the land as a taonga, so that it may be passed onto future generations with the mana o te whenua intact. We accept that mana is an issue and that it goes to the heart of the relationship of the tangata whenua and the owners of Lot 6A with their ancestral lands as well as their role as kaitiaki.

[258] We agree with Mr Mikaere that most issues raised in the evidence can be provided for in conditions. In light of the archaeological evidence produced and the conditions that could be imposed, including the Accidental Discovery Protocol to provide for Koiwi, Taonga Tuturu, Waahi Tapu and Waahi Taonga. We conclude that adequate provision can be made to protect waahi tapu. We could also require of the Applicant that the Trustees of the block and the Komiti be given the right to remove any material on Lot 6A prior to excavation works commencing. We further note that iwi see the benefit of a reticulation system, even if they have not openly supported this application.

Use of Lot 6A and Lot 7A for Papakainga

[259] We have earlier discussed the historical situation in relation to land in this area, and the special relationship of the tangata whenua with this area. We also note that Lot 6A and Lot 7A are remnant of lands utilised by Ngāti Awa, Ngāti Tūwharetoa and Ngāti Rangitihi. Lot 7A is the last vestige of lands formerly held by Tūwharetoa ki Taupo and now set aside for the benefit of all Tūwharetoa peoples which would include Tūwharetoa ki Kawerau - Bay of Plenty. As we have already

discussed, there is different ownership to Lot 6A and Lot 7A. Nevertheless, we acknowledge that they seem to have been seen and utilised by a section of the ahi kaa as a unit.

[260] We also acknowledge that Lot 6A appears previously to have had where, at least in the forward portion, on or near State Highway 2. There was also discussion of Lots 6A and 7A being utilised for gardens. Given that these were both much larger lots at one time, it is unclear what previous uses relate to the retained land.

[261] The unanimous view of all the witnesses we heard from is that it has been a long-held objective of the land owners to utilise this land for community facilities and Papakainga. The Trustees hold the same view, and the issue between the Trustees and the Komiti appears to be how best to achieve that goal given the current use of the land and the lack of income. Although various investigations into development have occurred, there is no longer any house on Lot 6A, although some witnesses recall one in the area of Lots 6A and 7A until the 1950s. We turn now to cultural issues, visual effects and the issue of odour. This we discuss further below and when we consider Part 2 issues.

Cultural effects on the prospects of Papakainga

- [262] Various witnesses argued that the presence of the plant, and the potential for odour events, had a cultural impact that made the site unacceptable for Papakainga. This nullifying cultural effect, it was contended, will result in no one being willing to live on either Lots 6A or 7A, once it is realised what Lot 6A is being used for.
- [263] While we accept that this potential effect is important we also have cultural evidence from Mr Mikaere and Mr Olsen which indicates that appropriate measures may be taken to overcome the cultural distaste obvious in the evidence before us, whilst still providing for the relationship of the owners and iwi with this ancestral land.
- [264] We note that the Treatment Plant itself does not discharge to ground. Accordingly, the alleged cultural offence is mitigated somewhat by this proposal as there will be no discharge from the Treatment Plant unless there is a major failure. We conclude the prospects of a leak are very low and would be detected and remedied immediately. This might include failure of either the piping or the tanks, which is likely to occur only in an extreme event. Any minor leaking is a matter that should be