

Before the Board of Inquiry  
Waterview Connection Project

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*in the matter of:* the Resource Management Act 1991

*and:*

*in the matter of:* a Board of Inquiry appointed under s 149J of the Resource Management Act 1991 to decide notices of requirement and resource consent applications by the NZ Transport Agency for the Waterview Connection Project

Reply on behalf of the **NZ Transport Agency**

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REFERENCE: Suzanne Janissen (suzanne.janissen@chapmantripp.com)  
Cameron Law (cameron.law@chapmantripp.com)

**Chapman Tripp**  
T: +64 9 357 9000  
F: +64 9 357 9099

23 Albert Street  
PO Box 2206, Auckland 1140  
New Zealand

www.chapmantripp.com  
Auckland, Wellington,  
Christchurch



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## REPLY ON BEHALF OF THE NZ TRANSPORT AGENCY

May it please the Board

### INTRODUCTION

- 1 This Reply will address various issues raised during the hearing:
  - 1.1 By the Board of Inquiry (*the Board*); and
  - 1.2 By submitters in their evidence or representations presented during the hearing.
- 2 So as to avoid repetition, this Reply will focus on those issues not already covered by the NZ Transport Agency's (*the NZTA*) Assessment of Environmental Effects (*AEE*), evidence, opening submissions or responded to in questions during the hearing.
- 3 As a preliminary comment, it is clear that various aspects of the NZTA's Project have undergone considerable advance and development during the course of this hearing. This is reflected, for example, in the ongoing updates and iterations of the Waterview Connection Project's (*Project*) proposed designation and consent conditions, which reflect numerous changes agreed by the NZTA in response to issues raised by the Board itself, by the Board's section 42A experts, by submitters and by submitters' experts during caucusing. A "Reply Set" of conditions is now provided<sup>1</sup> and will be more specifically addressed later in this Reply.
- 4 The various expert caucusing sessions which occurred immediately prior to and during the course of the hearing have also proved very useful in clarifying issues, reaching agreement on condition wording and narrowing the issues in dispute. These are also addressed further in this Reply.

### Outline of Reply

- 5 This Reply will be structured as follows:
  - 5.1 Summary of key effects areas and expert conclusions;
  - 5.2 Issues raised by the Board;
  - 5.3 Issues common to various submitters;
  - 5.4 Individual submitter issues;
  - 5.5 General issues;

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<sup>1</sup> See Annexure A, a separately bound condition booklet.

5.6 Conditions;

5.7 Conclusions.

### **SUMMARY OF KEY EFFECTS AREAS AND EXPERT CONCLUSIONS**

6 This section of the Reply will provide a summary of the key effects of the Project which have been identified and subject to detailed technical assessment, evidence, expert review, caucusing and analysis.

#### **Section 42A expert reports**

7 The NZTA accepts that many submitters did not have the opportunity, time or ability to retain their own experts. However, in addition to the comprehensive expert evidence lodged by the NZTA, the Board itself commissioned expert advice on key effects areas.

8 Section 42A expert reports have been produced as follows:

<b>s42A reports</b>	<b>Date(s)</b>
Air Quality (Jayne Metcalfe/Rachel Nicoll)	22 December 2010, 14 January 2011 and 25 February 2011
Noise and vibration (Malcolm Hunt)	December 2010
Marine ecology (Brian Stewart)	November 2010
Freshwater ecology (Gregory Ryder)	12 November 2010
Groundwater and Settlement (PI Kelsey and AH Nelson)	23 December 2010
Planning (Murray Kivell/Paul Thomas)	7 December 2010, 20 December 2010 and 7 March 2011

9 Those reports canvassed the relevant issues and thoroughly tested the findings and conclusions of the NZTA's experts. Various issues were challenged, resulting in further development on some Project matters (e.g. height of the ventilation stacks) and further analysis and refinement of the proposed conditions.

10 Section 42A authors also participated in subsequent expert caucusing sessions.

11 As a result of this process, submitters on the Project should be assured that the NZTA's technical assessments and evidence have indeed "been put under the microscope" in the course of this Board hearing process.

### Caucusing

- 12 There have been over 20 joint expert caucusing sessions which have been very constructive and productive. A list of the relevant caucusing reports is noted below:

<b>Expert Caucusing Joint Reports to the Board of Inquiry</b>	<b>Date</b>
Avifauna: Avian Conditions	21 January 2011
Freshwater Ecology	27 January 2011
Herpetofauna	27 January 2011
Air Quality	28 January and 28 February 2011
Coastal Processes	28 January 2011
Marine Ecology	28 January and 10 February 2011
Vegetation	28 January 2011
Stormwater	2 February 2011
Noise (construction and operational)	2 February and 17 March 2011
Groundwater and Ground Settlement	2 February 2011
Land and Groundwater Contamination	2 February 2011
Transport	3 February 2011
Landscape and Visual Design	4 February 2011
Social Planning	4 February 2011
Open Space	4 February and 21 March 2011
Planning	8 March and 16 March 2011

- 13 A brief summary of key expert findings in relevant effects areas is now provided.

#### Avifauna

- 14 The joint expert caucusing report on avian issues<sup>2</sup> records the avian experts' agreement that, given the presence of Banded Rail on Traherne Island, vegetation clearance on that island should only take place outside the breeding season of September to October. Avian Condition A.5 has been amended to reflect this agreement.
- 15 The avian experts confirmed that no avian conditions remain unresolved, and no significant issues were raised by submitters during the course of the hearing.

<sup>2</sup> Expert Caucusing Joint Report to the Board of Inquiry – Avifauna: Avian Conditions, 21 January 2011.

### **Freshwater Ecology**

- 16 The joint expert caucusing report on freshwater ecology<sup>3</sup> recorded agreement on all freshwater issues. Specifically the relevant experts (including those appearing on behalf of the Friends of Oakley Creek) agreed:
- 16.1 To amend proposed conditions to link groundwater and freshwater monitoring;
  - 16.2 To amend proposed Streamworks condition STW.1 to reference the Oakley Creek Realignment and Rehabilitation Guidelines;
  - 16.3 To require replication of the existing Stoddard tributary 'waterfall';
  - 16.4 On the frequency of freshwater ecological monitoring; and
  - 16.5 To record that the realignments necessary for highway construction are to be rehabilitated separately to the Project's SEV off-set mitigation.
- 17 The Freshwater caucusing statement records that "No Freshwater Conditions are unresolved".

### **Herpetofauna**

- 18 The joint expert caucusing statement on herpetofauna likewise recorded agreement on all lizard issues.<sup>4</sup> The experts considered that proposed Herpetofauna condition H.1 should be amended to require that lizard habitat enhancement (including now pest control) at population release sites, should occur a minimum of one month before and three years after release.
- 19 Otherwise the herpetofauna caucusing statement recorded that no issues remain unresolved.

### **Air quality**

- 20 Two joint expert caucusing reports have been lodged with the Board (as noted above), following at least four caucusing sessions. In their 28 February 2011 report, the experts advised that "all technical air quality matters have been resolved and are no longer disputed".<sup>5</sup> This effectively covers such matters as separation

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<sup>3</sup> Expert Caucusing Joint Report to the Board of Inquiry – Freshwater Ecology, 27 January 2011.

<sup>4</sup> Expert Caucusing Joint Report to the Board of Inquiry – Herpetofauna, 27 February 2011.

<sup>5</sup> Updated Expert Caucusing Joint Report to the Board of Inquiry – Air Quality, 28 February 2011, at paragraph 5. See also Gavin Fisher Second Supplementary Evidence, 28 February 2011, at paragraphs 5-9 and 23, reporting on outcome of the caucusing sessions. This caucusing came after Ms Petersen Supplementary Evidence, 24 February 2011 and the Updated Expert Caucusing Joint Report to the Board of Inquiry – Air Quality, 28 February 2011.

distances, filtration, vent stack height, compliance with air quality standards and guidelines, and the wording of the proposed air quality conditions.

- 21 Amongst other things, the experts have agreed on the following:
- 21.1 The establishment of three monitoring sites – one ambient site at an agreed location representative of the minimum separation distance between residential properties and the edge of sites; one ambient site near the existing Cowley Street site; and one tunnel portal site.<sup>6</sup>
  - 21.2 The use of a Peer Review Panel to review the ambient air quality monitoring programme and results.<sup>7</sup>
  - 21.3 The wording of conditions to resolve all technical monitoring and portal emission issues.<sup>8</sup>
  - 21.4 That from an air quality technical viewpoint, filtering the air from the vents will provide no significant benefits.<sup>9</sup>
  - 21.5 That, based on the results of further modelling, the use of 15m instead of 25m high ventilation stacks results in very minor changes to the ground level concentrations of all contaminants assessed. The effects of the vent discharges remain very low, for all contaminants, at all locations.<sup>10</sup>
- 22 The more recent s42A update report concluded that “dispersion modelling has demonstrated that a stack height of 15m is adequate”.<sup>11</sup> Likewise, the Auckland Council’s expert Ms Petersen has stated “...I accept that the conditions of consent can be changed to allow for a 15 metre ventilation stack rather than a 25 metre ventilation stack.”<sup>12</sup>
- Outstanding issues**
- 23 As noted in the 28 February 2011 caucusing report, the only areas where the experts did not reach agreement were in relation to construction effects and offsets.

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<sup>6</sup> Updated Expert Caucusing Joint Report to the Board of Inquiry – Air Quality, 28 February 2011, proposed condition OA.2, at paragraph 5 and Appendix 1.

<sup>7</sup> Ibid, proposed condition OA.8.

<sup>8</sup> Ibid, paragraph 5. Other air quality conditions had been agreed in the Expert Caucusing Joint Report – Air Quality, 28 January 2011, at paragraph 18.

<sup>9</sup> Expert Caucusing Joint Report – Air Quality, 28 January 2011, at paragraph 9.

<sup>10</sup> Gavin Fisher First Supplementary Evidence, 17 February 2011, at paragraphs 5–9.

<sup>11</sup> Updated s42A Air Quality Report, 28 February 2011, at paragraphs 63 and 102–103.

<sup>12</sup> Statement of Supplementary Evidence, 24 February 2011, at paragraph 4.1.

- 24 **Construction effects:** In this regard, the NZTA proposes a suite of Air Quality (AQ) conditions applicable to the construction period (AQ.1 to AQ.19), which it considers will adequately mitigate any potential adverse effects. These include effects associated with the two concrete batching plants and one rock crushing plant, and general road works.<sup>13</sup> In addition, proposed condition CNV.9 requires the concrete batching plants to be fully enclosed.
- 25 The outstanding matter raised by Ms Petersen and the s42A authors is, with respect, a non-issue. They consider that more consent conditions relating to odour, dust and visible emissions (as outlined in the s42A Updated Air Quality Report)<sup>14</sup> should be included.
- 26 However, as conceded by Ms Petersen on cross-examination,<sup>15</sup> these conditions are already included in the Construction Air Quality Management Plan (CAQMP)<sup>16</sup> which, pursuant to the proposed conditions (AQ.1), must be implemented by the NZTA. It is submitted that there is no need to repeat such matters in the (already) lengthy conditions. Especially if it is simply because (as the s42A Updated Air Quality Report put it) other Auckland Council consents include such conditions. As concluded by Mr Gavin Fisher, NZTA's expert, adding these conditions to the condition suite is not necessary to prevent adverse effects.<sup>17</sup>
- 27 Further, if the s42A authors' position was based on their concern at the time their report was written that "we do not consider that the current draft CAQMP is enforceable", that is incorrect.<sup>18</sup> Proposed condition AQ.1 clearly requires the NZTA to "finalise and implement...the CAQMP...submitted with the application". That will provide the certainty of enforceability sought.
- 28 **Offsets:** While the experts are agreed that offsets can be a good air quality management tool, they do not agree whether they should be required for this Project.<sup>19</sup>

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<sup>13</sup> Three air discharge consents have been applied for relating to those activities. No other air discharge consent is required. See Memorandum of Counsel on behalf of the NZTA in response to Minute from the Board Concerning Important Matters, 6 February 2011, Issue T, at paragraphs 161-167.

<sup>14</sup> Section 42A Updated Air Quality Report, 25 February 2011, at paragraphs 23-28.

<sup>15</sup> Transcript, at pages 801-803.

<sup>16</sup> They are contained in CAQMP Section 1.2, at pages 2-3.

<sup>17</sup> Gavin Fisher Rebuttal Evidence, at paragraph 29 and Supplementary Evidence, at paragraph 29.

<sup>18</sup> Section 42A Updated Air Quality Report, 25 February 2011, at paragraph 24.

<sup>19</sup> See Expert Caucusing Joint Report - Air Quality, 28 January 2011, at paragraphs 43-49 and 28 February 2011, at paragraph 6.2.



- 29 This issue has been addressed in detail in Mr Gavin Fisher's evidence.<sup>20</sup> He is firmly of the opinion that for this Project:<sup>21</sup>
- ... they [offsets] are (a) unwarranted, (b) unfair, (c) difficult to implement, (d) extremely inefficient on a cost benefit basis (my earlier evidence and assessment therein supports this position).
- 30 He also advises that the implications of the Board adopting or imposing an offset requirement on vehicle emissions prematurely are huge.<sup>22</sup>
- 31 This is particularly so given the fact that "the discharge of contaminants into air created by motor vehicle ... engines ... is a permitted activity", as clearly stated in Rule 4.5.3 of the Auckland Regional Plan: Air Land and Water (*ARP:ALW*).
- 32 Under cross-examination,<sup>23</sup> Ms Petersen acknowledged that any form of offset regime would require further work (in particular as to how it would be implemented), that that work had not been done, that Auckland Council has no policy with respect to offsets and such policy is yet to be developed. When asked if she agreed with Mr Gavin Fisher that offsets would be difficult to implement for this Project, Ms Petersen stated:<sup>24</sup>
- I think you may not be able to implement it as part of consent conditions, but you may choose to implement it as part of some other process.
- 33 With respect, the Board is required to make a decision now, based on the consents sought for this Project. The NZTA accepts Ms Petersen's acknowledgment that offsets could not be implemented as part of the Project's consent conditions and seeks that the Board finds accordingly.
- 34 In the NZTA's submission, there is no basis for imposition of any form of offset regime in this case, it would be premature to attempt to do so and, most importantly, no fair, workable or efficient offset regime could be established (nor has one been proposed by Ms Petersen).

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<sup>20</sup> Gavin Fisher Rebuttal Evidence, 3 February 2011, at paragraphs 55–62 and 69–74, Supplementary Evidence, 17 February 2011, at paragraphs 36–39, and Second Supplementary Evidence, 28 February 2011, at paragraphs 10–20.

<sup>21</sup> Gavin Fisher Second Supplementary Evidence, at paragraph 10.

<sup>22</sup> Ibid, at paragraph 20.

<sup>23</sup> Transcript, at pages 803–805.

<sup>24</sup> Ibid, at page 805.

- 35 With respect to the s42A authors' support of offsets, Mr Gavin Fisher explained why he did not agree with their arguments:<sup>25</sup>
- 35.1 First, the difficulty caused by the authors' interchangeable use of PM<sub>10</sub> and PM<sub>2.5</sub> throughout the s42A Report.<sup>26</sup> They are not the same.
- 35.2 Second, the authors' calculation of the amounts to be offset (assuming they should be applied to the entire volume of vehicle emissions along certain routes, rather than incremental increases due to the Project) and the cost/benefit.<sup>27</sup>
- 36 While the s42A authors claimed there are no significant "technical" issues to prevent implementation of offsets, it is notable that no fair or workable condition was proposed in their report.<sup>28</sup>
- 37 Moreover, the policy context which the s42A authors rely upon to support their offset proposal is illusory. They refer specifically to Policy 4.4.16 of ARP:ALW (which refers to assessing land use proposals with transportation effects on a project basis, including methods to mitigate effects on air quality) but seemingly ignore the fact that Rule 4.5.3 provides for motor vehicle emissions as a permitted activity. As Commissioner Dunlop rightly queried during the hearing "what can the effect of policy 4.4.16 be in the face of said permitted activity?"<sup>29</sup>
- 38 And while acknowledging that ARP: ALW "states the improvements in average vehicle emissions is likely to be more efficiently and effectively implemented at a national level", the s42A authors have effectively ignored that in recommending that this Board effectively step into uncharted territory by imposing some form of very localised offset regime.<sup>30</sup>
- Further discussion**
- 39 It is noted that the Auckland Regional Council's policy for assessment of emissions of transport projects (Policy 4.4.16) has been considered in the planning assessment on this Project, and the

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<sup>25</sup> Gavin Fisher Second Supplementary Evidence, 28 February 2011, at paragraphs 12-20.

<sup>26</sup> Section 42A Updated Air Quality Report, 25 February 2011, at paragraph 36.

<sup>27</sup> Section 42A Updated Air Quality Report, 25 February 2011, at Appendix 1.

<sup>28</sup> It is submitted that neither the "voluntary" neighbourhood offset scheme nor the PM<sub>2.5</sub> emission offset plan (to be developed in consultation with Auckland Council) (s42A Updated Air Quality Report, at paragraphs 53-61), provide a credible or practical way forward. Mr Fisher advises that the reasons include (a) it is difficult to determine the exact quantum of offset required to achieve significant reductions, (b) it is difficult to determine what areas this offset should be applied to, (c) it is virtually impossible to measure the changes and thus test for compliance, and (d) it is expensive and not at all cost effective.

<sup>29</sup> Transcript, at page 809 (question to Ms Petersen).

<sup>30</sup> Section 42A Updated Air Quality Report, 25 February 2011, at paragraph 50.

Ministry for the Environment's Good Practice Guide methodology has been closely followed. The following additional specific matters are also identified:

- 39.1 While it is not disputed that the Project is large in size and scale, it is not considered significantly large in respect of its air quality effects (particularly taking into account the degree to which this Project is a diversion of traffic that would otherwise be on the road in any case);
- 39.2 There has been an assessment of the human health effects of emissions, regional and local air quality, and within National Standards there are no exceedences. While it is acknowledged there is an existing local regional target exceedence which this Project will contribute to very slightly,<sup>31</sup> to what degree other land use change in this area (including the removal of housing, and reductions in traffic from local roads) will naturally 'offset' this, is not able to be quantified;
- 39.3 There are mitigation effects on air quality:
- (a) Improved emissions due to less congestion from a generally free flowing traffic environment, when compared to local roads. For many routes in and around the Project the traffic will be flowing more freely and smoothly with the Project in place, than without it. This leads to generally lower emissions.
  - (b) Improved separation distances from traffic and receivers (compared to the existing road conditions). There are currently a number of properties along SH16 just west of the Te Atatu interchange that are relatively close to the roadway, and within the nominal 20m separation distance. After the Project is completed there will be no such dwellings along this portion of the road.
  - (c) Tunnelling and ventilation stacks which further separate emissions and receivers significantly and provide much better dispersion of the vehicle emissions; and
  - (d) Improved opportunities for other modes (including Public Transport on local roads and pedestrian cycle connections in the affected Sector 9 area).

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<sup>31</sup> As shown in Gavin Fisher EIC, at Annexure E, the absolute worst case contribution from the Project to the 24-hour PM<sub>2.5</sub> regional target is 1.5 micrograms per cubic metre. The target value is 25, and wintertime measurements can reach 32. This worst case increase of under 5% is not considered significant by the experts.

40 Finally, it is not correct to assume that the future is always worse from an emissions perspective (an issue alluded to by Mr Allan in his assertion that we should move the northern ventilation stack as a precautionary measure in case the effects are deemed to be worse in the future).<sup>32</sup> The changes to the vehicle fleet will (there is no argument on this from any of the experts) mean that emissions from vehicles in the future reduce and therefore will be of even less effect than the minor effects assessed currently.

41 The final backstop in ensuring that air quality effects are acceptable for this Project is the ambient monitoring and reporting programme. In our submission that programme is extensive, accurate, robust and now fully agreed with the Auckland Council (and the s42A authors).

### **Marine Ecology**

42 The marine ecology caucusing statement<sup>33</sup> recorded agreement that:

42.1 The loss of 2.79ha of mangrove habitat was not significant;

42.2 That the proposed marine monitoring conditions were sufficient; and

42.3 That there is limited capacity for further onsite mitigation within the adjacent Coastal Marine Area (*CMA*) affected by the Project.

43 However there was disagreement as to:

43.1 Whether there had been sufficient recognition of the status of the marine reserve under the Resource Management Act 1991 (*RMA*) process;

43.2 Whether the mitigation proposed to offset permanent habitat loss from the widened causeway is sufficient;

43.3 Whether ongoing contamination attributable to stormwater discharge from the Project contributes to a significant permanent degradation of habitat in the marine reserve;

43.4 Whether additional mitigation (including offsite) for permanent habitat loss and ongoing degradation from contaminants is required.

44 Recognition of the status of the Motu Manawa Marine Reserve is addressed later in this Reply. The NZTA will be making a separate application to the Department of Conservation under the Marine

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<sup>32</sup> Cross-examination of Gavin Fisher, Transcript, at pages 730-731.

<sup>33</sup> Expert Caucusing Joint Report to the Board of Inquiry – Marine Ecology, 10 February 2011.

Reserves Act 1971 (*MRA*) to carry out the reclamation.<sup>34</sup> That application will include substantial further mitigation and provide further recognition of the Marine Reserve.

- 45 To the extent that there may be 'obligations, constraints and limitations' imposed by the MRA as Dr Bellingham asserts,<sup>35</sup> these will be addressed under the MRA application and will, in any event, apply regardless of this Board's decision under the RMA.
- 46 Those experts who considered there was insufficient mitigation suggested the expansion of the Motu Manawa Marine Reserve. As noted in Opening Submissions, the NZTA does not have the legal ability to apply for such an extension and this Board does not have the jurisdiction to grant it.<sup>36</sup> The Department of Conservation agrees with that position.<sup>37</sup>

### **Vegetation**

- 47 The vegetation caucusing attendees reached agreement on a number of matters including:<sup>38</sup>
- 47.1 The need for ongoing weed management within the designation;
- 47.2 Rock forest restoration planting, and rock revetment planting;
- 47.3 Genetically sourcing plants from the Auckland Ecological Region;
- 47.4 Tightening the requirements around relocation of *Mimulus Repens*; and
- 47.5 Requiring that riparian planting, where required for ecological mitigation or realignment, should achieve an average of 70% stream shading.
- 48 With the exception of the ongoing weed management condition, these matters have been incorporated into the NZTA's proposed conditions.
- 49 The suggested amendments to the weed management condition (proposed Vegetation condition V.8) were not accepted by the NZTA on legal, rather than botanical grounds. First, the caucusing

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<sup>34</sup> Section 4(3) of the Marine Reserves Act 1971.

<sup>35</sup> Ibid, at page 4.

<sup>36</sup> Opening Legal Submissions on behalf of the NZTA, 7 February 2011, at paragraphs 167 to 171.

<sup>37</sup> Opening legal submissions on behalf of Department of Conservation, at paragraph 22.

<sup>38</sup> Expert Caucusing Joint Report to the Board of Inquiry – Vegetation.

statement condition made the NZTA responsible in perpetuity for weeding areas outside of its operational designation (and therefore outside its control). The condition has been reworded to apply to areas that will remain in the NZTA's control. Second, the caucusing condition required weeding in perpetuity, but this is already a requirement of the Regional Pest Management Strategy and therefore this has been recorded as an advice note.

- 50 The Vegetation Caucusing statement records that some disagreements remained, including in relation to Traherne Island. The Traherne Island concerns relate to weed management on, and legal protection for Traherne Island and whether eco-tone replacement adjacent to Eric Armishaw Park is an appropriate way of mitigating eco-tone loss on Traherne Island.<sup>39</sup> These concerns are discussed later in this Reply.
- 51 The Friends of Oakley Creek (FOOC) expert also sought consultation with FOOC, a comprehensive restoration plan for the whole of Oakley Creek, and planting of riparian vegetation in Sector 8. In response, it is noted:
- 51.1 The riparian vegetation issue is addressed later in this Reply.
- 51.2 Consultation with FOOC as a key environmental stakeholder is appropriate and has been addressed by the express inclusion of that group in the Community Liaison Group.<sup>40</sup>
- 51.3 The production of a comprehensive restoration plan for Oakley Creek is not needed to mitigate the effects of the Project and would need to address water quality issues that are well beyond the control of the NZTA (such as the combined sewer overflows). However, the riparian planting for the Project has been designed, and will be implemented in accordance with, the Oakley Creek Realignment and Rehabilitation Guidelines.<sup>41</sup> South of New North Road, the "Environmental Weed Control and Native Revegetation Programme for Oakley (Te Auaunga) Creek" applies, which FOOC submissions described as 'the management plan for Oakley Creek'.<sup>42</sup>

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<sup>39</sup> The Vegetation Caucusing Statement is vague on this point, as it notes, at paragraph 11, support for the Eric Armishaw Park eco-tone vegetation plan, "if the Board determines that it is appropriate to undertake the proposed re-vegetation at Eric Armishaw Park and surrounds". However aside from the NZTA expert, the other experts preferred to mitigate eco-tone loss on Traherne Island itself. The NZTA now accepts that position.

<sup>40</sup> Proposed Public Information condition PI.5.

<sup>41</sup> Assessment of Freshwater Ecological Effects (Technical Report G.6) at Appendix C.

<sup>42</sup> Additional Submission on behalf of Friends of Oakley Creek – Te Auaunga Incorporated, 18 March 2011, at paragraph 6.3.

### **Stormwater**

- 52 The stormwater caucusing agreed various amendments to clarify conditions<sup>43</sup> and concluded that there were no remaining areas of disagreement.<sup>44</sup>
- 53 Given the suggestion by Forest and Bird that the levels of stormwater treatment are inadequate<sup>45</sup>, it is noted that the stormwater experts recorded their view that:<sup>46</sup>
- ... overall the stormwater management and streamworks proposed as part of the Project, with proposed consent condition[s], adequately mitigates for the effects of the Project on the environment in this specialist area. The level of stormwater treatment (quality and quantity) that has been proposed is agreed as being appropriate for the Project.
- 54 An issue that Ms Rhynd for Living Communities indicated as outstanding (albeit outside the scope of the stormwater caucusing) was the relocation of services. This has now been addressed by proposed Construction Environmental Management Plan condition CEMP.16 which provides for the relocation of services in consultation with infrastructure providers or owners. Ms Rhynd confirmed under cross-examination that the condition addressed her concern.<sup>47</sup>

### **Mr Tunncliffe**

- 55 In his representation to the Board, Mr Colin Tunncliffe (who is not a stormwater expert), asserted that the NZTA had used biofilters rather than a 'pipe system' along the causeway for cost reasons, with the consequence that more reclamation was required.<sup>48</sup> Biofilters were selected for practical not cost reasons. The 'pipe systems' favoured by Mr Tunncliffe are not practical as there is no longitudinal gradient, little hydraulic head between road level and sea level and because pipes are at greater risk from settlement. Biofilters are an integral part of the motorway design, managing spray from breaking waves. They are also preferred visually over a narrower formation requiring a barrier.
- 56 Mr Tunncliffe appears to confuse the level of treatment with the amount of stormwater treated.<sup>49</sup> He incorrectly asserts that the Project will only collect and filter 80% of the stormwater. However, the 80% Total Suspended Solids (TSS) figure is the level, rather than the extent, of treatment. Mr Tunncliffe also expresses concern

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<sup>43</sup> All of which have been adopted by the NZTA.

<sup>44</sup> Statement of Agreement Reached in Caucusing by Timothy Fisher, Bronwyn Rhynd and Hayden Easton, 2 February 2011 (*Stormwater Caucusing Statement*).

<sup>45</sup> Representation and Legal Submission on behalf of the Forest and Bird Motu Manawa Restoration Group, at paragraph 29.

<sup>46</sup> Stormwater Caucusing Statement, at paragraph 5.

<sup>47</sup> Transcript, at page 1001.

<sup>48</sup> Representation of Colin Tunncliffe, 21 March 2011, at paragraph 12.

<sup>49</sup> Ibid, at paragraph 15.

that the NZTA does not confirm that it will meet ARC TP10 (which requires 75% TSS). To the contrary, the Project will meet 80% TSS for the causeway sections of the motorway, and 75% TSS for Sectors 6 and 9.<sup>50</sup>

### **Noise**

- 57 Noise was a key issue for both the submitters and the Board during the hearing. Further evidence was prepared by Ms Wilkening and the noise experts have now prepared two caucusing statements and have appeared before the Board together in a 'hot tubing' question and answer format. They have also carefully redrafted the proposed Construction Noise and Vibration Conditions, before arriving at the point where they consider that they have no remaining areas of disagreement.<sup>51</sup>
- 58 It is submitted that the Board can have considerable confidence that the noise issues associated with the Project have been thoroughly interrogated and appropriately addressed through the proposed conditions for both construction and operational noise. Given the importance of this issue to many submitters, noise effects will be discussed in greater detail later in this Reply.

### **Groundwater and ground settlement**

- 59 In relation to groundwater, the experts' Agreed Statement<sup>52</sup> indicated no outstanding areas of disagreement.
- 60 A difference in interpretation of water level data was noted in relation to describing the perched and regional groundwater tables in the Waitemata Group in the vicinity of Avondale Heights. However the experts concluded that this "difference in interpretation is of little consequence" provided the extent and magnitude of settlement does not exceed that identified in Figure E14 attached to Mr Alexander's rebuttal evidence.<sup>53</sup> Specific reference to Figure E14 is now included in proposed Ground Settlement conditions S.1, S.2, S.4 and S.7.
- 61 The experts agreed a revised set of groundwater conditions which are now included in the NZTA's proposed condition suite – refer Groundwater conditions G.1 to G.14.<sup>54</sup>
- 62 The wording of condition G.1 has been amended to require the NZTA to "submit the GWMP [Groundwater Management Plan] to Auckland Council one month prior to the commencement of

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<sup>50</sup> Refer proposed Stormwater Condition SW.11.

<sup>51</sup> Second Expert Caucusing Joint Report to the Board of Inquiry – Noise (construction and operational), 17 March 2011.

<sup>52</sup> Expert Caucusing Joint Report to the Board of Inquiry – Groundwater and Ground Settlement, 2 February 2011, at pages 1-3.

<sup>53</sup> Ibid, at page 2.

<sup>54</sup> See Annexure A to this Reply.



construction dewatering for certification that it [the Plan] includes, but is not limited to..." the specific items listed in clauses (a) to (i). This is consistent with other conditions where the Auckland Council will certify (rather than approve) the contents of various management plans (as required by proposed condition CEMP.1).

- 63 Key matters which the groundwater experts agreed upon included the following:
- 63.1 The overall groundwater modelling approach, together with the scope of investigations and hydrogeological parameters;
  - 63.2 That the groundwater monitoring network is sufficient for the understanding and assessment of Project effects;
  - 63.3 That the potential effects on existing wells are less than minor;
  - 63.4 That the effects of changes to groundwater levels as a result of the Project (being the potential for ground settlement, movement of contaminants, loss of base flow) have been adequately assessed; and
  - 63.5 That the Groundwater Management Plan is appropriate.<sup>55</sup>
- 64 In relation to ground settlement, the experts' Agreed Statement<sup>56</sup> indicated no areas of disagreement.
- 65 A set of updated ground settlement conditions was agreed. These have been included in the NZTA's proposed condition suite – refer Ground Settlement conditions S.1 to S.17.<sup>57</sup>
- 66 The ground settlement experts agreed on various matters, including the following:
- 66.1 That best practice investigations, interpretation and analysis techniques have been used to assess potential settlements arising from construction of the Project;
  - 66.2 That Figure E14 provides a suitable basis for the assessment of settlement induced effects and provides certainty to all parties;
  - 66.3 That limited areas of building damage only are predicted, and these are indicated on Figures G1 to G4;

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<sup>55</sup> Expert Caucusing Joint Report to the Board of Inquiry – Groundwater and Ground Settlement, 2 February 2011.

<sup>56</sup> Ibid, at pages 3-6.

<sup>57</sup> See Annexure A to this Reply.

- 66.4 That as settlement predictions cannot be precise, a comprehensive monitoring programme is proposed, which is designed to avoid adverse effects wherever possible and allow mitigation or remediation if damage is unavoidable. Mitigation measures are available to reduce any adverse effects;
- 66.5 That adequate details have been provided of the types of buildings and services within the predicted settlement zone;
- 66.6 That localised effects on stream bank stability from the Project will be minor or less than minor;
- 66.7 That the effects of settlement on the stability of the previously landfilled materials below the Council owned Phyllis Street, Harbutt and Alan Wood Reserves would be no more than minor; and
- 66.8 That the effects of the Project on parts of slopes above Oakley Creek which are very steep and potentially only marginally stable need to be assessed and can be mitigated. In that regard proposed condition S.7 has been extended to include additional properties on Oakley Creek slopes and condition S.16 deals specifically with the slope stability issue.<sup>58</sup>

#### **Land and groundwater contamination**

- 67 The experts' Agreed Statement following caucusing indicated no areas of disagreement. The proposed contaminated land conditions (attached to the EIC of Terry Widdowson) were considered adequate for the management of contaminants for the Project.
- 68 The NZTA's Reply set of conditions includes a comprehensive set of proposed Contaminated Land and Contaminated Discharges conditions – refer CL.1 to CL.11.

#### **Transport**

- 69 A Joint Caucusing Report (dated 3 February 2011) was produced following three expert caucusing sessions.
- 70 Amongst other things, the experts agreed on the following:
- 70.1 That while it is in principle desirable to have local connections to SH20, a new interchange could adversely affect other local movements through the Great North Road/Carrington Road intersection and northern end of Carrington Road.<sup>59</sup> (Sir Harold Marshall's request for local

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<sup>58</sup> Expert Caucusing Joint Report to the Board of Inquiry – Groundwater and Ground Settlement, 2 February 2011.

<sup>59</sup> Expert Caucusing Joint Report to the Board of Inquiry –Transport, 3 February 2011, at paragraphs 1 and 5, Page 2.

connections was subsequently withdrawn, as discussed later in this Reply.)

- 70.2 That providing bus and cycle lanes on Great North Road can be resolved via the Network Integration Plan, through amendments to Operational Traffic condition OT.1<sup>60</sup> (which have been made).
- 70.3 That it would be desirable for the NZTA and Auckland Transport to work together to resolve existing deficiencies at the St Lukes Road/SH16 Motorway ramp, Great North Road intersection.<sup>61</sup> (That offer had previously been confirmed by Mr Parker for NZTA. The Council has since advised that it is no longer pursuing a St Lukes interchange upgrade as part of this Project.)<sup>62</sup>
- 70.4 That provision of bus shoulder lanes are an appropriate treatment for bus priority on SH16.<sup>63</sup>
- 70.5 That the Project does not create an adverse transport effect that requires the Sector 8 cycleway as mitigation.<sup>64</sup>
- 70.6 That both the NZTA and Auckland Transport have policy directives and responsibilities to provide cycling facilities and it would be desirable for them to work together to progress the provision of a cycleway in Sector 8.<sup>65</sup>
- 70.7 That a pedestrian/cycle bridge over SH16 between Waterview and Point Chevalier is unlikely to be appropriate mitigation of any adverse traffic effects of the Project.<sup>66</sup> (This relief was subsequently withdrawn by Living Communities & Others).<sup>67</sup>
- 70.8 That the Network Integration Plan should be expanded to consider opportunities to review traffic signal timings at the Te Atatu Interchange with a view to minimise delays to all

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<sup>60</sup> Ibid, at paragraph 1, page 4.

<sup>61</sup> Ibid, at paragraph 1, page 5.

<sup>62</sup> Opening Legal Submissions on behalf of Auckland Council/Transport, 28 February 2011, at paragraph 2.2.

<sup>63</sup> Expert Caucusing Joint Report to the Board of Inquiry –Transport, 3 February 2011, at paragraph 1, page 6.

<sup>64</sup> Ibid, at paragraph 3, page 6.

<sup>65</sup> Ibid, at paragraph 1, page 6.

<sup>66</sup> Ibid, at paragraph 1, page 7.

<sup>67</sup> Opening Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 1.5(b).

- users, including cyclists.<sup>68</sup> (Proposed condition OT.1(d) has been worded accordingly.)
- 70.9 That the traffic modelling has followed standard procedures and is generally responding reasonably, including the prediction of induced traffic.<sup>69</sup>
- 70.10 That the temporary traffic conditions are acceptable to the experts (being Ian Clark and John Gottler).<sup>70</sup> (At the hearing, Mr Clark confirmed that these conditions were also acceptable to Auckland Council/Transport).<sup>71</sup>
- 71 Outstanding issues at that time included:
- 71.1 Whether the Project will adversely affect accessibility to the Waterview, Point Chevalier and Carrington communities;<sup>72</sup>
- 71.2 That there is an overall need for or desirability of providing on and off ramps at Carrington Road, Great North Road Interchange;<sup>73</sup>
- 71.3 Whether the Project creates an overall adverse effect on St Lukes Interchange.<sup>74</sup> (The Council later withdrew its request for relief in this regard);
- 71.4 Whether the Sector 8 cycleway is needed to be included as part of the Project to meet its objectives;<sup>75</sup> and
- 71.5 Whether the Project creates an adverse effect on pedestrian/cycle links between Waterview and Point Chevalier.<sup>76</sup>
- 72 The final EMS Addendum Report addresses the issues discussed in transport caucusing in the following manner:
- 72.1 There is not a rational nexus between the Sector 8 cycleway and mitigating effects from the Project. This cycleway

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<sup>68</sup> Expert Caucusing Joint Report to the Board of Inquiry –Transport, 3 February 2011, at paragraph 2, page 8.

<sup>69</sup> Ibid, at page 9.

<sup>70</sup> Ibid, Temporary Traffic Conditions, at paragraph 1.

<sup>71</sup> Transcript, at page 818. Where Mr Clark confirmed his agreement to the wording of the temporary traffic conditions as contained in the Proposed Conditions.

<sup>72</sup> Expert Caucusing Joint Report to the Board of Inquiry –Transport, 3 February 2011, at paragraph 1, page 3.

<sup>73</sup> Ibid, at paragraph 3, page 3.

<sup>74</sup> Ibid, at paragraph 1, page 5.

<sup>75</sup> Ibid, at paragraph 1, page 7.

<sup>76</sup> Ibid, at paragraph 1, page 7.

should be capable of being funded and delivered separately from the Project.<sup>77</sup>

- 72.2 It is not practically achievable to construct the southbound on ramp to SH20 from Carrington Road without major consequential changes to the Project. Considerable additional design constraints and adverse safety impacts would need to be addressed.<sup>78</sup>
- 72.3 There are recognised deficiencies at the St Lukes Interchange, but the Project will not exacerbate those deficiencies. This Interchange should be addressed as a separate project.<sup>79</sup>
- 72.4 The experts have agreed on how bus facilities should be provided; bus shoulder lanes on SH16 and, in part, along SH20 connection;<sup>80</sup>
- 72.5 With respect to the proposed at grade link between Waterview and Eric Armishaw Park, EMS agrees with the joint caucusing report that a bridge link is not appropriate or justified.<sup>81</sup>

### **Social Issues**

- 73 A Joint Caucusing report (dated 4 February 2011) was produced following one non-expert and two expert caucusing sessions. A number of key areas of agreement were confirmed through this caucusing, including amongst other things:
  - 73.1 Recognition of the importance of proactive communication over the construction and for operational monitoring is a key to alleviate community fears and to mitigate social impacts. As a result, redrafting of the conditions was undertaken to strengthen and confirm the communication, liaison and engagement measures for the Project.
  - 73.2 Recognition was given to the importance of the student hostel (1510 Great North Road) in supporting the Unitec education facility (as a key social infrastructure) and amendments were made to the conditions to the satisfaction of Unitec's planning expert (Mr Israelson), such that there were no outstanding issues for this party;<sup>82</sup>

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<sup>77</sup> Ibid, at Section 3.3.13.

<sup>78</sup> Ibid, at Section 3.3.14.

<sup>79</sup> Ibid, at Section 3.3.15.

<sup>80</sup> Ibid, at Section 3.3.16.

<sup>81</sup> Ibid, at Section 3.3.18.

<sup>82</sup> Ibid, at paragraph 18.

- 73.3 Amendment to the proposed conditions and the Construction Noise and Vibration Management Plan resolved all outstanding issues identified by Ms Atimalala representing Housing New Zealand.<sup>83</sup>
- 74 However, a number of matters were not agreed, including as a summary of key outstanding matters:
- 74.1 The need for and value of an epidemiological study to assess the long term health effects of the Project on communities;<sup>84</sup>
- 74.2 The extent and significance of the social impacts identified in the Social Effects Assessment and on this basis, the need for additional mitigation to address social effects (including additional open space facilities, pedestrian and cycleways and additional bridges,<sup>85</sup> and
- 74.3 The need for an assessment of the impacts on property values for the social effects assessment and the mitigation to address property value impacts.<sup>86</sup>
- 75 The EMS Final Addendum Report addresses a number of the above issues as follows:
- 75.1 The authors remain concerned about the cumulative effects on communities at Waterview and Owairaka / New Windsor during the lengthy construction period (section 4.2.1);
- 75.2 While they do not support a number of the mitigation projects that have been promoted, they consider the extent to which further mitigation is justified for these communities over the construction period (section 4.2.2);
- 75.3 They recognise the role of communication and engagement conditions to at least in part address these effects (section 4.2.5, 4.2.7), but note residual concern about cumulative impacts over a long period on the more vulnerable groups of the community (section 4.2.8); and
- 75.4 They propose a Community Trust Fund as an appropriate mitigation response (section 4.3).

### **Planning**

- 76 Since commencement of the hearing, two planning caucusing sessions have been held with the express purpose of reviewing and

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<sup>83</sup> Ibid, at paragraphs 19 – 24.

<sup>84</sup> Ibid, at paragraph 10, page 3.

<sup>85</sup> Ibid, at paragraphs 44 and 47, page 11.

<sup>86</sup> Ibid, at paragraph 55, page 12.

reaching agreement on the wording of the proposed conditions. This was in specific response to concerns expressed by the Board regarding the certainty of these conditions. The outcome of these caucusing sessions (8 March and 16 March 2011) is that the experts are satisfied as to their substance and ability to be implemented.

- 77 This agreement is reflected both in the Joint Caucusing Reports and in the EMS Final Addendum Report (section 3.9.15) where the authors note that they are “now comfortable with their substance overall”. It is also reflected in the comments made by Auckland Council's expert planner (Ms Richmond), who concluded that subject to minor amendments to conditions on construction management, construction noise, landscape/visual and open space (which were subsequently agreed in the second Planning Caucusing Report), only the wording of Condition V.8 remained an outstanding issue.<sup>87</sup>

### **ISSUES RAISED BY THE BOARD**

- 78 The NZTA has found it particularly useful during the course of this hearing to have the opportunity to respond more immediately to issues and questions raised by Board members as they arise (rather than leaving it to the Reply).
- 79 The following matters have been addressed by way of supplementary evidence, information or memoranda provided by the NZTA:
- 79.1 The extent to which the Board may modify a requirement, and the extent to which alternatives need to be considered;<sup>88</sup>
- 79.2 Issues concerning causeway construction;<sup>89</sup>
- 79.3 Integrated transport plans, Construction Yard 1, Alan Wood Reserve classification, the historic oak trees, Construction Yard 6 and Waterview Reserve available open space at Alan Wood Reserve during construction, pond fencing, Te Atatu Pony Club lease arrangements and cycleway bridge costs;<sup>90</sup>
- 79.4 Clarification of what activities may not comply with construction noise limits, their duration and the location of affected properties; and how the construction noise conditions proposed to work in practice;<sup>91</sup>

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<sup>87</sup> Transcript, at pages 1252-1256.

<sup>88</sup> See Memorandum of Counsel on behalf of the NZTA on a preliminary legal issue in response to the Board of Inquiry's Minute, 14 February 2011.

<sup>89</sup> See response from NZTA's expert Dr Jeff Hsi, 2 March 2011.

<sup>90</sup> See Amelia Linzey Second Supplementary evidence, 26 February 2011.

<sup>91</sup> Siiri Wilkening's First Supplementary evidence, 28 February 2011.

- 79.5 Clarification of how the NZTA's proposed consenting scheme, as reflected in the proposed conditions, will work and whether there are sufficiently certain performance levels so that the Auckland Council can perform its certifier and enforcer roles (Ms Linzey's Third Supplementary evidence, 1 March 2011);
- 79.6 Whether the replacement rail corridor land is reasonably necessary to meet the Project objectives and to what extent the Board should take into account the effects of moving the rail corridor;<sup>92</sup>
- 79.7 Land requirements at 51 Hendon Avenue (the Chands), consultation with Hendon Avenue residents, the replacement rail corridor and designation;<sup>93</sup>
- 79.8 More specific information in the form of letters to answer questions and clarify uncertainties raised in submitter's representations.<sup>94</sup>

**Public Works Act issues not relevant**

- 80 It should be noted that a large amount of the additional information provided to various submitters relates to property acquisition and compensation (e.g. the Chands and Jinhu Wu). Such matters are provided for under the Public Works Act 1981, and are entirely separate to the RMA approvals process. As such, they are outside the Board's jurisdiction and are not relevant to this hearing.

**Issues of concern during the hearing**

- 81 As noted previously, noise has been an issue of particular concern to the Board through the hearing, and in particular:
- 81.1 The wording of the proposed noise conditions; and
- 81.2 How the management plan regime and Council certification process will work.
- 82 The noise assessment for the Project involved two distinct parts: construction and operational noise. Several issues were raised by the Board and submitters during the hearing, and discussed by the expert witnesses in two caucusing sessions, during which areas of disagreement were resolved.

**Construction Noise**

- 83 In response to the concerns of the Board in relation to construction noise, the proposed Construction Noise and Vibration Conditions

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<sup>92</sup> See Joint Memorandum of Counsel on behalf of the NZTA, KiwiRail and Auckland Council/ Transport, 16 March 2011.

<sup>93</sup> Ms Linzey's Fourth Supplementary evidence.

<sup>94</sup> For example, letters to the owners of 1510 Great North Road (14 March), the Chands (14 March), the Vipond family (7 March).



were substantially reworded to provide much greater clarity and certainty about the processes which will be implemented prior to, and throughout construction of the Project. These include:

- 83.1 An amendment to CNV.1 to delete 'as far as practicable' and require that the Construction Noise and Vibration Management Plan (*CNVMP*) set out measures to comply with the noise criteria or to specify the processes for implementation of mitigation;
  - 83.2 An amendment to CNV.2 so that compliance with the specified noise performance standards is no longer 'as far as practicable' but required unless certified by the Council through a Site Specific Noise Management Plan (*SSNMP*); and
  - 83.3 A methodology for Auckland Council to be the certifying body for events when compliance with the noise performance standards of CNV.2 cannot be achieved (CNV.13).
- 84 Specific concerns of the Board and other expert witnesses have also been taken into account and incorporated in the amended conditions. These include:
- 84.1 The exclusion of night time pile driving (CNV.8); and
  - 84.2 The early investigation and installation of (permanent) traffic noise mitigation measures where this is practicable during construction (CNV.7).
- 85 The proposed set of conditions, as amended, respond to the Board's concerns in that they provide for Council to certify that mitigation measures (including offers of relocation) are appropriate, rather than simply leaving this decision to the contractor alone. The amended conditions set out the framework for the formulation and refinement of the *CNVMP* while setting clear requirements on the Project contractor to achieve the relevant performance standards.

***Operational Noise***

- 86 Operational noise was assessed in accordance with the new New Zealand road noise Standard NZS6806:2010. The Standard has a different approach to previous traffic noise assessment tools, in basing the assessment of effects and mitigation on the Best Practicable Option in accordance with the RMA, rather than setting a numerical limit.
- 87 The Board's questions in relation to the application of the Standard and the suitability of the resulting internal and external noise levels, were specifically discussed in expert caucusing. The experts agreed that they support the application, methodology and criteria of NZS6806 for all noise sensitive receivers in the vicinity of the

Project. The experts further agreed that the draft operational noise conditions are suitable and sufficient to achieve the desired outcomes for the Project.<sup>95</sup>

- 88 Only 14 of the 521 dwellings and facilities assessed have been identified as potentially receiving noise levels that would place them in Category C under the Standard, meaning they may require internal mitigation.<sup>96</sup> All of these dwellings and facilities are in Sectors 1 to 7 along the route of the existing motorway.
- 89 Importantly for the Board's assessment of the effects of the Project, it is noted that the Project will result in betterment in terms of noise effects, for most dwellings and facilities in Sectors 1 to 7,<sup>97</sup> including the most affected dwellings.<sup>98</sup> Within Sector 9, none of the dwellings will be in Category C (and only 3 are Category B).

**Other Issues Raised by the Board**

- 90 Other issues raised by the Board during the hearing which are now addressed in this Reply are:
- 90.1 Relevance of the Government Policy Statement;
  - 90.2 Ability of the Board to direct funding;
  - 90.3 Remedying effects of past activities and under section 5(2)(c) of the RMA;
  - 90.4 Limiting a designation by time;
  - 90.5 Relevance of section 128 RMA to designations;
  - 90.6 Transport-related issues, temporary traffic management, the community liaison person and storage of explosives; and
  - 90.7 Further questions from the Board (22 March).
- 91 These are now addressed in turn.

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<sup>95</sup> Second Expert Caucusing Joint Report to the Board of Inquiry – Noise, 17 March 2011, at paragraphs 12 and 13.10.

<sup>96</sup> Ibid, paragraph 13.6 – 13.7. It is noted that the 14 buildings include Unitec facilities. Refer to Technical Report G.12, Appendix E, Preferred Mitigation Options.

<sup>97</sup> EIC, Ms Wilkening, paragraph 95.

<sup>98</sup> Second Expert Caucusing Joint Report to the Board of Inquiry – Noise, 17 March 2011, at paragraph 13.8.

### Relevance of the GPS

- 92 The Board has asked what weight it should give to the Government Policy Statement on Land Transport Funding (*GPS*).<sup>99</sup>
- 93 The Land Transport Management Act 2003 (*LTMA*) requires the Minister of Transport to prepare and issue a GPS every 3 financial years.<sup>100</sup> The GPS “sets out how land transport funding is intended to improve the land transport sector in the context of land transport policy”.<sup>101</sup> In particular, the GPS enables the Minister to guide the NZTA and the land transport sector on the outcomes and objectives, and the short to medium term impacts that the Crown wishes to achieve through the National Land Transport Programme (*NLTP*) and from the allocation of the National Land Transport Fund (*NLTF*).<sup>102</sup>
- 94 The NZTA must give effect to the GPS when performing its LTMA functions in respect of land transport planning and funding.<sup>103</sup> For example, the NZTA must ensure that the national land transport programme gives effect to the GPS.<sup>104</sup>
- 95 The GPS is also relevant to regional land transport programmes and strategies. Auckland Transport must be satisfied that the Auckland Regional Land Transport programme is consistent with the GPS.<sup>105</sup> Auckland Council now prepares Auckland’s Regional Land Transport Strategy,<sup>106</sup> which must take into account the GPS.<sup>107</sup>
- 96 While the GPS is not referred to in the RMA, it is submitted that with respect to the NZTA’s applications for resource consent, the GPS should be considered as “any other matter the consent authority considers relevant and reasonably necessary to determine the application” under section 104(1)(c) of the RMA.<sup>108</sup>
- 97 “Any other matter” under section 104(1)(c) has previously been found by the Environment Court to encompass the Auckland Regional Land Transport Strategy (*RLTS*).<sup>109</sup> In considering resource consent applications for the State Highway 1 realignment

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<sup>99</sup> Transcript, at page 97, question from Member Dormer.

<sup>100</sup> LTMA, s 84 and s 87.

<sup>101</sup> LTMA, s 88(1).

<sup>102</sup> LTMA, s 84(1)(a).

<sup>103</sup> LTMA, s 89(1).

<sup>104</sup> LTMA, s 19B(a)(iii).

<sup>105</sup> LTMA, s 15(a)(iii).

<sup>106</sup> LTMA, s 74(2).

<sup>107</sup> LTMA, s 75(b)(i).

<sup>108</sup> RMA, s 104(1)(c) is relevant to the Board’s determination of the consent applications, as the Board is required to apply sections 104 to 112 and 138A “as if it were a consent authority” (see s 149P(2) RMA).

<sup>109</sup> *Transit New Zealand v Auckland Regional Council* (A100/00, 18 August 2000) at [128].

from Orewa to Puhoi, the Court considered the relevant contents of the RLTS (at that time prepared under the Transit New Zealand Act 1989), to decide whether the RLTS was “reasonably necessary” to determining the resource consent applications. The Court considered that the RLTS was relevant and that the proposed highway would give effect to the road transport objectives and policies of the RLTS.<sup>110</sup>

- 98 Like the RLTS, the GPS is a document prepared under a different statute from the RMA. As the Board will be aware, the GPS identifies the Western Ring Route (of which the Project forms part) as a Road of National Significance.<sup>111</sup> It thereby requires the NZTA to advance the Project quickly to reduce congestion, improve safety and support economic growth.<sup>112</sup>
- 99 It is submitted that the direction given by the Government in the GPS for the NZTA to prioritise planning/funding of the Western Ring Route is therefore relevant to the Board’s determination of the applications for resource consents.
- 100 For the reasons set out above, it is submitted that the GPS should similarly fall within “any other matter the territorial authority considers reasonably necessary in order to make a recommendation on the [notices of] requirement” under section 171(1)(d) of the RMA.<sup>113</sup>

#### **Board’s ability to direct funding for cycleway**

- 101 The Board raised the issue of whether it can direct the NZTA to make funding available for a cycleway in Sector 8 (subject to relevant land owners agreeing to provide land for the cycleway).<sup>114</sup> The Board raised this possibility in the event that it was to find a shortfall in the quality or quantity of open space provided as the NZTA’s proposed mitigation. For the reasons set out below, it is submitted that such a direction cannot be made.
- 102 The NZTA’s primary response to this issue is that such funding is not necessary or reasonable because the NZTA’s proposed open space package appropriately addresses any adverse effects on open space provision in and around the Project. Leaving that practical matter to one side, the two legal issues arising are addressed below.
- 103 Part 6AA of the RMA does not contain a specific provision that would enable the Board to require the NZTA to make funding available.

<sup>110</sup> Ibid, at [129] and [130].

<sup>111</sup> Government Policy Statement on Land Transport Funding, May 2009, at paragraph 22.

<sup>112</sup> For further discussion of the GPS, see Tommy Parker EIC, at paragraphs 26 to 30.

<sup>113</sup> Section 149P(4)(a) of the RMA requires the Board to have regard to the matters set out in s 171(1) as if it were a territorial authority.

<sup>114</sup> Transcript, at page 101, question from Judge Newhook.

Instead, consideration must be given to whether the Board may impose a condition requiring the provision of such funding.

- 104 The Board may impose conditions that it considers appropriate on any resource consent granted, as if it were a consent authority.<sup>115</sup> In respect of notices of requirement, the Board may confirm the requirement “but modify it or impose conditions on it as the Board thinks fit”.<sup>116</sup> This power to impose conditions is similar to that of the Environment Court, when determining appeals from a decision of a requiring authority.<sup>117</sup>
- 105 It is generally accepted that the law relating to resource consent conditions applies to designations. The power to impose conditions is not unfettered. The tests expressed in *Newbury District Council v Secretary of State for the Environment*<sup>118</sup> were referred to with approval by the Supreme Court in *Waitakere City Council v Estate Homes Ltd*.<sup>119</sup> The Supreme Court described the three requirements, as follows:<sup>120</sup>

Under these general requirements of administrative law, conditions must be imposed for a planning purpose, rather than one outside the purposes of the empowering legislation, however desirable it may be in terms of the wider public interest. The conditions must also fairly and reasonably relate to the permitted development and may not be unreasonable.

- 106 It is submitted that the Board is not able to impose a condition requiring funding for a cycleway for the following reasons:
- 106.1 There is no statutory basis for imposing such a condition under the RMA: the requirement to make funding available would amount to a “financial contribution” condition under section 108(9) of the RMA, and financial contribution provisions do not apply to designations.
- 106.2 A condition requiring the NZTA to provide funding is unreasonable because it is likely to be incapable of performance.<sup>121</sup> This is due to the limitations that the LTMA places on the NZTA’s funding decisions.
- 107 These reasons are discussed in more detail below.

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<sup>115</sup> RMA, s 108(1) and s 149P(2).

<sup>116</sup> RMA, s 149P(4)(b)(iii).

<sup>117</sup> RMA, s 174(4)(c).

<sup>118</sup> *Newbury District Council v Secretary of State for the Environment* [1981] AC 578.

<sup>119</sup> *Waitakere City Council v Estate Homes Ltd* [2007] 2 NZLR 149 at [61] (SC).

<sup>120</sup> *Ibid.*

<sup>121</sup> *Westfield (NZ) Ltd v Hamilton City Council* [2004] NZRMA 556 at [55] (HC).

**Ordering payment of money and financial contribution conditions**

108 Conditions requiring the provision of land and/or money are subject to specific restrictions contained in section 108(10) of the RMA:

- (10) A consent authority must not include a condition in a resource consent requiring a financial contribution unless—
  - (a) The condition is imposed in accordance with the purposes specified in the plan or proposed plan (including the purpose of ensuring positive effects on the environment to offset any adverse effect); and
  - (b) The level of contribution is determined in the manner described in the plan or proposed plan.

109 On their face, the restrictions in section 108(10)(a) and (b) indicate that the Board's ability to impose a condition requiring the NZTA to fund a cycleway, largely turns on whether it could be imposed in accordance with the purposes specified in the District Plan and whether the level is able to be determined in a manner described in the Plan.

110 However, it is submitted that there is no statutory basis for financial contribution conditions to apply to designations. Section 108(10) applies to a "condition in a resource consent requiring a financial contribution". It does not state that it applies to conditions imposed on requirements, nor are they imported into Part 8 of the RMA by cross-reference. If Parliament intended for financial contribution conditions to be imposed on designations, it could have provided for this.

111 Furthermore, the effect of a designation is that the rules in a plan do not apply to that project or work.<sup>122</sup> To allow a condition to be imposed requiring a financial contribution on a designation would run counter to the overriding nature of a designation in a district plan.

112 In any event, section 108(1)(a) would not be met as the purposes of financial contributions in the Auckland City District Plan (Isthmus Section) do not include the provision of cycling facilities / connections.<sup>123</sup>

113 Consequently, it is submitted that there is no RMA basis for the Board to impose a designation condition requiring the NZTA to provide funding for the cycleway as a financial contribution.

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<sup>122</sup> RMA, s176(1)(a).

<sup>123</sup> Rule 4B.3.2 of the Auckland City District Plan (Isthmus Section).

**LTMA limitations on funding**

- 114 The LTMA's limitation on the NZTA's funding decisions is a further reason why the NZTA might not be capable of complying with a condition requiring the provision of funding for a cycleway. The NZTA has various functions prescribed by the LTMA, including the management of the State highway system.<sup>124</sup> It also has statutorily independent functions, which include the approval of activities as qualifying for payments from the NLTF.<sup>125</sup>
- 115 To approve an activity such as a cycleway as qualifying for funding, the NZTA must first be satisfied that the activity is included in the NLTP (except in the urgent interests of public safety or to effect repair of damage caused by a sudden and unexpected event).<sup>126</sup> There are a number of other considerations in section 20 of the LTMA that the NZTA must be satisfied of before it can approve an activity for funding. The determination of whether activities should be included in the NLTP is also a statutorily independent function of the NZTA.<sup>127</sup> In other words, if the proposed Sector 8 cycleway is not in the NLTP, the NZTA simply cannot fund it.<sup>128</sup>
- 116 These obligations would therefore prevent the NZTA from complying with a condition requiring the provision of funding for a cycleway in Sector 8.

**Remedying effects of past activities and under s5(2)(c)**

- 117 The Royal Forest and Bird Protection Society and the Star Mills Preservation Society sought that the NZTA should address the adverse effects of historic discharges of stormwater into the CMA. In response to cross-examination of Mr Bell by Star Mills on this point, His Honour queried whether the phraseology "avoiding, remedying or mitigating any adverse effects of activities on the environment" in section 5(2)(c) of the RMA implied that historic effects should be remedied.<sup>129</sup> In particular, as part of this Project should the NZTA be required to address effects caused by the National Roads Board during the 1950s, when the SH16 causeway was constructed.<sup>130</sup>
- 118 Remedy in the context of section 5(2)(c) has been described by the Environment Court as meaning that "adverse effects of an activity may be allowed to occur as part of sustainable management if

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<sup>124</sup> LTMA, s 95(1)(c).

<sup>125</sup> LTMA, s 95(2)(e).

<sup>126</sup> LTMA, s 20(2)(a).

<sup>127</sup> LTMA, s 95(2)(d).

<sup>128</sup> While the Waterview Connection Project is in the NLTP, a Sector 8 cycleway has never been part of that Project and is not in the NLTP.

<sup>129</sup> Transcript, at pages 309-310.

<sup>130</sup> Ibid, at page 309, question from Judge Newhook.

redress or reparation for those effects is later given".<sup>131</sup> To remedy adverse effects is to rectify or to "make good" those adverse effects.<sup>132</sup> In contrast, to avoid adverse effects is to ensure they do not occur, and to mitigate them is to allow them to occur but to lessen their impact.<sup>133</sup>

- 119 It is submitted that the requirement to remedy relates to the effects of the activity or Project being considered under section 5; remedying effects is an alternative approach where the effects of that activity cannot be adequately avoided or mitigated. Accordingly, the NZTA does not have an obligation to remedy the historic adverse effects caused by the existing causeway as part of this Project.
- 120 Sections 5(2)(c), 104(1)(a), and 171(1) of the RMA are concerned with the impact of the particular activities that form part of the Project currently before the Board. These provisions respectively refer to "effects of activities on the environment", "any actual and potential effects on the environment of allowing the activity", and "the effects on the environment of allowing the requirement".
- 121 Within this Project there are certainly examples of effects that potentially cannot be avoided or mitigated and so need to be remedied (that is, the effects occur but are then redressed). These include:
- 121.1 The loss of stream length associated with the realignment of Oakley Creek cannot be avoided, and cannot be mitigated. The NZTA therefore proposes to remedy the situation through SEV rehabilitation planting to improve an extended length of the Creek.
- 121.2 The remedying of any ground settlement effects of the Project on structures following a post-construction survey.
- 121.3 The rehabilitation of the soil and sub-soil of construction yards once they are no longer required for construction activities, to address the effects of compaction on soil hydrology.
- 122 For stormwater discharges, however, the effects on the environment of allowing the activities associated with this Project are a significant improvement in the extent of stormwater treatment and discharge quality, in excess of the levels of treatment recommended in Council's TP10 guideline.

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<sup>131</sup> *J F Investments Ltd v Queenstown Lakes District Council* (C48/2006, 27 April 2006) at [21].

<sup>132</sup> *Alexandra District Flood Action Society Incorporated v Otago Regional Council* (C102/2005, 20 July 2005) at [145].

<sup>133</sup> *Ibid.*



- 123 Given this level of mitigation, it is submitted that there is no requirement arising from this Project to 'remedy' the effects of this Project in terms of stormwater. As noted earlier, nor is there jurisdiction to require mitigation of the effects of historic discharges on the environment.<sup>134</sup> Otherwise, it is submitted that there would be no limit to the effects of past activities that an applicant might be required to remedy.
- 124 That position notwithstanding, it is noted that in developing the Project, the NZTA has identified opportunities to remedy some effects of past activities, and in some cases, will provide environmental enhancement of the existing environment as offset mitigation. A good example of this is the proposed stormwater treatment that will treat more than 80% of suspended solids and a similar percentage of metals in solution. This will result in a net improvement in the quality of stormwater from the enlarged causeway entering the CMA.<sup>135</sup>

**Limiting a designation by time**

- 125 During the hearing, Member Dormer asked if you can "have a designation limited by time? Can you put a sunset clause on it?"<sup>136</sup>
- 126 This query arose in the context of a discussion about whether the proposed conditions at that time (16 March) included a requirement that, on completion of the Project, the designation be uplifted from land not required for operational purposes.<sup>137</sup> (At the time, the conditions did not).
- 127 Since then, the NZTA has included a new proposed General Designation condition DC.10, which reads:
- Following completion of construction of the Project, the NZTA shall give notice to Auckland Council in accordance with Section 182 of the RMA for removal of those parts of the designation that are not required for the long term operation, maintenance and mitigation of effects of the State highway (Note: this condition is specific to land no longer required for construction purposes once the Project is completed).
- 128 It is clear that a designation or part of a designation can be removed by the use of section 182 of the RMA, as contemplated by proposed condition DC.10. Once a requiring authority has given notice that it no longer wants the designation, a territorial authority amends its district plan, and the designation comes to an end.<sup>138</sup>

<sup>134</sup> Further complexity arises from the fact that stormwater has been (and continues to be) discharged into the estuary from a number of different sources during the approximately 60 years the motorway has been in place.

<sup>135</sup> Owen Burn Second Statement of EIC, at paragraph 31.

<sup>136</sup> Transcript, at page 398.

<sup>137</sup> Ibid, at pages 397-398.

<sup>138</sup> RMA, s 182.

The use of section 182 to reduce the extent of a designation as far as practicable following construction has previously been required as a condition of a roading designation,<sup>139</sup> and is not uncommon on the NZTA's major Auckland projects (e.g. Victoria Park Tunnel).

- 129 With respect to duration however, unlike resource consents whose duration is provided for in section 123 of the RMA, there is no equivalent provision applicable to designations. This is because under section 175 of the RMA, once a designation is confirmed, it is included in the district plan (and any proposed district plan) as if it were a rule in that plan. As a result the designation remains in a district plan for the life of that district plan. In practice, a designation often extends well beyond the life of an operative district plan, as the procedure in Schedule 1 of the RMA "permits the rolling over of existing designations into proposed plans".<sup>140</sup>
- 130 Accordingly, designations are not so much limited by time but rather can be limited by reference to works or activities.<sup>141</sup> For example, pulling back the designation boundaries following completion of construction (as proposed in condition DC.10), or removing various designation conditions following construction if not required for the long term operation and maintenance of the Project (as proposed in new condition DC.11).<sup>142</sup>

#### **Relevance of s128 RMA to designations**

- 131 On a number of occasions the Board has questioned whether a section 128 RMA review type clause could be included on the designations for this Project.<sup>143</sup> In discussing this issue, the case of *Villages of NZ (Mt Wellington) Ltd v Auckland City Council* was raised during the hearing as being potentially on point.<sup>144</sup>
- 132 In *Villages of NZ*, the Council's counsel conceded that section 128 does not apply to notices of requirement by territorial authorities,<sup>145</sup> but submitted that the Court may impose such conditions as it thinks fit under section 174(4).<sup>146</sup> The Court accepted counsel's submission that the Court is not constrained in imposing "a review-type condition on a designation" and agreed that to avoid any

<sup>139</sup> For example, *Estate of PA Moran v Transit New Zealand* (W055/99, 30 April 1999), Schedule C, Condition 50.

<sup>140</sup> *Transit New Zealand v Pearson* [2002] NZRMA 318 at [8].

<sup>141</sup> As noted in Transcript, at page 398 by Judge Newhook.

<sup>142</sup> Given the size of the proposed designation conditions, if the construction-related conditions are removed post-construction, this should reduce considerably the conditions needing to be attached to the Auckland Plan.

<sup>143</sup> For example, Transcript, at pages 750-751.

<sup>144</sup> *Villages of NZ (Mt Wellington) Ltd v Auckland City Council* (A023/2009, 20 March 2009) (Interim Decision). See Transcript, at page 751.

<sup>145</sup> *Villages of NZ (Mt Wellington) Ltd v Auckland City Council* (A023/2009, 20 March 2009) at [83]. Likewise it is submitted that s128 does not apply to NORs by requiring authorities under s168 RMA.

<sup>146</sup> Ibid.

possible confusion with s128 it would be preferable if the words 'further assess' and/or 'further assessment' were substituted for 'review' ...".<sup>147</sup> This finding enabled the Court to impose a condition requiring the Council to assess and implement further mitigation measures if the monitoring of the on-street parking demand showed that two-way traffic flows could not be maintained.<sup>148</sup>

- 133 It is submitted that this decision essentially confirms that section 128 of the RMA does not apply to designations, and the conditions at issue were worded to ensure that they would not be treated as such. While a "further assessment" condition was imposed, it was simply in the form of a 'do monitoring and if monitoring results show issues, provide further mitigation'. That is not an uncommon form of designation condition, but it is not a review condition in the nature of section 128.

#### **Transport related issues**

- 134 Board members' comments during the hearing indicated there may still be residual concerns around:

- 134.1 The possibility of traffic "backing up" into the tunnels (primarily at the northern end);
- 134.2 Ensuring that the problems experienced on SH1 near Manukau, when the new SH20-SH1 connection opened, are not repeated at Waterview.<sup>149</sup>

#### **Possibility of traffic backing up into the tunnel**

- 135 The Network Integration Plan (NIP) required by proposed Operational Traffic condition OT.1 will look at this issue in greater detail. While congestion westbound on SH16 has the potential to

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<sup>147</sup> Ibid at [86].

<sup>148</sup> *Villages of NZ (Mt Wellington) Ltd v Auckland City Council* (A56/2009, 21 July 2009) (Final decision), Condition 5D. The relevant conditions read:

- 5B On parts of Barrack, Banks and Malone Roads used for sports-field related parking, two-way traffic flows must be maintained, except for a maximum distance of 5 car-lengths on any of the individual roads.
- 5D (i) If the parking demand monitoring shows that the requirements of condition 5B (above) are not being met the requiring authority must assess and implement further mitigation measures to ensure compliance with condition 5B. The further mitigation measures may include (but are not limited to) managing use of the sports fields and road management measures (including further road widening).
- (ii) If further mitigation measures are required under this condition the requiring authority must, in consultation with potentially affected land owners and occupiers on Barrack, Malone and Banks Road, prepare a traffic management (mitigation) plan which describes the further mitigation measures.
- (iii) Within three months of the report being provided under condition 5C(b) (above), the traffic management (mitigation) plan must be provided to the Resource Consent Monitoring Leader who must be satisfied that the further mitigation measures will ensure compliance with condition 5B.

<sup>149</sup> For example, Transcript, at pages 821-822, Member Jackson.

extend back into the northbound tunnel, operational transport modelling indicates that this is unlikely. The transport assessment identified some improvements to Te Atatu Road that could further improve the operation of SH16 and decrease congestion.<sup>150</sup> As the improvements require changes to the local network some distance from SH16, they are not included in the Project, but condition OT.1(c) requires the NIP to address "Integration of the works proposed on Te Atatu Road to appropriately transition between the Waterview Connection Project and any projects being progressed by Auckland Transport". In addition, Auckland Council's Regional Arterial Roading Plan and the NZTA's Western Ring Route (North West) Network Plan include improvements to arterial roads to address issues and maximise opportunities associated with the Project.

- 136 Further, the Tunnel Traffic Operation Plan required by proposed condition OT.2 will include procedures for managing traffic to avoid or minimise potential congestion within the tunnel, particularly during peak periods. This will include methods to manage traffic entering and leaving the tunnel and how the risk of traffic queuing in the tunnel could be managed, including restricting the flow of traffic entering the tunnel on the SH20 on ramps and the traffic heading west on SH16.

***Preventing repeat of problems at SH20-SH1 in Manukau***

- 137 As explained by Mr Clark in questioning by the Board, the problem that occurred at Manukau when the new SH20-SH1 connection opened arose because an agreed assumption of the widening of SH1 south of Manukau (i.e. the receiving environment) was not undertaken prior to SH20 being completed as planned.<sup>151</sup>
- 138 The periods of congestion that occur on SH20-SH1 in the PM peak are as a result of the limited capacity on SH1 southbound. While the NZTA had identified projects to address the southbound capacity issue, they were not properly aligned in the construction programme. Prior to commissioning of the SH20-SH1 link, there was no management plan in place to deal with such problems (i.e. until after the problem emerged).
- 139 This example highlights the importance of widening SH16 as part of the overall Project. The integration of SH20 and SH16 has been planned and aligned in the construction programme.
- 140 Detailed operational modelling of the integration of SH20 and SH16 has been undertaken for the Project. The Tunnel Traffic Operation Plan and Network Integration Plan will assist in identifying how any issues could be dealt with, thereby minimising the risk of similar problems occurring when this Project is complete.

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<sup>150</sup> Assessment of Transport Effects (Technical Report G.18), at page 126.

<sup>151</sup> Transcript, at pages 821-822.

- 141 Additionally, the situation at Manukau involved 4 entry lanes merging into 3 (i.e. 2 new lanes on SH20 joining the 2 existing lanes on SH1 then merging into 3 lanes). On SH16, the 5 entry lanes will have 5 receiving lanes on SH16 (i.e. the 2 lanes from the tunnel will join with the 3 existing lanes on SH16 to form 5 lanes over the causeway).

### **Temporary traffic management**

- 142 Regarding temporary traffic, Member Hardie asked what would happen if the members of the group that co-ordinates temporary traffic plans are not in agreement.<sup>152</sup>
- 143 The roading network is an integrated transport network, and given the importance of managing temporary traffic impacts on this network, it is important that the members of the Traffic Management Project Governance Group (*TMPGG*) work in a collaborative way to achieve consensus.
- 144 Under cross-examination, Mr Clark confirmed his understanding that the members of the *TMPGG* would work collaboratively and it would not be the case that two parties could effectively “out-vote” one another.<sup>153</sup>
- 145 Once established, the *TMPGG* will need to agree on how it will deal with potential issues or disagreements and set these processes out in the updated Construction Traffic Management Plan.<sup>154</sup> However, if there is still an unresolved agreement on a *SSTMP*, provision for dispute resolution is contained within proposed condition CEMP.14 (because the *SSTMP* forms part of the overall CEMP through the Construction Temporary Management Plan).

### **Community Liaison Person**

- 146 Member Jackson asked if there should be more than one community liaison person (*CLP*) appointed pursuant to the conditions.<sup>155</sup>
- 147 The NZTA’s experts maintain that it is of greater benefit to the community to have a single point of contact on the Project, and therefore have nominated a single position in the proposed conditions, the ‘Community Liaison Person’ (pursuant to Condition PI.1). It is important that this person be the main point of contact for the community, with a single contact phone number and transparent accountability to that community.

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<sup>152</sup> Ibid, at page 233. This question was directed at Hugh Leersnyder, who was not able to assist, but was not asked of John Gottler, the NZTA’s temporary traffic expert.

<sup>153</sup> Ibid, at pages 818-819, cross-examination of Ian Clark.

<sup>154</sup> As explained in John Gottler EIC, the Construction Traffic Management Plan is a ‘live’ document that will be reviewed and updated at regular intervals, at paragraphs 65-66.

<sup>155</sup> Transcript, at page 229-230.

- 148 Given the NZTA's experience on other large projects, it is anticipated that this person may have a team of people working with him/her, providing assistance and support where required and covering times when that person may be either on leave or sick. The alternative of having two or more nominated 'Community Liaison People' has the risk of the community feeling disregarded as they get directed and redirected to different people, associated with different construction areas.

### **Explosives**

- 149 Member Jackson asked if there was any provision in conditions or the CEMP that provide that no explosives will be stored on site (i.e. within the construction yards or designation).<sup>156</sup>
- 150 Explosives used during basalt blasting (during tunnelling works or for specific sections along SH16) will only be brought on site when required, and no explosives will be stored or left overnight in the construction yards. This is confirmed in the Hazardous Substances Management Plan (*HSMP*) (section 1.1, paragraph 4) as follows:

This HSMP does not cover the management of explosives. It is the responsibility of the blasting contractor to manage the off-site storage, transport and use of explosives in accordance with the Hazardous Substances (Fireworks, Safety Ammunition, and Other Explosives Transfer) Regulations 2003, no. 2003/176. Explosives used during basalt blasting will only be brought on to site when required. No explosives will be stored or left overnight in the construction yards.

### **Further questions from the Board**

- 151 On 22 March 2011,<sup>157</sup> the Board directed that the NZTA address various queries about the nature of consents required to relocate the Waterview Primary School's main entrance to Oakley Avenue and to relocate the Waterview Kindergarten to Oakley Avenue, including the time that might be taken, cost of doing so and the impact that might have on the commencement of construction of works of the Project.
- 152 Those issues have been addressed in a letter to the Board dated 24 March 2011, which contains the joint view of counsel for the Ministry of Education, the School and the Kindergarten Association. (A copy is attached to this Reply as **Annexure B**).
- 153 The Board also asked the following:<sup>158</sup>

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<sup>156</sup> Transcript, at page 232.

<sup>157</sup> Minute and Directions of the Board, 22 March 2011, at paragraphs 1-6.

<sup>158</sup> Ibid, at paragraph 7.

Indeed, the issues may go further than the school and kindergarten. A number of items of suggested mitigation, which if they recommend themselves to the Board (if consent is to be granted), might well require resource consents. For instance, works in certain reserves, and construction of cycle/pedestrian bridges and pathways. Does NZTA accept that construction works in relevant areas might need to await formal consents for required mitigation? If it sees construction works and those consenting procedures proceeding in tandem, how are items of mitigation to be brought to account if any consents for such were ultimately to be refused?

154 During the hearing, it has become apparent that additional resource consents may be required for the following activities:

154.1 The new Waterview Kindergarten (with the preferred location being at 17 Oakley Avenue, which will require a discretionary activity resource consent from Auckland Council). Proposed condition SO.3 (amended) requires that this occur prior to construction works commencing on land adjoining the current Kindergarten site.<sup>159</sup>

154.2 The works to upgrade Valonia Reserve, adjoining the boundary of the designation in an open space zone. This work would be required at the time of implementation of Alan Wood Reserve Restoration Plan. The implementation of the Restoration Plan is not required as part of the designation conditions (proposed Condition OS.1 requires the submission and approval of these Plans by Auckland Council);

154.3 Creation of open space land use on residential zoned land adjoining Howlett Reserve. (Again, this consent may be required depending on the outcome of proposed Condition OS.10);

154.4 Works for the new sections of the expanded Saxon Reserve (proposed condition OS.10); and

154.5 Potentially for earthworks to provide a flat grassed area for the Te Atatu Pony Club, in accordance with proposed Condition SO.11.<sup>160</sup>

155 On the above issues, the NZTA accepts that the construction works should not proceed until the mitigation is in place. It will necessarily

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<sup>159</sup> It is noted that should resource consent on this site not be obtained (for whatever reason), there are alternative sites which could fulfil the requirements of this condition, including relocation within the existing designated site of the Waterview Primary School (western boundary).

<sup>160</sup> The need for a controlled activity consent for works on the historic stone wall, under the Regional Coastal Plan, was also identified in the EIC of Mr Owen Burn.

assume the risk of obtaining consents in a timely manner so as to meet construction schedules.

- 156 The NZTA is offering the above conditions based on the *Augier* principle.<sup>161</sup> The High Court in *Frasers Papamoa Ltd v Tauranga City Council* endorsed the characterisation of the *Augier* principle “as being concerned with ‘specific undertakings’ or ‘specific representations’ made as a foundation for orders of the Environment Court”.<sup>162</sup> In *Frasers Papamoa Ltd*, the High Court was told that the *Augier* principle “assists in enabling applicants to offer attributes or mitigation beyond the jurisdiction of the Court in order to settle appeals”.<sup>163</sup>
- 157 Should the Board consider that the NZTA ought to provide additional mitigation – e.g. expansion of Valonia Reserve and/or construction of cycle/pedestrian bridges or pathways outside the designation – that raises different issues.
- 158 Those issues are:
- 158.1 Where mitigation relates to land outside the boundaries of the designation, the Board does not have the power to modify the designation by enlarging its boundaries.
- 158.2 The NZTA has no power to designate land for a purpose outside of its requiring authority approval, such as for open space.<sup>164</sup>
- 158.3 The Board would need to require the additional mitigation by way of condition. The NZTA would need to obtain additional resource consents and the approval of the relevant landowners. The NZTA would have very little control over the purchase of any land required, but the more fundamental concern is that those landowners who might be directly affected are not participants in this designation process.
- 158.4 Such a condition would need to be framed as a condition precedent. If tied to construction, this could hold up construction of the Project until various requirements (which are outside of the NZTA’s control) are met. In these circumstances, such a condition would be wholly unreasonable.

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<sup>161</sup> *Augier v Secretary of State for the Environment* (1978) 38 P & CR 219 (QBD).

<sup>162</sup> *Frasers Papamoa Ltd v Tauranga City Council* [2010] NZRMA 29 at [32].

<sup>163</sup> *Ibid*, at [33].

<sup>164</sup> Transit New Zealand (now the NZTA) was approved as a requiring authority for “the construction and operation (including the maintenance, improvement, enhancement, expansion, realignment and alteration) of any State highway or motorway pursuant to the Transit New Zealand Act 1989” (Resource Management (Approval of Transit New Zealand) as Requiring Authority Notice 1994).



- 159 These issues are best demonstrated by way of examples of mitigation sought by Auckland Council/Transport - the Sector 8 cycleway and Valonia Reserve expansion - and are discussed in more detail below.

***Provision of a cycleway over the tunnelled portion of the Project (Sector 8)***

- 160 Auckland Council / Transport, Living Communities and other submitters seek that a cycleway connection through the tunnelled portion of the Project (Sector 8) be required as part of the Project.
- 161 Amongst other things,<sup>165</sup> there is a jurisdictional issue as to whether the cycleway could be required by way of condition if it related to land outside of the Project's designation boundaries that is not owned or controlled by the NZTA, and where further resource consents would be required for its construction.
- 162 In opening submissions, Mr Gerald Lanning for Auckland Council/Transport accepted that the land for the cycleway is outside the designation boundaries, but submitted that conditions requiring mitigation outside the boundaries of the designation "could be drafted so as to be conditional upon landowner consent and/or obtaining of any necessary resource consents".<sup>166</sup> In support of his submission, Mr Lanning quoted from *Westfield (New Zealand) Ltd v Hamilton City Council*.<sup>167</sup>
- 163 Mr Douglas Allan for Living Communities also submitted that offsite mitigation is capable of being addressed through conditions that "[a]re themselves conditional on resource consent and landowner approval being forthcoming".<sup>168</sup>
- 164 The transport experts agreed in caucusing that the Project does not create an adverse transport effect that requires such a cycle link as a mitigation measure.<sup>169</sup> However, it has been argued that the cycleway connection should be provided as part of an offset mitigation package to mitigate the impacts of the Project on open space / connectivity and on the local community generally.<sup>170</sup>

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<sup>165</sup> The Sector 8 cycleway is also addressed later in this Reply.

<sup>166</sup> Opening Legal Submissions on behalf of Auckland Council / Transport, 28 February 2011, at paragraph 7.5.

<sup>167</sup> *Westfield (New Zealand) Ltd v Hamilton City Council* [2004] NZRMA 556 at [56].

<sup>168</sup> Legal Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 4.18(a).

<sup>169</sup> Expert Caucusing Joint Report to the Board of Inquiry – Transport, 3 February 2011, at page 6, paragraph 3. The EMS Final Addendum Report concurs with this view (paragraph 3.3.13).

<sup>170</sup> Opening Legal Submissions on behalf of Auckland Council / Transport, 28 February 2011, at paragraphs 6.6 and 6.7; Legal Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 2.10.

- 165 In *Westfield (New Zealand) Ltd v Hamilton City Council*, the High Court accepted that a condition would be invalid if it was framed in terms requiring “an applicant to bring about a result which is not within the applicant’s power, for example, that the applicant construct a new roundabout on a nearby roadway when the roadway is controlled by Transit New Zealand”.<sup>171</sup> However, a condition would be valid if it “stipulates that a development should not proceed until an event has occurred, in this example that the roundabout has been constructed ...”,<sup>172</sup> even though this event may not lie within the powers of the developer.
- 166 It is notable that no party seeking construction of the cycleway connection as part of the Project has attempted to put forward a suitable condition.
- 167 It appears that Auckland Council/Transport and Living Communities intend for the cycleway requirement to be drafted as a condition precedent. However, in order for such a condition to comply with the *Westfield* decision, there would need to be some form of restriction deferring the NZTA’s ability to carry out the activities authorised by the designation (presumably applicable to Sector 8 (Notice of Requirement 5)), until the cycleway is constructed. This is problematic because it would not be physically possible to construct some links during the construction of the Project. How such a condition precedent could be drafted, or what it would be directed at (i.e. what reasonable and relevant restriction could be imposed on the NZTA), has not been articulated by Messrs Lanning and Allan.
- 168 Whether such a condition precedent could be fulfilled by the NZTA in any event would turn on various matters, including:
- 168.1 The Auckland Council/Transport agreeing with the NZTA on a suitable route, elements (e.g. any bridges), level of design, and cost for the Sector 8 cycleway;
- 168.2 The NZTA obtaining the approval and necessary property rights from all affected landowners to construct the cycleway. While Auckland Council’s agreement as landowner is indicated in paragraph 7.5 of Mr Lanning’s Legal Submissions, there are likely to be other affected landowners (such as Unitec and KiwiRail);
- 168.3 The NZTA obtaining any required resource consents for the construction of the cycleway (as advised by Ms Linzey, these would be discretionary or non-complying); and
- 168.4 The relevant parties agreeing ongoing maintenance and ownership issues.

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<sup>171</sup> *Westfield (New Zealand) Ltd v Hamilton City Council* [2004] NZRMA 556 at [60].

<sup>172</sup> *Ibid.*

- 169 In light of these matters, it is submitted that it would be very difficult to draft a reasonable condition precedent requiring the cycleway which was sufficiently certain, workable and effects based.

*Uncertainty regarding cycleway route*

- 170 As explained in Mr Andrew Murray's rebuttal evidence<sup>173</sup> and recorded in the expert transport caucusing report, the optimal route for a Sector 8 cycleway (and connections to it, and its form, whether on-road or off-road) has not been determined.<sup>174</sup> The caucusing report also records:

4. ... Consequently it is not possible to determine a position on the need for or appropriateness of specific elements.

- 171 The uncertainty surrounding the route, elements, design etc of the proposed cycleway would inevitably lead to uncertainty in the designation condition itself. The Environment Court in *Ferguson v Far North District Council* stated that to be enforceable, a condition must be specific, clear, and accurately expressed such that it leads "to a certain measure of certainty".<sup>175</sup> In that case, the Court held that a condition providing for a public walkway was uncertain due to "considerable grey areas, including where the pathway is to go, who is to be responsible for its creation, formation and maintenance, and who will be legally responsible for the pathway".<sup>176</sup>

*Requirement for landowner agreement and further resource consents*

- 172 Mr Allan and Mr Lanning saw no issues with a condition that is itself conditional on resource consent and landowner approval. Mr Allan referred to some examples, including where a consent holder was required to undertake works on remote council land (with council permission).<sup>177</sup>
- 173 The NZTA does not concur with this view. In the example given by Mr Allan, it is significant that the council had already given its approval to off-site works being undertaken on its land. Notwithstanding substantial discussions to date, matters have not progressed that far in this case and the route for a cycleway is far from agreed with Council – let alone with any of the various submitters (including Cycle Action Auckland) who support such a connection.

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<sup>173</sup> Andrew Murray Rebuttal Evidence, at paragraph 53 and Annexure D.

<sup>174</sup> Expert Caucusing Joint Report to the Board of Inquiry – Transport, 3 February 2011, at page 6, paragraph 4.

<sup>175</sup> *Ferguson v Far North District Council* [1999] NZRMA 238 at 244.

<sup>176</sup> Ibid.

<sup>177</sup> Legal Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 4.19.

- 174 Further, it is submitted that a condition precedent which in effect requires a further resource consent process does not provide finality or sufficient certainty. In considering an application for enforcement orders, regarding a breach of consent conditions, the Environment Court in *Nelson City Council v Mainland Television Ltd* stated:<sup>178</sup>

It is clearly undesirable that an applicant should be required to provide as a condition of one consent something which is again subject to a resource consent process.

- 175 It is also submitted that it would not be reasonable to frame a potential condition to provide offset mitigation, for the impacts of the Project on open space / connectivity and on the local community generally, in the form of a condition precedent.
- 176 In general, where conditions precedent have been imposed, the mitigation required to be undertaken is essential to mitigate the effects of a development. For example, in *Roman Catholic Diocese of Auckland v Franklin District Council*, the Environment Court amended conditions of consent for the establishment of a large secondary school so that the school was not to open unless various traffic measures were undertaken.<sup>179</sup> In those circumstances, the High Court upheld the Environment Court's decision that Part 2 of the RMA would not be satisfied if the development was allowed to proceed without this mitigation.
- 177 In this case however, the transport experts agree that the Sector 8 cycleway is not necessary to mitigate transport effects of the Project. A cycleway would provide benefits to the local community and would be more akin to environmental compensation. In these circumstances, it is submitted that imposing a restriction on the designation by either delaying construction or preventing operation of the tunnels until the cycleway is in place (assuming that will be the form of restriction imposed) would be far too onerous and unreasonable.
- 178 The NZTA supports the conclusion of EMS in its final Section 42A Addendum Report that there is no "rational nexus" with the cycleway in terms of mitigating effects of the Project. As a result, EMS does not consider the cycleway should be required as part of the Project.<sup>180</sup>

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<sup>178</sup> *Nelson City Council v Mainland Television Ltd* (C92/2005, 28 June 2005) at [24]. In that decision, the condition that was breached regarding the provision of off-site parking required a further resource consent. Mainland Television Ltd held a resource consent to use the premises for television studios, but breached a condition by failing to obtain a resource consent for the use of off-site carparks [at paragraphs 7 and 13]. The Court granted the enforcement orders requiring Mainland Television Ltd to cease using the premises [at paragraph 39], but made the above comments regarding the appropriateness of the condition.

<sup>179</sup> *Roman Catholic Diocese of Auckland v Franklin District Council* (W18/2007) at [1] and [104].

<sup>180</sup> EMS Final Addendum Report, at paragraph 3.3.13.

- 179 As explained by Mr Murray and acknowledged by Mr Tommy Parker in cross-examination, the NZTA does not dispute that a cycleway connection would be "beneficial". However, there are a number of issues that need to first be worked through by the NZTA and Auckland Council / Auckland Transport so that this can be progressed as a separate project,<sup>181</sup> which the NZTA is ready, willing and able to do.<sup>182</sup>
- 180 Consequently, in the absence of the NZTA offering up an Augier-type condition (which it is not), it is submitted that it would not be possible to draft a sufficiently certain, fair or reasonable condition precedent requiring a cycleway connection as part of the Project.

***Expansion of Valonia Reserve***

- 181 Auckland Council seeks the expansion of Valonia Reserve as part of an alternative open space mitigation package.<sup>183</sup> The Council's revised layout would require the acquisition and removal of eight additional properties to that currently covered by the Project. This would involve enlarging the designation footprint significantly beyond that lodged and notified.
- 182 The NZTA's position remains the same as that set out in counsel's memorandum on this preliminary issue on 18 February 2011. Put simply, the Board does not have jurisdiction to enlarge the designation by the inclusion of the eight Valonia Street properties that would be required to enlarge Valonia Reserve.
- 183 All counsel appearing before the Board appeared to agree on the relevant law; that the power to modify a requirement does not permit changes that alter the essential nature or character of that requirement. In determining this, a key concern is whether people affected by the modification have been involved in the decision-making process.<sup>184</sup>
- 184 It is quite possible that the owners or residents of those properties may have submitted on the Project had such a proposal formed part of the Project as lodged and notified. Further, the removal of the eight houses could expose properties and houses across the street to different effects from the sportsfields, and possibly also from the motorway.

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<sup>181</sup> Andrew Murray Rebuttal Evidence, at paragraph 56.

<sup>182</sup> Tommy Parker EIC, at paragraph 147, Rebuttal Evidence, at paragraphs 46-47 and Annexure B (letter to Auckland Transport, 17 December 2010). See also Transcript, at pages 68-70 and 76-77.

<sup>183</sup> Opening Legal Submissions on behalf of Auckland Council / Transport, at paragraph 5.2.

<sup>184</sup> Memorandum of Counsel on behalf of Auckland Council / Transport, 18 February 2010, at paragraph 11(e).

- 185 In light of this, such a modification would alter the nature of the notice of requirement and the Board therefore cannot require the enlargement of the designation.
- 186 Mr Lanning attempted to bypass this jurisdictional issue by suggesting that conditions could be imposed on the NZTA's Project that would somehow achieve the expansion of Valonia Reserve.<sup>185</sup> The fact that eight additional residential properties would need to be acquired (a process the NZTA would have little control over on a willing seller/buyer basis or indeed any certainty with), and that the owners/occupiers of those properties have not had the opportunity to participate in this process, appear to be of little consequence to the Council.
- 187 Following the *Westfield* decision, the condition proposed by Mr Lanning would also need to be framed as some form of condition precedent. Once again, there would need to be some restriction deferring the NZTA's ability to carry out activities authorised by the designation until the Reserve is actually expanded. For similar reasons as explained above, such a restriction (be it on construction commencing or operation of the motorway post-construction) would in our submission be wholly unreasonable, particularly since the expansion of the Reserve is sought in order to establish side by side sportsfields and a cricket pitch and/or to provide or preserve open space.<sup>186</sup> In conjunction with the need for eight residential properties in Valonia Street to be removed, it is submitted that imposition of such a condition precedent is not warranted in order to mitigate the effects of the Project.

### **ISSUES COMMON TO VARIOUS SUBMITTERS**

- 188 This section of Reply addresses issues common to various submitters, as follows:
- 188.1 Mitigation analysis – sector versus Project as a whole;
  - 188.2 National/regional benefits versus local benefits;
  - 188.3 Value of mitigation;
  - 188.4 Relocation of northern ventilation stack;
  - 188.5 Southern ventilation buildings;
  - 188.6 Open space;
  - 188.7 Additional bridges;

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<sup>185</sup> Ibid, at paragraphs 8-12.

<sup>186</sup> Cross-examination of Andrew Beer, Transcript, at page 1218.

- 188.8 Provision of cycleway through tunnelled portion of Project (Sector 8);
- 188.9 Air quality;
- 188.10 Provision of local on/off ramps to/from SH20;
- 188.11 Mitigation by tunnelling;
- 188.12 Impact on trees;
- 188.13 Alternatives assessment does not require the "best" option;
- 188.14 Relevance of "community opinion";
- 188.15 Economics and BCR issues;
- 188.16 Mitigation of ecotones;
- 188.17 Motu Manawa-Pollen Island Marine Reserve;
- 188.18 Transparent Noise Barriers; and
- 188.19 Transport related issues.

**Mitigation analysis – sector versus Project as a whole**

- 189 Counsel for Living Communities submits that "[t]he Board cannot trade off mitigation between different parts of the route".<sup>187</sup> Mr Allan gave the example of adopting Option 3 at the southern portal having little relevance to the community around the northern portal.<sup>188</sup> He went on to submit that "[i]f mitigation is needed in a number of locations along the route then it needs to be implemented at each location regardless of the cost efficiency of further works at some other part of the route".<sup>189</sup>
- 190 In so doing, Mr Allan appears to be taking a very narrow approach to the analysis required under Part 2 of the RMA, suggesting that the Board split the Project into its different sectors and assess the mitigation of effects in each sector in isolation of one another or the whole Project. With respect, that approach is not correct.

**Part 2**

- 191 Part 2 has been described as "the engine room of the RMA".<sup>190</sup> It "expresses in ordinary words of wide meaning the overall purpose

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<sup>187</sup> Legal Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 5.7(c).

<sup>188</sup> Ibid.

<sup>189</sup> Ibid, at paragraph 5.7(d). See also Representation by Peter McCurdy on behalf of the Star Mills Preservation Group, 22 March 2011, at paragraph 8.3.

<sup>190</sup> *Auckland City Council v John Woolley Trust* [2008] NZRMA 260 at [47].

and principles of the Act".<sup>191</sup> The decision of *North Shore City Council v Auckland Regional Council* provides guidance on how section 5 should be applied:<sup>192</sup>

The method of applying section 5 then involves an overall broad judgment of whether a proposal would promote the sustainable management of natural and physical resources. That recognises that the Act has a single purpose...Such a judgment allows for comparison of conflicting considerations and the scale or degree of them, and their relative significance or proportion in the final outcome.

- 192 Where a proposal involves a number of issues, the Court has made it clear that a decision cannot be reached on section 5 merely on the basis that a paragraph of section 5(2) cannot be satisfied in respect of just one issue:<sup>193</sup>

Where (as in this case) there are a number of issues to be considered in deciding whether a proposal would promote the sustainable management of natural and physical resources as defined, it is our understanding that the duty entrusted to those making decisions under the Act cannot be performed by simply deciding that on a single issue one or more of the goals in paras (a), (b) and (c) is not attained.

- 193 In *Takamore Trustees v Kapiti Coast District Council*, the High Court dismissed the appellant's argument that the section 5 RMA assessment was skewed by comparing the need to build the whole of the road against the effects of the small section of road objected to by Maori. (The appellant argued the Environment Court could have withdrawn a portion of the requirement for a link road, in respect of the area on which the requirement would have the greatest effect on the appellant's ancestral lands).<sup>194</sup>

- 194 The High Court concluded that "there could hardly be a need to consider the NOR section by section",<sup>195</sup> as the Environment Court had concluded "that there were no grounds to set aside the designation over the total route". The Court held there was no power to cancel part of the requirement,<sup>196</sup> but even if confirmation of a section of the notice of requirement could be withheld, the gap

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<sup>191</sup> *New Zealand Rail Ltd v Marlborough District Council* [1994] NZRMA 70 at 86. This quote was recently endorsed by the High Court in *Meridian Energy Ltd v Central Otago District Council* [2010] NZRMA 477 at [91].

<sup>192</sup> *North Shore City Council v Auckland Regional Council* [1997] NZRMA 59 at 94. This finding was referred to more recently with approval in *Genesis Power Ltd v Franklin District Council* [2005] NZRMA 541 at [51].

<sup>193</sup> *North Shore City Council v Auckland Regional Council* [1997] NZRMA 59 at 93. This finding was referred to with approval in *Genesis Power Ltd v Franklin District Council* [2005] NZRMA 541 at [52].

<sup>194</sup> *Takamore Trustees v Kapiti Coast District Council* [2003] 3 NZLR 496 at [34].

<sup>195</sup> *Ibid*, at [35].

<sup>196</sup> *Ibid*, at [37].



in the alignment would mean the link road was not performing the functions that were intended.<sup>197</sup>

**Section 5(2)(c)**

- 195 In terms of section 5(2)(c) of the RMA, the Board of Inquiry into the *Upper North Island Grid Upgrade Project* held that:<sup>198</sup>

... section 5 does not require that all adverse effects on the environment be fully avoided, remedied or mitigated. Rather, as Transpower submitted, the extent to which adverse effects would not be avoided, remedied or mitigated is to be included in making the judgement whether allowing the proposal would more fully promote sustainable management of natural and physical resources rather than disallowing it.

- 196 The Board in that case found that there would be significant adverse landscape and visual effects, effects of clearance of vegetation and habitat, potential adverse social effects, and disruption to farming activities as a result of the Grid Upgrade Project.<sup>199</sup> Those effects would not be fully eliminated by avoidance, remediation or mitigation.<sup>200</sup> Instead, these “residual” effects “are to be brought into the judgement process”.<sup>201</sup>

- 197 In *Contact Energy Limited v Manawatu-Wanganui Regional Council*, the Environment Court considered the presence of adverse landscape and visual effects when considering applications for resource consents for a wind farm.<sup>202</sup> The Court granted the consents,<sup>203</sup> and in considering Part 2 of the RMA, stated:

[t]here will inevitably be some adverse landscape and visual amenity effects – everyone agrees about that, but to the greatest degree one could reasonably expect, the site and the design reduce those effects to a level that, objectively considered, is acceptable.<sup>204</sup>

- 198 An inability to fully mitigate an adverse effect did not prevent the confirmation of a requirement in the decision of *Auckland Volcanic Cones Society Inc v Transit New Zealand*.<sup>205</sup> This was despite the significant adverse effects of the proposed motorway on the volcanic

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<sup>197</sup> Ibid, at [35].

<sup>198</sup> Report and Decision of the Board of Inquiry into the Upper North Island Grid Upgrade Project (September 2009) at [2477].

<sup>199</sup> Ibid, at [2478].

<sup>200</sup> Ibid, at [2478].

<sup>201</sup> Ibid, at [2479].

<sup>202</sup> *Contact Energy Ltd v Manawatu-Wanganui Regional Council* [2010] NZEnvC 406 at [1].

<sup>203</sup> Ibid, at [139].

<sup>204</sup> Ibid, at [129].

<sup>205</sup> *Auckland Volcanic Cones Society Inc v Transit New Zealand* [2003] NZRMA 54.

cone, which was found to be an outstanding natural feature under section 6(b) of the RMA.<sup>206</sup>

- 199 In dismissing an appeal of the Environment Court's decision, the High Court described the Environment Court as having "considered that the SH20 motorway extension was a matter of sufficient importance that to approve the notice of requirement satisfied the purposes of sustainable management".<sup>207</sup>
- 200 The High Court approved of the following passage from the Environment Court's decision, which set out the approach to Part 2:<sup>208</sup>

Therefore, our task in this part of our decision in evaluating Part II matters against the notice of requirement proposal is to identify matters which may be of importance in terms of Part II; **identify what measures have been taken to avoid remedy or mitigate adverse effects of the proposal** on the environment, with particular reference to environmental matters singled out in ss 6 and 7; and then **to assess whether those measures are sufficient in view of the importance of the SH20 corridor or whether the damage inflicted by the works associated with that designation will have such an effect upon Part II matters that the work should not proceed.**

(Emphasis added)

***Overall broad judgement***

- 201 Accordingly, the measures intended to mitigate the adverse effects of this Project must be assessed in light of the national significance of the Project.<sup>209</sup> An inability to fully mitigate an adverse effect does not preclude a proposal from satisfying the purpose of the RMA.<sup>210</sup> Any "residual" adverse effects must be taken into account when making an overall broad judgement under section 5.<sup>211</sup>
- 202 It is submitted that the Project should not be divided up into geographical sectors when the Board considers the proposed mitigation under section 5. Such an approach was not taken by the Board for the Grid Upgrade Project. Rather, the Board considered each class of adverse effect separately, as well as the positive effects, and determined that allowing the Grid Upgrade Project would more fully achieve the sustainable management purpose of

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<sup>206</sup> Ibid, at [4].

<sup>207</sup> *Auckland Volcanic Cones Society Inc v Transit New Zealand* [2003] NZRMA 316 at [38].

<sup>208</sup> Ibid, at [37].

<sup>209</sup> Ibid, at [37].

<sup>210</sup> *Report and Decision of the Board of Inquiry into the Upper North Island Grid Upgrade Project* (September 2009) at [2477].

<sup>211</sup> Ibid, at [2479].

the RMA, notwithstanding the considerable adverse effects found.<sup>212</sup> It held as follows:<sup>213</sup>

However, when compared in proportion to the national need and benefit of the Grid Upgrade Project, the Board judges that the significance of those considerable adverse effects on the environment would not be equivalent to the national and regional need for, and benefit of, the Grid Upgrade Project.

- 203 Similarly, for this Project to achieve its intended function of completing the Western Ring Route, it is submitted that the Board must consider it as a whole, so that an overall broad judgement is made under section 5 of the RMA.<sup>214</sup>

**National and regional benefits of the Project versus local benefits**

- 204 This section of the Reply responds to the concerns expressed by numerous submitters that the local communities experience all the negative effects of the Project but none of the benefits.<sup>215</sup> It also responds to questions from Board members regarding the extent to which economic benefits of the Project are realised 'locally', rather than regionally or nationally.<sup>216</sup>

- 205 The NZTA wishes to make two key points in response:

205.1 First, the Board and submitters cannot overlook the fact that:

- (a) This Project involves a Road of National Significance (as determined by the Government (and listed in the GPS);
- (b) Two Ministers issued a direction that this Project be considered a proposal of national significance (under the RMA); and

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<sup>212</sup> Ibid, at [2514] and [2517].

<sup>213</sup> Ibid, at [2513].

<sup>214</sup> The High Court in *Takamore Trustees v Kapiti Coast District Council* [2003] 3 NZLR 496 at [35] acknowledged the difficulty that could arise if there was an ability to cancel part of a requirement: "the immediate consequence was whether the link road was any longer a link road at all performing the functions intended".

<sup>215</sup> For example, Opening Submission on behalf of Living Communities & Others, at paragraphs 1.5(b), 2.7 and 2.8. Opening Submissions on behalf of the Albert-Eden Local Board, at paragraphs 6.2-6.5 and 9.1. In response to questioning by the Board, Mr Mead indicated that there should be local or individual 'compensation' to balance the wider regional benefits of the Project (Transcript, at page 1310).

<sup>216</sup> For example, Transcript, at pages 207 and 209, Mr Dormer's and Ms Jackson's questioning of Mr Copeland.

- (c) The state highway network is considered a matter of national importance under the RMA.<sup>217</sup>

205.2 Secondly, the local communities do benefit from the Project.

***Economic benefits realised by the local communities surrounding new SH20 link***

- 206 In undertaking the Assessment of Effects and the Assessment of Social Effects, the Project Team has concluded that there are local benefits from the Project in improved accessibility and connectivity. To further provide a quantification of this benefit, a specific assessment has been undertaken by Mr Murray of the proportion of the monetized benefits accrued by the local community, compared to the regional community (see **Annexure C** to the Reply).<sup>218</sup> This assessment has focused on the communities surrounding the new SH20 link, as it is submitters from those communities who have expressed the greatest concern that they experience no transport benefit from the Project (e.g. the communities of Owairaka / Mt Albert, New Windsor, Waterview, Point Chevalier).
- 207 In this assessment, Mr Murray concludes that some 10% of the monetized benefits will be accrued to the 'local community' surrounding the SH20 Waterview Connection. He has defined the area where these benefits are realized (as shown in the Figure 1, Defined Local Community, of **Annexure C**). This is a notable proportion of the overall benefits of the Project, considering this community represents some 2% of the total trips made in the Auckland Region.
- 208 The monetized benefits calculated in this assessment relate most directly to the travel time benefits for those people either travelling to or from this local area. Whilst not a full assessment of all 'benefits', Mr Murray's assessment provides a quantifiable method to demonstrate that while the Project is a regional public good, the region of benefit includes the local community (rather than them being exclusive entities as has been presented by many submitters).
- 209 In addition to these, other transport benefits are identified for the local community in the Social Assessment, relating to the improved ability for other transport modes on the local network (e.g. through walking and cycling connections) which are not calculated in the monetized benefit.

***Te Atatu Community***

- 210 In addition to the transport benefits described above, other aspects of the Project will clearly provide local benefits for the Te Atatu Community. The delivery of these outcomes is provided for in the

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<sup>217</sup> *Auckland Volcanic Cones Society Inc v Transit New Zealand* [2003] NZRMA 316 (HC), [34]-[35].

<sup>218</sup> Letter from Andrew Murray, 18 March 2011, 'Assessment of Local Benefits'.

proposed suite of conditions (these are referenced here, as appropriate):

- 210.1 Improved pedestrian / cycleway facilities adjacent to SH16, for local road access to the pedestrian / cycleway, and upgraded underpass at Te Atatu Interchange for access between Te Atatu and Te Atatu North;<sup>219</sup>
- 210.2 Improved safety and amenity at pedestrian / cycle accessway and entrance of Rosebank Domain, through the separation of the vehicular and pedestrian / cycle accessways and through restoration of this open space area following construction;<sup>220</sup>
- 210.3 Improved ambient noise environment for residents adjacent to SH16, as a result of the proposed noise barriers,<sup>221</sup> with the exception of those residents on Alwyn Avenue who have expressed a preference to retain their views and will therefore be offered the option of internal noise assessment and, as necessary, building modification;<sup>222</sup>
- 210.4 Improved screening and amenity planting, including specimen tree planting at Te Atatu Interchange (provided by Condition LV.2(c) and restorative planting in currently unused open space land along SH16 (adjacent to the Rosebank Domain);<sup>223</sup>
- 210.5 Improved ecological planting and rehabilitation of the open space zoned land adjoining SH16;<sup>224</sup>
- 210.6 Improved passenger transport opportunities by increasing the proportion of bus shoulders (Quality Transport Networks) on SH16;<sup>225</sup>
- 210.7 Urban design improvements and general upgrades, such as new barrier treatment for the Te Atatu Road bridge and concrete retaining walls to match other parts of SH18 further north and to help establish a sense of place;<sup>226</sup>

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<sup>219</sup> Provided by conditions DC.1(d) and OT.1(d).

<sup>220</sup> Provided by conditions DC.1(b), OS.3 and LV.1.

<sup>221</sup> Provided by conditions ON.2 - ON.5.

<sup>222</sup> Provided by conditions ON.6 – ON.11.

<sup>223</sup> Provided by condition LV.9.

<sup>224</sup> Provided by Condition LV.9.

<sup>225</sup> Set out in the AEE Part A, Section 2 and provided in condition DC.1.

<sup>226</sup> AEE Section 4.1.10.

- 210.8 Learning and teaching opportunities for education facilities to participate in Project aspects (planting, artworks etc);<sup>227</sup>
- 210.9 Ecological restoration and enhancement of coastal margins through vegetation and coastal rock revetment planting;<sup>228</sup>
- 210.10 Secured and longer term pest and weed management for Traherne Island;<sup>229</sup>
- 210.11 Improved performance of stormwater treatment discharging to receiving environments from existing and new paved areas of SH16, with 80% removal of TSS from 100% of new and proposed paved areas through Sectors 1 – 4.<sup>230</sup>

***Waterview / Pt Chevalier Community***

- 211 In addition to the transport benefits, other aspects of the Project will also provide local benefits for the Waterview / Point Chevalier Communities. The delivery of these outcomes is provided for in the proposed suite of conditions (as appropriate these are cross referenced here):
  - 211.1 Improved pedestrian / cycleway accessways between Waterview and Point Chevalier and between Waterview and Eric Armishaw Park / Walker Park (open space) adjacent to SH16;<sup>231</sup>
  - 211.2 Providing bus priority measures on northern side of Great North Road;<sup>232</sup>
  - 211.3 Enhanced amenity planting, including specimen tree planting at the Great North Road Interchange;<sup>233</sup>
  - 211.4 The Project will provide increased public access to and along the CMA (i.e. through the Waterview Open Space Restoration Plan);<sup>234</sup>
  - 211.5 Improved recreation furniture (quality and quantity) in accordance with Auckland Council guidelines in open space restoration areas (Waterview Reserve area);<sup>235</sup>

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<sup>227</sup> Provided by conditions SO.1(e) and SO.6.

<sup>228</sup> Delivered by Condition V.15.

<sup>229</sup> Provided by Condition V.18.

<sup>230</sup> Provided by Condition SW.11.

<sup>231</sup> Provided by Conditions DC.1(d) and OT.1(e).

<sup>232</sup> Provided by Condition OT.1(a).

<sup>233</sup> Proposed by Condition LV.2(c).

<sup>234</sup> Delivered by Condition OS.5.

<sup>235</sup> Proposed by Condition OS.4(e).

- 211.6 Improved active recreation facilities, through provision of one 'open for play' full size sand carpeted football field at Waterview Reserve, improving the total 'hours of play' for this sportsfield;<sup>236</sup>
- 211.7 Improved and expanded recreation facilities at Saxon Reserve and linkage to Howlett Reserve, providing for improved use of existing open space areas;<sup>237</sup>
- 211.8 Ecological restoration and enhancement through vegetation and coastal rock forest development;<sup>238</sup>
- 211.9 The bridge crossing of Oakley Inlet will improve public access to and along the CMA and between Waterview and the Northwestern Cycleway;<sup>239</sup>
- 211.10 Improved public access to the Star Mill heritage area, interpretive signage and landscaping of this area;<sup>240</sup>
- 211.11 Improved recreation access to and along the CMA of Waterview (provided by the establishment of new esplanade reserve areas, in accordance with the Open Space Replacement Land (Schedule A, Row 29));<sup>241</sup>
- 211.12 Area of treated impervious surface increased by 3ha, improving stormwater discharge to CMA;
- 211.13 Improved ambient noise environment for residents adjacent to SH16 at Waterview and Pt Chevalier due to operational noise mitigation;<sup>242</sup>
- 211.14 Upgraded reserve and open space facilities at Saxon Reserve, Waterview Reserve and Howlett Reserve in accordance with Auckland Council guidelines;
- 211.15 Upgraded facilities at the Waterview Primary School as a key social facility used by the Waterview Community (as confirmed by agreement with the School) including improved acoustic insulation, new classroom and playground facilities, upgraded classroom facilities and a reconfigured school entrance;<sup>243</sup>

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<sup>236</sup> Provided by Condition OS.5(a)(i).

<sup>237</sup> Confirmed in Condition OS.5.

<sup>238</sup> Delivered by Condition V.14.

<sup>239</sup> Proposed by Condition Arch.6.

<sup>240</sup> Proposed by Conditions OS.5(b)(i) and ARC.6.

<sup>241</sup> Required by Condition OS.5.

<sup>242</sup> Provided by conditions ON.2 – ON.11.

<sup>243</sup> In part provided to meet the criteria provided by Condition CNV.2(d).

- 211.16 Relocation and development of the Waterview Kindergarten to Oakley Avenue, including upgrading of the facility (through construction of new buildings, playgrounds and other facilities);<sup>244</sup>
- 211.17 Opportunities for education facilities and community group involvement in Project aspects (planting, artworks etc);<sup>245</sup>
- 211.18 Improved performance of stormwater treatment discharging to receiving environments from existing and new paved areas of SH16, with 75% removal of TSS through Sectors 5 and 6 from 100% of new surfaces and some 80% of existing surfaces).<sup>246</sup>

### **Owairaka Community**

- 212 In addition to the transport benefits, other aspects of the Project will provide local benefits for the Owairaka Community. The delivery of these outcomes is provided for in the proposed suite of conditions (as appropriate these are cross referenced here):
- 212.1 Improved recreation furniture (quality and quantity) in accordance with Auckland Council guidelines in open space restoration areas (Alan Wood Reserve area);<sup>247</sup>
- 212.2 Improved active recreation facilities, through providing two 'open for play' full size sand carpeted football fields in new Valonia Reserve area, being a 'betterment' of existing sportsfield facilities in this area, in the size of 'hours of play' for these fields;<sup>248</sup>
- 212.3 Amendment to the configuration of proposed sportsfields on the Valonia Reserve area. This is to maximise opportunity for summer sports playing areas (in addition to the winter sports code already provided) as summer sports playing areas are not currently provided for in the configuration of fields in Alan Wood Reserve;<sup>249</sup>
- 212.4 Improved pedestrian / cycle facilities through Alan Wood Reserve, including connections across Oakley Creek (Hendon Park Bridge) and from Methuen Road and a continuous open space land corridor through this area;<sup>250</sup>

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<sup>244</sup> Provided by Condition SO.3.

<sup>245</sup> Provided by Conditions SO.1(e) and SO.6.

<sup>246</sup> Provided by Condition SW.11.

<sup>247</sup> Proposed by Condition OS.4(e).

<sup>248</sup> Provided by Condition OS.6(a)(i).

<sup>249</sup> Provided by amended proposed Condition OS.6(a)(v).

<sup>250</sup> Provided by Condition OS.6(b).



- 212.5 Improved provision for pedestrian / cyclists through the Southwestern Cycleway expansion from Mt Roskill through to Alan Wood Reserve (in the vicinity of Steward Road);<sup>251</sup>
- 212.6 Improved ecological value of open space areas, including riparian planting, walkways and ecological planting of 'wetland areas' which will contribute to passive open spaces (though not included in the open space replacement land area calculations);<sup>252</sup>
- 212.7 Opportunities for education facilities and community group involvement in Project aspects (planting, artworks etc);<sup>253</sup>
- 212.8 Restoration of naturalised stream morphology and ecological systems of the Oakley Creek.<sup>254</sup>

### **Value of mitigation**

- 213 In his submissions, Mr Allan raises the issue as to whether the Board, in assessing whether additional expenditure should be incurred on mitigation, should have regard to whether that would be the best use of funds.<sup>255</sup> Mr Allan considers that such an approach is flawed. Mr Lanning similarly observed that the proposed mitigation appears to be "significantly influenced by monetary costs" and consequently, the NZTA's approach to mitigation has been too narrow.<sup>256</sup>
- 214 Under the LTMA, the NZTA has a statutory responsibility in undertaking its functions, to use its revenue in a manner that seeks value for money.<sup>257</sup> This concept of "value for money" is also an important feature of the Government's vision in the New Zealand Transport Strategy 2008.<sup>258</sup> Affordability is one of the principles of this vision, and a key component is "...the need for all investments in transport to be cost-effective and represent value for money".
- 215 The New Zealand Transport Strategy 2008 is listed as one of the relevant non-statutory documents,<sup>259</sup> and is considered to be

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<sup>251</sup> Provided by Condition DC.1(d).

<sup>252</sup> Provided by Conditions OS.6, SW.11, and STW.1.

<sup>253</sup> Provided by Conditions SO.1(e) and SO.6.

<sup>254</sup> Provided by proposed Condition STW.1.

<sup>255</sup> Legal submissions on behalf of Living Communities & Others dated 7 March 2011, paragraphs 5.6-5.7.

<sup>256</sup> Legal submissions on behalf of Auckland Council/Transport dated 28 February 2011.

<sup>257</sup> Section 96(1)(b), LTMA.

<sup>258</sup> "The government's vision for transport in 2040 is that: 'People and freight in New Zealand have access to an affordable, integrated, safe, responsive and sustainable transport system.'", section 1.3.1 New Zealand Transport Strategy 2008.

<sup>259</sup> AEE, Part B, Section 6.5.10.

relevant to the Board's consideration of the Project under the RMA (in terms of section 171(1)(d) and section 104(1)(c)).

- 216 The concept of "value for money" is explained by Mr Parker in his rebuttal evidence and further under cross-examination. He also explained the primary reason why the NZTA aims to work within its approved Project budget:<sup>260</sup>

...cost is always an issue for the Agency. We are the custodians of taxpayers' money and therefore we need to make sure that any money we spend represents good value for money.

- 217 Applying this concept, in developing the mitigation package for the Project, the NZTA has scrutinised the costs for each mitigation measure against the benefits those measures would bring.<sup>261</sup>
- 218 Mr Parker explained that if the Board were minded to require additional mitigation and this were to take the Project over the 50<sup>th</sup> percentile for which it is funded, a further draw on the NLTF would be required.<sup>262</sup> This would have a direct impact on other transport projects around New Zealand (e.g. delay, cancellation), due to the transport funding framework that the NZTA is required by statute to work within.
- 219 As a result, the cost and value of any mitigation sought by submitters or imposed by the Board is – and must be – a relevant and important consideration.
- 220 Mr Allan also suggested that the costs of mitigation sought by submitters be kept in perspective<sup>263</sup>, and notes that (for example) \$40 million would only be 2% of the Project budget.
- 221 The NZTA takes a different view, and considers that \$40 million is a significant amount of money, particularly when considered against the mitigation already being proposed for the Project.
- 222 In light of the substantial mitigation package proposed, the NZTA rejects claims by some submitters that it is doing "as little as possible" on this front, or that its approach to mitigation has been too narrow. The NZTA considers that the Project design and suite of mitigation measures proposed and provided for in the conditions are entirely appropriate.
- 223 Counsel for the Albert-Eden Local Board accepted that cost is a factor in terms of the reasonableness of any condition imposed.<sup>264</sup>

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<sup>260</sup> Transcript, page 65.

<sup>261</sup> Transcript, pages 82 and 85.

<sup>262</sup> Transcript, page 66.

<sup>263</sup> Legal submissions on behalf of Living Communities & Others dated 7 March 2011, paragraph 5.9.

Ms Devine's submission is echoed in the Environment Court's decision in *Environmental Defence Society Inc v Taranaki Regional Council*,<sup>265</sup> where the Court considered a condition mitigating the emission of carbon dioxide from a proposed power station. The Court was satisfied that "while the recovery and storage of carbon dioxide is technically feasible, the cost is so prohibitive that it would be unreasonable to impose such an alternative condition".<sup>266</sup>

- 224 In a similar vein, in considering if additional or alternative mitigation is necessary for the Project, it is submitted that the Board should consider whether conditions requiring significant expenditure are reasonable, and have regard to the principle of affordability in the New Zealand Transport Strategy.

**Relocation of the northern ventilation stack**

- 225 The location of the northern ventilation stack has been one of the more contentious issues during the hearing. By contrast, the location and improved form of the northern ventilation buildings (as reflected in Mr David Gibbs' EIC in particular) was not the subject of such debate. The final design of those buildings must go through the outline plan of works process, with various and specific requirements for their final form specified in proposed designation condition DC.8.
- 226 The NZTA agrees with EMS' Final Addendum Report that "the location of the vent stack should be determined through this hearing process with only detailed design of the structure left to the OPW process".<sup>267</sup>
- 227 The NZTA remains firmly of the view that the location currently proposed – adjacent to the school on the west side of Great North Road – is preferred and that the adverse effects of the stack are capable of being adequately mitigated in that location. The debate that was generated during the hearing by submitters who support a relocation of that stack across the road in Oakley Esplanade Reserve has served only to highlight, in the NZTA's view, the validity of that position. Amongst other things, it exposed various difficulties associated with a stack located on the eastern side of Great North Road.

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<sup>264</sup> Submissions on behalf of the Albert-Eden Local Board dated 10 March 2011, at paragraph 5.8.

<sup>265</sup> *Environmental Defence Society Inc v Taranaki Regional Council* (A184/2002, 6 September 2002) at [1].

<sup>266</sup> *Environmental Defence Society Inc v Taranaki Regional Council* (A184/2002, 6 September 2002) at [53].

<sup>267</sup> Executive Summary. We note that EMS Final Addendum Report, at paragraph 2.1.17 refers to the "building form, location and height of the stacks" being resolved through this process. However, the NZTA understands that EMS did not mean to include "building form" as that will be a matter addressed during detailed design and through the Outline Plan of Works process. (Compare at paragraph 3.2.3 where EMS refers only to "location and bulk" of buildings).

***Jurisdictional issue***

- 228 As one such initial difficulty, it is submitted that there is a jurisdictional issue with such a relocation. While an alternative location for the stack across Great North Road could be found within the designation boundaries currently before the Board,<sup>268</sup> it is submitted that an obvious issue still arises as to the Board's jurisdiction to modify the requirement in this manner.
- 229 Earlier in the proceeding, counsel for a number of parties filed memoranda relating to the Board's power to modify a requirement (in response to the Board's Minute dated 14 February 2011).<sup>269</sup> Counsel were in general agreement regarding the legal principles that apply to modification of requirements.
- 230 The Board needs to determine whether a modification alters the essential nature and character of a notice or requirement. It may have the power to modify a requirement if "the changes are minor, there is a lessening of environmental impact, and that effect landowners remain unchanged."<sup>270</sup> However, where new parties are involved, "the power to modify could not encompass such a substantive change."<sup>271</sup>
- 231 Even where the modification is to occur within the designation boundaries, the Board needs to consider whether there are any persons who would be affected by such a modification who did not lodge a submission, but who would have done so if the modification formed part of the proposal as lodged and notified.<sup>272</sup>
- 232 The Oakley Reserve is an area of open space of local and regional importance,<sup>273</sup> and the visual effects of the ventilation stack may impact on the local amenity values of the Reserve. As shown in the photo simulations,<sup>274</sup> the visual and amenity effects associated with the stack being located on the eastern side of Great North Road within the Reserve are clearly different to effects of the NZTA's proposed location.
- 233 In our submission, the stack is much more visible on the Alternative 1 site (hard up against the road with limited opportunity for planting), than on the NZTA's proposed location (where there

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<sup>268</sup> As shown on the Construct Site Plan, Drawing 004B (Exhibit 8).

<sup>269</sup> Including Memoranda of Counsel on behalf of the NZTA, Auckland Council / Transport, Living Communities (Auckland) Incorporated & Others, and Albert-Eden Local Board, all 18 February 2011.

<sup>270</sup> *Alan Hope T/A Victoria Lodge v Rotorua District Council* [2010] NZEnvC 7 at [41].

<sup>271</sup> *Ibid*, at [40].

<sup>272</sup> *Norwest Community Action Group Incorporated v Transpower New Zealand Limited* A113/01 [39].

<sup>273</sup> Wendy John Statement of Evidence on behalf of Friends of Oakley Creek, at paragraph 2.1, and Transcript, at page 1052.

<sup>274</sup> Exhibits 7 and 8.

will be some shielding benefits from the ventilation buildings and related landscaping).<sup>275</sup> Anybody walking or driving past that site could not escape its visibility. To argue that it is less visible is simply not credible.

- 234 It is quite possible (if not, very likely) that there are landowners or occupiers, or people who make use of the Oakley Reserve, or users of Great North Road, who may have submitted on the Project had the location of the ventilation stack in Oakley Reserve formed part of the Project as lodged and notified.
- 235 It is submitted that the Board cannot be satisfied that no one else would have submitted on the Project if the northern ventilation stack was located on the boundary of the Oakley Reserve, as now sought by various submitters.
- 236 Consequently, and in response to a question from the Board, the NZTA's position is that the relocation of the northern ventilation stack across Great North Road does raise a jurisdictional issue and would fall outside the Board's power to modify the requirement.

***NZTA's proposal***

- 237 Addressing next the NZTA's proposed location for the northern ventilation stack, it is acknowledged that the stack has potential adverse effects on the environment, both in terms of visual / landscape concerns and potential social effects associated with its proximity to the community.
- 238 Since lodgement, significant work has been undertaken to further develop the design. The subsequent caucusing sessions have been useful to identify issues of concern and endeavour to address those by way of detailed design requirements in the conditions (proposed DC.8).
- 239 There is no question that the Project needs a ventilation stack at the northern portal and that the stack, wherever it is located, cannot be "hidden". The NZTA remains confident that it can be designed in such a manner as to adequately mitigate its effects.
- 240 A number of specific mitigation measures are proposed by the NZTA. These include:
- 240.1 Provision for an Outline Plan of Works to be prepared, with specific design parameters and urban design input into the northern ventilation buildings and stacks,<sup>276</sup> requiring

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<sup>275</sup> Exhibit 7.

<sup>276</sup> Required by proposed Condition DC.8.

amongst other things sculptural treatment<sup>277</sup> and screening / buffering through planting;<sup>278</sup>

240.2 Agreement with Waterview Primary School and Ministry of Education for substantial redevelopment of the School site, including revising the layout of the School to relocate junior classrooms and playground facilities further west on the site (providing a buffer between these facilities and the ventilation building and stack) and providing internal buffering and landscaping<sup>279</sup>; and

240.3 Permanent relocation of the Waterview Kindergarten.<sup>280</sup>

241 On this basis, it is considered that the effects of the ventilation building and stack at the NZTA's proposed location are capable of being appropriately mitigated as proposed by the NZTA, particularly if the stack height can be substantially reduced from 25m.

***Option 1 relocation***

242 While Living Communities, Albert-Eden Local Board and various residents have expressed a strong preference for relocation of the ventilation stack to the eastern side of Great North Road, it is submitted that this is not appropriate for a number of reasons.

243 The "Option 1" supported by submitters at the hearing has been identified and considered as an alternative to the NZTA's proposed location largely on the basis of an A4 sketch location plan (submitted as Annexure E in the rebuttal evidence of Mr Andre Walter). Subsequently that location plan was updated (Exhibit 7) to show the "Alternative vent" site proposed by Melean Absolum slightly south of Option 1 so as to be fully within the designation boundaries.

244 However, this in no way can accurately reflect or even give an indication of the potential impacts of this option or its effect on the environment.

245 As was evident during the hearing, none of the submitters or groups advocating this option had undertaken a detailed effects assessment so as to be in a position to more fully inform this Board of the effects which it is required to weigh up. This was exemplified in Mr McKenzie's supplementary statement (planner for Living Communities). He acknowledged that his "evidence" was based primarily around visibility assessments.<sup>281</sup> It was evident that he had not undertaken a broader effects analysis – certainly nothing in

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<sup>277</sup> Proposed Condition DC.8(g).

<sup>278</sup> Proposed Condition DC.8(f).

<sup>279</sup> Exhibit 20.

<sup>280</sup> Provided by proposed Condition SO.3.

<sup>281</sup> Transcript, at page 1078.

the order of the multi-disciplinary assessment which Ms Linzey coordinated for the southern ventilation building Option 3 (also to be determined by this Board).

- 246 It was also evident during the hearing that, in some cases, submitter endorsement of Option 1 was predicated on assumptions that simply may not be able to be realised for this option – for example, e.g. screening it with landscaping,<sup>282</sup> moving it further eastward into the Waterview Glades site,<sup>283</sup> screening it from the walkway in Waterview Glades, or moving it to the immediate environs of the BP service station.<sup>284</sup>
- 247 Ms Absolum (for Living Communities) acknowledged this fact when she effectively changed position as to whether the stack, if located on the alternative site, could or should be assimilated into the Reserve. In her EIC (December 2010), Ms Absolum argued that locating the stack in close proximity to existing established trees on the east of the road corridor “will reduce its visual prominence” (paragraph 3.31). In the subsequent expert caucusing session (4 February) she was reported as not supporting Option 1 (paragraph 2.11). In her supplementary statement (25 February) she supported a location slightly south of Option 1 to (among other things) provide a backdrop of trees to the stack, supplemented with additional planting to provide “effective screening of much of the stack” (paragraph 2.8).
- 248 To assist consideration of the northern vent stack options, the NZTA provided a visualization of ‘Option 1’ (located within the designation) as a comparison to the NZTA’s proposed location.<sup>285</sup> Once Ms Absolum had the opportunity to better see what relocation actually involved (i.e. how prominent the stack would actually be on that eastern side), her evidence turned to focus on the opportunity “to make something of it” in that location, instead of “shrub up the front of the stack and try and hide it and pretend it’s not there”.<sup>286</sup>
- 249 During the hearing, there was a very well canvassed discussion amongst the experts on the visual effects of the northern ventilation stack options, though clearly without consensus being reached. I will not attempt to summarise the mixed views here, other than to note that Mr Brown (for NZTA) and Mr Scott (for Council) were firmly of the view that relocating the stack across Great North Road

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<sup>282</sup> For example, C Jordan (Submitter 136) and E Turner (Submitter 228) as noted in their signed forms appended to Mr McKay Supplementary Evidence, 7 March 2011. Also, Ms McLennan who stated ‘*The screening afforded by the existing trees would help to hide the stack*’, Transcript, at page 1301.

<sup>283</sup> Transcript, at page 1301-1302.

<sup>284</sup> Representation of Mr Hart (Submitter 205), Transcript, at page 1505, and Representation of Mr Easte (Submitter 211), Transcript, at page 1539.

<sup>285</sup> Exhibit 7 (photo simulation) and Exhibit 8 (showing site location).

<sup>286</sup> Transcript, at page 1034.

would be the wrong thing to do, and for a number of reasons. Their views were not swayed under cross-examination.

- 250 By comparison, it was evident that it was a much more difficult and closer call for Ms Absolum. Under cross-examination she agreed that it was not an easy decision to make in terms of balancing the impacts of the various alternative locations:

That's right. I actually went through quite a process and wrote some evidence and then rewrote it and waived a lot and finally came to a decision, because it is difficult wherever we put it there were going to be problems.<sup>287</sup>

- 251 As acknowledged by counsel for the Albert-Eden Local Board, "there is a fine balance between the alternatives, even for experts".

- 252 There are a number of other potential effects and issues associated with the stack relocation that have not been fully considered or addressed by submitters (other than some being highlighted as potential issues in the rebuttal evidence of NZTA's Mr Andre Walter). These would change the effects of the Project on the environment (and as a result may have meant other parties would have had an interest in the proceedings).

- 253 These effects include:

- 253.1 The potential increase to the duration of construction and disruption on Great North Road that may result from the additional ducting and construction works required. Mr Walter gave evidence that this could be up to 6 months, which is a substantial period of time (given concerns already expressed by residents on that issue).
- 253.2 The potential safety and operational impacts that the vent stack may have on Great North Road itself (as a regional arterial) given its proximity to the carriageway. In order to minimize impacts on the reserve, submitters and Ms Absolum advocated that it be located "hard up" against the road boundary, but no one addressed the implications of this.
- 253.3 The requirement for realignment of the proposed walkway (and the visual impact on the proposed walkway) through Waterview Glades. This is proposed as part of the Waterview Glades Open Space Restoration Plan and as part of the temporary open space access works to Oakley Creek for the construction occupation of Waterview Glades.
- 253.4 Land and vegetation impacts associated with operational access requirements to the northern ventilation stack.

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<sup>287</sup> Transcript, at page 1053.



- 253.5 Ongoing operation and maintenance impacts as a result of the increased maintenance requirements and reduced energy efficiency of this option.
- 253.6 Potential Iwi values and interests, particularly for Ngati Whatua, given their landownership in the vicinity of the Waterview Glades reserve and the archaeological sites that are recorded on and in this area (which are a common indicator of cultural affiliation to an area).
- 254 As acknowledged by the planner presenting on behalf of Living Communities, Mr McKenzie,<sup>288</sup> the potential effects of this option have not been considered by the proponents of this option.
- 255 In these circumstances, it is submitted that the Board does not have before it adequate information to properly assess the impacts of the relocated stack site, certainly not enough to justify a conclusion that relocation would, in the round, provide more appropriate mitigation than that proposed by the NZTA, or justify the significant additional expense involved. By comparison, the considerable evidence provided by the NZTA on the various effects of its proposed location, together with the mitigation it proposes, is sufficient to enable this Board to conclude that it can be confirmed.
- Undergrounding of the southern ventilation buildings**
- 256 In consideration of the wider balancing of environmental effects, the NZTA continues to support the location of the Southern Ventilation Building with the design parameters proposed by Mr David Gibbs and others in their EIC.
- 257 While it is acknowledged that the Project will have visual and amenity impacts, particularly in the vicinity of the southern ventilation building and stack, the experts (particularly Mr Stephen Brown and Ms Lynne Hancock) have demonstrated that the potential adverse effects can be appropriately remedied and/or mitigated by specific design considerations in the finalisation of the form of these elements of the Project. This is provided for in the proposed Condition DC.9, which had considerable input through expert caucusing (Landscape and Visual Design Joint Expert Caucusing Report, 4 February 2011).
- 258 The future requirement of an Outline Plan of Works (as proposed by Condition DC.7) will provide further opportunity for Council to review and provide comment on the scale, location and bulk as well as other potential environmental effects of the southern ventilation building and stack.
- 259 The NZTA accepts that there are a number of alternative configurations for the southern ventilation building to partly or fully underground the buildings. Three of these options were specifically

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<sup>288</sup> Transcript, at page 1078.

identified through submitters' evidence and caucusing, and additional assessment was undertaken and presented in Ms Linzey's first supplementary evidence.<sup>289</sup>

- 260 The multi-disciplinary assessment presented by Ms Linzey indicated that of the three options considered, Option 3 (involving moving of the Southern Ventilation south into the existing deep cut with surface access and gantry buildings) would have additional local environmental benefits over and above the base option.
- 261 The additional funding required for this additional work is significant and may result in other NZTA projects being delayed or cancelled (as presented in the evidence of Mr Parker), which itself would have wider effects of the regional or even national transport infrastructure (a nationally significant physical resource).
- 262 While Option 3 may be regarded as the "best option" of all alternatives assessed, as outlined earlier, the NZTA is not required to choose that option unless the Board was to find that such a level of mitigation was warranted to mitigate Project effects.<sup>290</sup>

#### **Open Space**

- 263 The impact of the Project on open space has been another key issue of concern to submitters and debated at length during the hearing. To update where matters have progressed, the Reply will summarise:
- 263.1 Outcomes of caucusing prior to the hearing;
  - 263.2 What the NZTA is now proposing;
  - 263.3 How that is reflected in proposed conditions;
  - 263.4 The outstanding issues with Council; and
  - 263.5 The outstanding issues with any other party.

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<sup>289</sup> Dated 9 February 2011. A full description of the three options is provided in Andre Walters Rebuttal Evidence, 3 February 2011.

<sup>290</sup> An issue raised by the Board during the hearing is whether the NZTA considered there would be a jurisdictional issue should the Board find that Option 3 needed to be implemented to mitigate effects. Given the outcome of the multi-disciplinary assessment carried out for that option, together with Mr Brown's response to questions on potential visual effects of residents, the NZTA sees no obvious jurisdictional issue.

- 264 Two Joint Caucusing reports (dated 4 February 2011 and 21 March 2011) were produced following both one non-expert and a number of expert caucusing sessions for open space. It is noted that the second open space caucusing session was only between experts representing Auckland Council and the NZTA.
- 265 A number of key areas of agreement were confirmed through the first caucusing report, including amongst other things:
- 265.1 On provision of improved pedestrian / cycle accessways and shared paths throughout the Project, as presented in the Plan set 'PT & Active Transport Mode Transport Routes Existing and Proposed', served to the Board of Inquiry 28 January 2011<sup>291</sup>;
  - 265.2 That active reserve facilities are a regional rather than local resource and can therefore be located in another area<sup>292</sup>;
  - 265.3 That the direct open space impacts in Waterview are mitigated by the measures provided in proposed Conditions OS.5 and OS.10<sup>293</sup>;
  - 265.4 That the waterfront walkway provided by the Howlett Reserve linkage and passive open space at Saxon Reserve would provide open space benefits<sup>294</sup>;
  - 265.5 That the impacts on Western Springs Garden would be addressed if there was no permanent loss of car parking<sup>295</sup>, which is provided for in proposed Condition OS.15;
- 266 However, as noted in the caucusing report (4 February 2011) there were a number of matters that were not agreed, including:
- 266.1 The inclusion of designated rail land in the calculations of open space<sup>296</sup>;
  - 266.2 The need for the Sector 8 cycleway to mitigate open space effects<sup>297</sup>;

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<sup>291</sup> Paragraphs 29 and 30, page 6, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>292</sup> Paragraph 53, page 11, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>293</sup> Paragraph 55, page 11, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>294</sup> Paragraph 68, page 12, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>295</sup> Paragraph 91, page 16, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>296</sup> Pages 3 and 4, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

- 266.3 Provision of additional bridge crossings for improved access to open space in Waterview, to mitigate loss of open space and construction disruption (including Eric Armishaw and Alford Street Bridges)<sup>298</sup>;
- 266.4 Provision of Phyllis Street Bridge as mitigation for open space effects<sup>299</sup>;
- 266.5 The provision of further mitigation for passive open space impacts in Alan Wood Reserve, including additional linkages and bridge crossings for access to open space (including Soljak Bridge and Olympus Bridge)<sup>300</sup>;
- 266.6 Provision of additional land (particularly at Valonia Street), and further tunnelling or burying of the southern ventilation building to increase the amount of passive open space in Alan Wood Reserve<sup>301</sup>; and
- 266.7 Open space impacts of the relocation of the northern ventilation stack.<sup>302</sup>
- 267 On this basis, the key open space issues relate to the SH20 alignment and the Waterview and Owairaka/New Windsor areas and each of these areas are addressed in turn.

***Waterview area***

- 268 In the case of the Waterview area, the NZTA maintains (and it was agreed in expert caucusing) that the remediation and mitigation proposed in Waterview provided adequate replacement open space and restoration of open space to remedy and mitigate the effects of the Project.
- 269 In summary, the mitigation proposed includes:
- 269.1 During construction – the establishment of replacement sportsfields (either within the designation or as a financial contribution to facilities elsewhere), other active recreation facilities, development of an expanded Saxon Reserve area, and improvements to the connection of Howlett Reserve to

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<sup>297</sup> Page 5, para 27, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>298</sup> Pages 7 and 8, paragraphs 32 and 34, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>299</sup> Page 8, paragraphs 36 and 37, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>300</sup> Page 9 (paragraphs 41 and 42, 44) and pages 14 and 15, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>301</sup> Pages 11-12 and 15, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

<sup>302</sup> Page 16, Expert Caucusing Joint Report to the Board of Inquiry - Topic Open Space, 4 February 2011.

Howlett Street or Oakley Ave (or in lieu of this a financial contribution for other local open space upgrades) prior to construction commencing (provided for by Condition OS.10);

- 269.2 Post-construction – planning and implementation of restoration for the Waterview Reserve, providing equivalent or better open space facilities (including children’s playground, additional ablution block, a full size basketball court and volleyball court), enhanced integration and development of the Oakley Inlet Heritage Area, improved esplanade reserve linkages along the coast (provided for by proposed Condition OS.5), and restoration of Waterview Glades (provided by proposed Condition OS.7).
- 270 With the exception of the expressed preference by the Auckland Council for the development of sportsfield facilities at Phyllis Street Reserve (rather than Waterview Reserve), it is considered that there are no remaining outstanding issues with Auckland Council in respect of open space in the Waterview area.
- 271 While many submitters appear supportive of the open space remediation and mitigation proposed in the Waterview area, there are a number of submitters who consider additional mitigation is required.<sup>303</sup> In particular, bridge connections to Unitec, Eric Armishaw Park and/or Phyllis Reserve to provide improved connections to additional open space areas.
- 272 It is acknowledged that in the case of the Saxon Reserve expansion and property linkage to Howlett Reserve works are required beyond the designation and subject to additional resource consents. In the case of Saxon Reserve, this is accepted as an Augier form of condition. In the case of the Howlett Reserve linkage, it is noted that proposed Condition OS.9 provides an alternative financial contribution for this work, if it cannot be delivered in an acceptable timeframe. This proposed condition has been accepted by the Auckland Council.
- 273 The EMS Final Addendum Report addresses a number of the above outstanding issues for open space in the Waterview area and concludes the following:
- 273.1 On balance, the author supports the ‘like for like’ local replacement rather than network linkages;

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<sup>303</sup> This includes Living Communities, Eden Albert Community Board, Northwestern Residents Association and individual submitters such as Mr Black, Ms Watson, Ms Riley.

- 273.2 There is a diverse range of opinions regarding open space mitigation options, including some that range to 'betterment' rather than mitigation<sup>304</sup>;
- 273.3 In respect of the Eric Armishaw Bridge - that a bridge link is not appropriate or justified<sup>305</sup>;
- 273.4 In respect of the Alford Road Bridge - that SH20 will be in cut and cover at this point and the existing accesses to Unitec will be retained, and therefore a new pedestrian access is not justified<sup>306</sup>;
- 273.5 That the impacts arising from construction are not sufficiently unmitigated to warrant further network connections.<sup>307</sup>
- 274 The NZTA agrees with, and submits that the evidence taken as a whole, supports all of these conclusions.

***Owairaka/New Windsor area***

- 275 In the case of the Owairaka / New Windsor area, the NZTA proposes a number of measures that provide remediation and mitigation for open space effects of the Project. In this area, it is acknowledged that while these works mitigate the adverse effects on open space, there are some effects that are not fully mitigated (particularly in respect of the changed noise environment for the open spaces of Alan Wood Reserve).
- 276 In summary, the mitigation proposed includes:
- 276.1 During construction – the early provision of sportsfields (or equivalent financial contributions), other active recreation facilities and passive open space areas, prior to construction commencing in the Alan Wood Reserve area and subsequent expansion of this reserve area, once the Oakley Creek realignment is completed (provided for by Conditions OS.9 and OS.9(b));
- 276.2 Post-construction – planning and implementation of restoration for the Alan Wood Reserve, providing equivalent or better open space facilities (including 2 senior or full size, 'open for play' sand carpeted sportsfields, changing and ablution facilities, a half size basketball court and volleyball court), enhanced integration and development of the Oakley Creek Area, and improved esplanade reserve linkages along the creek (provided for by proposed Condition OS.5), and

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<sup>304</sup> Sections 3.6.3 - 3.6.5.

<sup>305</sup> Section 3.3.18.

<sup>306</sup> Section 3.3.21.

<sup>307</sup> Section 3.8.7.

restoration of Waterview Glades (provided by proposed Condition OS.7) and a pedestrian / cycle way including pedestrian bridge parallel to the open carriageway sections through Alan Wood Reserve.

- 277 The Auckland Council maintains that the above measures do not adequately mitigate the passive open space impacts of the Project and on this basis, and to achieve a better outcome for active open space provision, they seek an additional eight residential properties from Valonia Street for an expanded open space area. Council has also indicated that they consider Option 3 for the southern ventilation building better mitigates the passive open space impacts of the Project.
- 278 Many submitters<sup>308</sup> also seek the improved linkages and open space options identified in the open space caucusing (referred to earlier).
- 279 The EMS Final Addendum Report addresses a number of the above outstanding issues for open space in the Owairaka area and concludes the following:
- 279.1 On balance, the authors support the 'like for like' local replacement rather than network linkages;
- 279.2 There is a diverse range of opinions regarding open space mitigation options, including some that range to 'betterment' rather than mitigation<sup>309</sup>;
- 279.3 That the eight property expansion of Valonia Reserve is not warranted<sup>310</sup>;
- 279.4 That there are unmitigated effects on Alan Wood Reserve and that the response for such effects may be better addressed through the Community Trust Fund (Section 4) rather than increased provision of physical works within the Project<sup>311</sup> (including consideration of Soljak Bridge); and
- 279.5 That the impacts arising from construction are not sufficiently unmitigated to warrant further network connections<sup>312</sup>.
- 280 It is acknowledged that in the case of the Alan Wood Reserve, not all adverse effects on the open space are fully mitigated. However,

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<sup>308</sup> This includes Living Communities, Eden Albert Community Board, Northwestern Residents Association and individual submitters such as Mr Black, Ms Watson, Ms Riley.

<sup>309</sup> Sections 3.6.3 - 3.6.5.

<sup>310</sup> Section 3.8.7.

<sup>311</sup> section 3.8.7.

<sup>312</sup> section 3.8.7.

the NZTA maintains that other 'betterments' are provided through the mitigation and remediation proposals, such that overall an appropriate balance is achieved.

- 281 In particular, these measures include:
- 281.1 Improved sportsfield provision (both in the size and hours of play provided for on these fields);
  - 281.2 Long term certainty of a completed open space linkage between Richardson Road and New North Road (not provided for with the current rail designation bisecting the reserve and in some cases creating a 'gap' in the open space linkage);
  - 281.3 Improved walking and cycling facilities (which is the most popular passive open space activity);
  - 281.4 Improving connectivity across the open space network (which is currently severed by Oakley Creek);
  - 281.5 Enhancing the ecological value of passive open space areas (consistent with Auckland Council's open spaces policy); and
  - 281.6 Reallocation of open space to improve accessibility to open space for those local communities with low access to these areas currently (for example, the New Windsor area).
- 282 In addition to the above discussion, it is noted that a number of submissions have cited reference to the lack of open space provision for the residents of the Albert-Eden Board. At the request of the Board, Auckland Council's expert Mr Beer presented information confirming that the Albert-Eden area did have a low provision of open space (though it was acknowledged that a number of 'open space' areas were excluded from these calculations). When cross-examined, however, Mr Beer conceded that he had not undertaken a local level assessment of the open space provision for residents of Owairaka or Waterview.
- 283 The NZTA has undertaken this assessment and provides summary plans (as **Annexure D**) of open space areas and population for the relevant 'suburbs' (defined by Stats NZ Census Area Units) both existing and post construction. This Plan demonstrates that the ratio of open space to population is not low in the Waterview or Owairaka communities, though it is low for the adjoining New Windsor area (which is in part mitigated by the reallocation of open space to Valonia Reserve as proposed by the Project).
- 284 Over the course of the Hearing, additional caucusing has been undertaken between the open space and planning experts of Auckland Council and the NZTA to further progress areas of



agreement between the experts. While full agreement was not reached on all of the substantive matters set out above, further refinement of conditions was made by agreement of the attending experts, such that there are no outstanding concerns in respect of the delivery of the open space mitigation proposed by the NZTA (with all conditions discussed at caucusing confirmed as 'resolved' by the parties).

**Request for various additional bridges**

285 Both through submissions and in representations to the Board, a number of submitters have proposed new pedestrian / cycle bridges, including:

285.1 A connection between Waterview (north) and Eric Armishaw Park (*the Eric Armishaw Bridge*);

285.2 An "at-grade" connection between Waterview and Mt Albert over Oakley Creek, either as the:

(a) crossing from Oakley Reserve (Waterview Glades) to the Unitec site (*Alford Street Bridge*); or

(b) crossing from the reserve adjoining the Great North Road / Blockhouse Bay Road intersection to Phyllis Reserve (*Phyllis Bridge*);

285.3 A crossing of the North Auckland Rail Line to connect Alan Wood Reserve to Harbutt Reserve, (*the Soljak Bridge*); and

285.4 A crossing of the SH20 carriageway and rail land in the vicinity of Olympus Street on Hendon Ave (*the Olympus Bridge*).

286 The NZTA does not support the inclusion of any of these bridges as part of this Project, nor does it consider them necessary mitigation for the effects of the Project.

287 The following provides a summary of the key reasons and unresolved issues for the bridge options proposed.

***Eric Armishaw Bridge***

288 Generally the submissions and representations in support of this bridge did so on the basis of:

288.1 Restoring the historical severance created by SH16 between Waterview and the public open space at Eric Armishaw reserve and beach;

288.2 As 'off-set' mitigation for the loss of Waterview Park and open space; and

- 288.3 For the increased severance of the Waterview community as a result of the Project.
- 289 The NZTA does not consider that restoration of historic severance is a matter for mitigation of this Project.
- 290 For the reasons set out in the rebuttal evidence of Mr David Little and as agreed in the expert caucusing, the impacts of the Project on open space in the Waterview area have been adequately mitigated through the proposed expansion of Saxon Reserve, and improved esplanade reserve and restoration works of Waterview Reserve.<sup>313</sup> On this basis, this bridge is not required to mitigate these effects.
- 291 Finally, in terms of improved connectivity for Waterview (as mitigation for severance impacts), the evidence of Ms Hancock clearly indicates that length and isolation of this connection would have its own issues for perceptions of safety.<sup>314</sup> And the evidence of Mr Murray in questioning by Albert-Eden Local Board indicated that such a connection would be unlikely to generate significant movements (with a limited catchment and shorter or more direct routes available for other parts of Waterview).<sup>315</sup>
- 292 These conclusions are supported by a number of other submitters, including Cycle Action, who indicated their preference for an at-grade connection through the existing Great North Road interchange.<sup>316</sup> This connection has the added benefit of improving access to areas such as Point Chevalier shops.
- 293 Notwithstanding the comments above, it is also noted that the provision of such a bridge represents a significant cost,<sup>317</sup> would require substantial additional consenting (for works in the coastal marine area, and for the land structures and works in reserve) and would require additional land (private property purchase) and landowner approvals (including Council and the NZTA for the bridge over SH16). The scale of this structure is also likely to require a more comprehensive assessment of effects (including land take from open space, coastal process, ecological and other impacts).

***Waterview / Mt Albert (Alford Street and Phyllis Bridges)***

- 294 Generally the submissions and representations in support of one or both of these bridges did so on the basis of:

294.1 An 'off-set' mitigation for the loss of Waterview Park and open space;

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<sup>313</sup> Provided by proposed Conditions OS.5 and OS.10.

<sup>314</sup> Lynne Hancock Rebuttal Evidence, at paragraph 30.

<sup>315</sup> Transcript, at page 186, 11 February 2011.

<sup>316</sup> Planning Caucusing Report, 4 February 2011, at paragraph 32.

<sup>317</sup> As set out in Amelia Linzey Second Supplementary Evidence, at paragraph 44.

- 294.2 For the increased severance of the Waterview community as a result of the Project; and
- 294.3 To improve accessibility to other open space areas during and post construction.
- 295 For the reasons set out above, in relation to Eric Armishaw Bridge, the NZTA does not consider that these bridges are required to mitigate effects on open space in the Waterview area. While it is acknowledged that the option to put active reserve facilities at Phyllis Street Reserve (rather than Waterview Reserve), which has been sought by the Auckland Council, does remove the sportsfields from the local community, it is also considered that this is an effect of the relief sought by the Council and is not a direct effect of this Project.
- 296 Furthermore, as agreed in the expert caucusing, the provision of active recreation facilities is considered a regional open space issue rather than a local one and therefore the co-location of such facilities for improved maintenance and operation is appropriate.
- 297 In terms of improved connectivity for Waterview as mitigation for severance impacts, the evidence of Ms Hancock demonstrates that the length of this connection to Point Chevalier is comparable if not longer than the link on Great North Road. The low levels of development on the Unitec site mean that there is currently a degree of isolation associated with this connection that would have its own issues for perceptions of safety.<sup>318</sup>
- 298 Further, the evidence of Mr Little raises concern that the provision of a Phyllis Street bridge does little to improve accessibility for the residents of north Waterview (the most affected community), due to its more southerly location.<sup>319</sup>
- 299 In response to the concerns of accessibility to open space during construction, it is relevant to note that the Alford Street Bridge access would not be able to be built during construction and therefore could not provide this mitigation. Furthermore, the proposed revisions to the conditions, particularly Condition SO.10, clearly sets out the works and open space mitigation that will be available for the Waterview community prior to construction commencing.
- 300 In respect of access to the passive open space on the Unitec site, it is noted that this needs to be considered in light of Unitec's own development planning, which would see the majority of such spaces

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<sup>318</sup> Lynne Hancock EIC, at paragraph 34.

<sup>319</sup> David Little Rebuttal Evidence, at paragraphs 36-40.

taken up with the residential and education development they are proposing.<sup>320</sup>

- 301 Notwithstanding the comments above, it is also noted that the provision of either bridge also represent significant costs,<sup>321</sup> would require additional consenting (for buildings, earthworks and potentially tree removal in reserve),<sup>322</sup> may require additional land purchase (private property purchase for Phyllis Street Bridge) and landowner approvals (including Council and in the case of Alford Street Bridge, Unitec). The scale of this structure is also likely to require a more comprehensive assessment of effects, including impacts on Oakley Creek.

**Soljak Bridge**

- 302 Generally the submissions and representations in support of this bridge did so on the basis of:
- 302.1 To improve accessibility to other open space areas during construction; and
- 302.2 An 'off-set' mitigation for the loss of passive open space in Alan Wood Reserve.

- 303 It has been acknowledged that there are adverse effects of construction activities on open space in Alan Wood Reserve that were not mitigated in the application as lodged by the NZTA. However, the proposed mitigation, including the revised conditions which clearly identify open space areas for use during and prior to construction,<sup>323</sup> now provides greater certainty and address concerns of the loss of walkway linkages and connectivity of open space during the construction period.
- 304 The operational effects of the Project particularly noise will change the passive open space experience. However, there are a number of other measures, including ecological restoration of Oakley Creek and provision of extensive walkway and cycleway facilities through Alan Wood Reserve<sup>324</sup> which will improve other aspects of passive open space functionality. On this basis, the NZTA maintains that the current suite of mitigation measures in this area is appropriate.
- 305 As with the two earlier bridges, it is also noted that the provision of this bridge also represent significant costs,<sup>325</sup> would require

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<sup>320</sup> As illustrated in the Concept Plan presented by Mr Paul Condor on behalf of Unitec.

<sup>321</sup> As set out in Amelia Linzey Supplementary Evidence, at paragraph 41.

<sup>322</sup> As identified by Ms Linzey in response to questioning by the Board, Transcript, at pages 411-412.

<sup>323</sup> Provided in proposed Condition OS.9.

<sup>324</sup> Provided by proposed Condition OS.6.

<sup>325</sup> Amelia Linzey Supplementary Evidence, at paragraph 41.

additional consenting (for buildings, earthworks and potentially tree removal in the reserve,<sup>326</sup> and would require additional landowner approvals (including, most notably, approval from KiwiRail, who have confirmed that such a crossing would conflict with their longer term development plans for the link of the Southdown and North Auckland rail lines in this location). The scale of this structure is also likely to require a more comprehensive assessment of effects, including visual and amenity impacts for residents in the residential development on Soljak Place.

### ***Olympus Bridge***

- 306 Generally the submissions and representations in support of this bridge did so on the basis of improving accessibility across the surface section of SH20 to address severance issues in Sector 9 (between Owairaka and New Windsor).
- 307 This connection was originally identified in the draft Urban Design and Landscape Framework as a potential connection between Brydon and the Olympus Reserves. The proposed connection required additional residential land purchases at properties adjoining these reserves to establish a high quality open space connection. At that time, the open section of the SH20 alignment was significantly further north, with the at-surface alignment extending north of Harlston Road.<sup>327</sup>
- 308 With the increased extent of cover proposed in the application as lodged, this connection was no longer considered necessary mitigation for the Project, due to the comparative increase in open space provided both within Alan Wood Reserve and at Valonia Street. In addition, as the portal had shifted south, the extent of pedestrian / cycle diversion to provide for this connection was reduced to some 200-300m.
- 309 This connection was acknowledged in the open space caucusing of experts,<sup>328</sup> though the experts did not agree that the level of connection was necessarily adequate to 'link communities and open space'.
- 310 Given that the costs of this connection would be around \$3.5 million,<sup>329</sup> and the degree to which this connection was already provided, the NZTA does not consider this connection is a sustainable use of natural and physical resources nor necessary mitigation for the Project.

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<sup>326</sup> As identified by Ms Linzey in response to questioning by the Board, Transcript, at pages 411-412.

<sup>327</sup> See Figure 11.5 of the AEE which compares the May 2009 and December 2009 alignments (the December 2009 alignment is the Project as lodged).

<sup>328</sup> Expert Caucusing Joint Report to the Board of Inquiry - Open Space, 4 February 2011, at paragraph 43.

<sup>329</sup> Amelia Linzey Second Supplementary Evidence, at paragraph 44.

**Provision of a cycleway over the tunnelled portion of the Project (Sector 8)**

311 As noted earlier, Auckland Council / Transport, Living Communities and other submitters seek that cycleway connection through the tunnelled portion of the Project (Sector 8) be required as part of the Project.

312 The EMS Final Addendum Report carefully considered the evidence and concluded:<sup>330</sup>

... on balance we consider this link is better managed as an Auckland Transport and Auckland Council project and as a gap in the network we consider that this should be capable of being funded and delivered separately from the Project.

313 This Reply has already addressed the difficulties posed by the facts that:

313.1 There is no agreed route. There is no confirmation on the most appropriate route for such a cycleway, with the various alternatives promoted by submitters having a range of advantages and limitations. For example, the potential route shown in consultation on the Urban Design Landscape Framework is not necessarily an optimal or even complete connection between the SH20 and SH16 cycleway routes (as submitters seek) as it would leave a 450m 'gap' along Great North Road.

313.2 Neither land nor consents have been sought by the NZTA to enable a cycleway link in Sector 8. Consents for works would likely be required for earthworks, buildings and land use activities in Open Space 2 land, and potentially for crossings of the Oakley Creek and contaminated land depending on the final designs of bridge structures.<sup>331</sup> In addition, landowner approvals would be required from a number of parties, including KiwiRail (Soljak Bridge) and Unitec (Alford Street Bridge).<sup>332</sup>

314 In addition, the NZTA considers that the cycleway is not required to meet the Project objectives or to mitigate effects.

315 The AEE contains the relevant Project objective relating to the provision of cycleways;<sup>333</sup>

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<sup>330</sup> EMS Final Addendum Report, at paragraphs 3.3.4-3.3.13.

<sup>331</sup> Transcript, at page 410, during questioning of Ms Linzey.

<sup>332</sup> See Amelia Linzey Second Supplementary Evidence, at paragraphs 39-44.

<sup>333</sup> AEE, Objective 4, at page 3.3.

To support mobility and modal choices within the wider Auckland Region by providing opportunities for improved public transport, cycling and walking.

The AEE on regional benefits concludes that:<sup>334</sup>

In summary, the proposals for enhancements and extensions to the existing Northwestern Cycleway, coupled with the new and improved facilities provided for the SH20 pedestrian/cycle way facilities, provide a positive effect and align with the objectives of the Project.

- 316 The Assessment of Transport Effects concludes that the Project will complement future pedestrian and cycling connection identified in local and regional plans and strategies.<sup>335</sup> Specifically, the Project will reduce traffic flows on a number of arterial routes, assisting in the delivery of these plans and strategies. Overall, the Project therefore meets its objectives.
- 317 Mr Tommy Parker confirmed the NZTA's commitment to providing cycling infrastructure as a key component of State highway infrastructure.<sup>336</sup> However, in the instance of Sector 8 where the surface road infrastructure is controlled by the local authority (not the NZTA), the NZTA's view is that provision of a cycleway in this location must sit with Auckland Transport, with funding support from the NZTA.
- 318 Mr Murray confirmed that the Transport Assessment (Technical Report G.18) did not identify that provision of a cycleway in Sector 8 was necessary to mitigate effects of the Project.<sup>337</sup> He also states that the Project does not preclude a cycleway and reiterated that traffic reductions on surrounding surface streets could assist in enabling cycling proposals, which should be progressed by Auckland Transport with support from NZTA.
- 319 Mr Clark, witness for Auckland Transport accepts that a Sector 8 cycleway is not required to mitigate adverse effects of the Project on the existing cycle network.<sup>338</sup>

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<sup>334</sup> AEE: Part D, Chapter 13, at page 13.20.

<sup>335</sup> Assessment of Transport Effects (Technical Report G.18), at pages 128-129.

<sup>336</sup> Tommy Parker EIC, at paragraphs 156-161.

<sup>337</sup> Andrew Murray EIC, at paragraphs 112-114.

<sup>338</sup> Mr Clark Evidence, at paragraph 8.4. This was also confirmed during expert transport caucusing.

- 320 The rebuttal evidence of Mr Murray is extensive on this matter and notes that:<sup>339</sup>
- 320.1 The benefits of the Sector 8 cycleway is uncertain given the less direct nature of the route compared to using existing local connections, and there are potential CPTED concerns;
  - 320.2 Cost efficiency alone does not justify inclusion of the Sector 8 cycleway in the Project; and
  - 320.3 Auckland Transport also has a cycleway provider mandate and cycleway provision is a joint responsibility, not just that of the NZTA.
- 321 In conclusion, on the basis of the evidence presented, the NZTA maintains that the Sector 8 cycleway does not form part of the Project as it is not required for mitigation of adverse traffic effects of the Project and is not reasonable necessary to meet the Project objectives. As noted by Ms Linzey,<sup>340</sup> the cycleway would be best delivered through a collaborative working arrangement between Auckland Transport, Auckland Council and the NZTA. A Sector 8 cycleway is clearly a separate but complementary project.

**Air quality effects and perceptions**

- 322 Numerous submitters raised concerns both in submissions and during the hearing about the potential health effects associated with the ventilation stacks. As discussed earlier in this Reply, the air quality effects of the Project has undergone substantial scrutiny by experts for both Auckland Council and the Board and agreement has been reached on all technical air quality matters. Those experts are also in agreement that a stack height of either 25m or 15m is appropriate (and presumably also anything in between).
- 323 No expert evidence has been adduced by any submitter to challenge those experts' findings.
- Filtration not a viable option**
- 324 The experts' findings notwithstanding, some submitters still seek that some form of filtration device be used in the ventilation stacks. As noted earlier, the air quality experts do not support the need for filtration.
- 325 Mr Fisher's rebuttal evidence also explains why filtration has never been considered a viable air pollution control option.<sup>341</sup> A specific system would need to be designed and costed to address the array vehicle exhaust emissions generated. Indicative cost benefit analysis suggests the cost of a very basic system would probably be

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<sup>339</sup> At paragraphs 30-60.

<sup>340</sup> Amelia Linzey Rebuttal Evidence (Planning), at paragraphs 21-22.

<sup>341</sup> Rebuttal Evidence, at paragraphs 5-7 and 75-77.



1000 times more than the public health benefits that might be derived.<sup>342</sup>

**Perceptions**

- 326 The case has been made by submitters that, regardless of the actual effects, “the science” or expert opinions, the air discharges (especially those from the vents) will be perceived as degrading air quality in the area and affecting people’s health.
- 327 As noted in Opening Submissions, it is entirely understandable that the community is concerned about potential adverse effects of the Project but, while genuinely held, the public’s perception of health risk in this case is not founded on evidence. Nothing presented during the hearing changes that fact.
- 328 Case law is clear that community perception of risk cannot influence a decision if unsupported by evidence.<sup>343</sup> Put simply, perceived health effects related to the ventilation stacks can only be given weight if they are reasonably based on real risk – and in this case, the perceptions are not.
- 329 In addition to the air quality experts’ findings as discussed earlier, the evidence of both Gavin Fisher and Dr Black address potential health effects of the Project. They conclude as follows:
- 329.1 Potential air quality effects during construction can be appropriately mitigated to eliminate any detectable effect on the health of the adjacent communities.<sup>344</sup>
- 329.2 During the operational phase, the level of air emissions entering breathing spaces from the ventilation vents are well within safe levels. In many areas there are air quality benefits as a result of the Project, and the net effect on public health is likely to be positive for both the local and wider Auckland community.<sup>345</sup>
- 329.3 There are no issues of concern with regard to adverse health effects from soil and water contamination.<sup>346</sup>
- 329.4 Auditory effects during construction will be adequately mitigated so as not to be of concern for public health. During the operational phase, noise levels will be entirely

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<sup>342</sup> See Memorandum of Counsel on behalf of the NZTA in response to Minute from the Board, 6 February 2011, Issue S, at paragraphs 155-160.

<sup>343</sup> *Shirley Primary School v Telecom Mobile Communications Ltd* [1999] NZRMA 66 at [193].

<sup>344</sup> Dr David Black EIC, at paragraph 31; Gavin Fisher EIC, at paragraph 15.

<sup>345</sup> Ibid at paragraphs 24 and 37.

<sup>346</sup> Ibid, at paragraph 14.

acceptable, thereby minimising any risk of adverse health effects.<sup>347</sup>

- 329.5 Any vibration effects (construction/operational) will not cause any adverse health effects.<sup>348</sup>
- 329.6 Any potential effects from lighting will be mitigated and are not a public health concern.<sup>349</sup>
- 329.7 In terms of mental health, any misconceptions and misunderstandings of risk which could cause distress will be mitigated by the provision of full and complete information and careful communication.<sup>350</sup>
- 330 In considering Board members' questions during the hearing about how general community concerns about the discharges could be managed,<sup>351</sup> the NZTA has included various provisions within the proposed conditions seeking to address such concerns, including:
- 330.1 Air quality monitoring data will be provided to the Education Liaison Group which will include representatives from local schools, kindergartens and childcare facilities.<sup>352</sup>
- 330.2 Community Liaison Groups established pursuant to Condition PI.5 will be provided opportunities to review and comment on, amongst other things, publicly available results of environmental monitoring.<sup>353</sup>
- 330.3 An increased length of period of ambient air quality monitoring subject to expert review.<sup>354</sup>
- 330.4 The creation of an independent review panel to analyse and report on air quality effects.<sup>355</sup>
- 330.5 Greater definition on details to be included in the Communications Plan which will set out procedure and practices for communicating with stakeholders and the public over construction and monitoring periods.<sup>356</sup>

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<sup>347</sup> Ibid, at paragraphs 15-16.

<sup>348</sup> Ibid, at paragraph 18.

<sup>349</sup> Ibid, at paragraph 19.

<sup>350</sup> Ibid, at paragraph 20.

<sup>351</sup> For example, Transcript, at pages 419-420.

<sup>352</sup> Proposed Condition SO.1(a).

<sup>353</sup> Proposed Condition PI.5(f).

<sup>354</sup> Proposed Condition OA.4.

<sup>355</sup> Proposed condition OA.8.

<sup>356</sup> Proposed Condition PI.2.

### **The provision of local ramps to/from SH20 at the Great North Road Interchange**

- 331 The issue of whether local ramp connections should or could be provided at the Great North Road Interchange (*Interchange*) has been addressed comprehensively in the rebuttal evidence of Mr Robert Mason and Mr Murray.<sup>357</sup> Mr Mason explained in his evidence that a number of options for such connections were considered by the NZTA during the design phase of the Project and he provided expert evidence on Sir Harold Marshall's proposal for ramps at Carrington Road.
- 332 This was also the subject of discussion in the expert Transport Caucusing. While it was agreed that the local ramps would in principle be desirable (i.e. "nice to have"), whether there is an overall need for these ramps at Carrington Road / Interchange was not agreed.<sup>358</sup>
- 333 On behalf of his clients, Mr Allan confirmed on the second day of the hearing that Sir Harold Marshall would no longer be pursuing local on and off ramp connections at the Interchange due to the engineering issues associated with the ramps presented in the NZTA's rebuttal evidence and at expert caucusing. The need to move the northern portal further south along Great North Road to accommodate the ramps was identified as a key concern of his client.<sup>359</sup>
- 334 The EMS Final Addendum Report likewise concludes:<sup>360</sup>
- that it is not practically achievable without major consequential changes to the Project. Our understanding is that considerable additional design constraints and adverse safety impacts on the Project would need to be addressed.
- 335 While other submitters had raised this issue in their submissions or representations at the hearing (i.e. it is still being pursued by some<sup>361</sup>), it is noted that Mr Mason was not cross-examined by any party. As a result, his expert evidence on the design and safety problems associated with the provision of these ramps is unchallenged.
- 336 Although this relief was dropped, Mr Allan submitted that "the absence of the ramps emphasises the disparity between regional

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<sup>357</sup> Robert Mason Rebuttal Evidence, at paragraphs 34-76, and Andrew Murray Rebuttal Evidence, at paragraphs 61-87.

<sup>358</sup> Expert Caucusing Joint Report to the Board of Inquiry, 3 February 2011, at page 2, paragraph 1, and page 3, paragraph 3.

<sup>359</sup> Transcript, at page 60.

<sup>360</sup> EMS Final Addendum Report, at paragraph 3.3.14.

<sup>361</sup> For example, Representation of Mr Graeme Easte, at page 4.

benefits and local adverse effects."<sup>362</sup> However, this comment effectively ignores the local transport benefits that the Project would deliver to the community, for example, through reduced flows and congestion at Great North Road, Point Chevalier town centre, Carrington Road, Woodward Road and Richardson Road.<sup>363</sup> The issue of national/regional benefits of the Project versus local benefits was addressed earlier in this Reply.

- 337 In his evidence, Mr Murray also explained the various ways to access SH20 from the Waterview, Point Chevalier and Carrington communities.<sup>364</sup> His evidence is that some of those routes are shorter in distance than if an on-ramp were constructed at Carrington Road, and therefore such a ramp would not significantly improve accessibility.<sup>365</sup>
- 338 In the NZTA's view, as the Project does not reduce the local communities' accessibility to SH20, the absence of local ramps at Great North Road Interchange would not adversely affect those residents.<sup>366</sup> While Mr Parlane (expert for Sir Harold Marshall and the Mt Albert Residents Association) indicated during caucusing that there is insufficient information to conclude those residents would not be adversely affected, he provided limited evidence to refute Mr Murray's analysis.<sup>367</sup> It is submitted that Mr Murray's "evidence" should be preferred.
- 339 Moreover, facilitating local trips by providing a local connection at Great North Road Interchange is not a Project objective. Rather, the focus of the Project is to contribute to the Region's critical transport infrastructure. The relevant Project objectives to this issue are Objectives 1, 2, 3 and 5:<sup>368</sup>

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<sup>362</sup> Legal submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 1.5(a).

<sup>363</sup> Andrew Murray Rebuttal Evidence, at paragraph 82.

<sup>364</sup> Andrew Murray EIC, at paragraphs 106-107, and Rebuttal Evidence, at paragraph 70 and Annexure F.

<sup>365</sup> Andrew Murray Rebuttal Evidence, at paragraph 66. It was however agreed in caucusing that travel times accessing SH20 from these communities would likely be improved by the ramps. Expert Caucusing Report to the Board of Inquiry – Transport, 3 February 2011, at page 2, paragraph 4.

<sup>366</sup> Andrew Murray Rebuttal Evidence, at paragraph 83. It was not agreed at caucusing whether the Project is expected to adversely affect accessibility to the Waterview, Point Chevalier, and Carrington Communities. Expert Caucusing Report to the Board of Inquiry – Transport, at paragraph 1, page 3.

<sup>367</sup> Expert Caucusing Joint Report to the Board of Inquiry – Transport, 3 February 2011, at page 3, paragraph 1. Mr Parlane argued that journey time, rather than distance should be used to assess the impact of the ramps, Evidence of John Parlane at paragraph 12.

<sup>368</sup> AEE, at Section 3.3.

1. To contribute to the region's critical transport infrastructure and its land use and transport strategies:
  - by connecting SH16 and SH20 and completing the Western Ring Route
  - by improving the capacity and resilience of SH16
2. To improve accessibility for individuals and businesses and support regional economic growth and productivity:
  - by improving access to and between centres of future economic development
3. To improve resilience and reliability of the State highway network:
  - by providing an alternative to the existing SH1 corridor through Auckland that links the northern, western and southern parts of Auckland
  - by securing the SH16 causeway against inundation
5. To improve connectivity and efficiency of the transport network:
  - by separating through traffic from local traffic within the wider SH20 corridor

340 Mr Murray's evidence is that while accessibility for the local community may be marginally improved by the inclusion of the ramps, this is expected to increase congestion, thereby having a detrimental impact on the rest of the network in terms of network efficiency.<sup>369</sup> Consequently, the ramps would have a detrimental effect on the regional Project Objectives 1, 2, 3 and 5.

#### **Mitigation by tunnelling**

341 Auckland Council / Transport, Albert-Eden Local Board and Living Communities have challenged the NZTA's contention that the 2.5 kilometre tunnel portion constitutes mitigation for the Project. Counsel for Auckland Council / Transport argued that the tunnelled portion is not mitigation, as it forms part of the NZTA's current proposal to be considered by the Board.<sup>370</sup>

342 The NZTA reiterates its position is that "tunnelling the majority of the new SH20 connection is significant mitigation in itself".<sup>371</sup> Ms

<sup>369</sup> Andrew Murray Rebuttal Evidence, at paragraphs 72-80 and 85.

<sup>370</sup> Opening Submissions on behalf of Auckland Council / Transport, 28 February 2011, at paragraph 4.7. See also Legal Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraphs 5.1 to 5.5.

<sup>371</sup> Tommy Parker EIC, at paragraph 173.

Linzey described the tunnelling as a key design feature “to avoid adverse environmental (including social) effects of a surface road alignment”.<sup>372</sup>

- 343 The NZTA has been considering and consulting on a number of alignments over the last 10 years; including surface routes through Waterview, full tunnels and partial cut and cover tunnels. Consultation in 2006 “signalled a strong desire for tunnelling of the SH20 alignment”, to which the NZTA responded by considering further undergrounding options, later followed by consultation on various tunnel alignments from 2008.<sup>373</sup> The NZTA has been able to respond to concerns about potential effects by tunnelling a significant portion of the Project.
- 344 It is submitted that in limiting their focus to the tunnelling “activity” alone, counsel for submitters have taken far too narrow an approach to what should be assessed under the RMA, in particular under section 5. It is submitted that a more broad view should be taken. Put simply, the “activity” that the Board should assess is the Project alignment or corridor.
- 345 Guidance can be taken from the approach adopted by the Environment Court in *Auckland Volcanic Cones Society Incorporated v Transit New Zealand*:<sup>374</sup>

Therefore, our task in this part of our decision in evaluating Part II matters against the NOR proposal is to identify matters which may be of importance in terms of Part II; identify what measures have been taken to avoid, remedy or mitigate adverse effects of the proposal on the environment, with particular reference to environmental matters singled out in ss 6 and 7; and then to assess whether those measures are sufficient in view of the importance of the SH20 corridor or whether the damage inflicted by the works associated with that designation will have such an effect up on Part II matters that the works should not proceed.

- 346 The Court went on to consider what measures were in place to avoid, remedy or mitigate adverse effects of the proposal. It considered that the deep cuts at Mt Roskill (which formed part of the SH20 proposal and SH20 corridor) created a beneficial effect by removing the movement of traffic and lighting associated with the motorway from the “ground-level forecourt to the cone”.<sup>375</sup> Because the motorway would be hidden from a number of viewpoints, the corridor was also seen to be preserving the continuance of open space on the northern apron of Mt Roskill.

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<sup>372</sup> Amelia Linzey Third Statement of EIC, at paragraph 11.1. See also AEE, at section 23.5.1.1.

<sup>373</sup> Amelia Linzey Second Statement of EIC, at paragraphs 58.4 and 58.5.

<sup>374</sup> *Auckland Volcanic Cones Society Incorporated v Transit New Zealand* [2003] NZRMA 54.

<sup>375</sup> *Ibid*, at [77] and [78].

- 347 The NZTA's Project is clearly articulated in its Objectives, being to contribute the region's critical transport infrastructure by connecting SH16 and SH20.<sup>376</sup> Essentially the Project's aim is to complete the Western Ring Route. It is not inherent in the Objectives that a tunnel is needed.
- 348 Like the use of cuts into Mt Roskill to provide for a northbound on-ramp, tunnelling a portion of the Waterview alignment was considered by the NZTA as an integral means of avoiding or mitigating impacts of the Project on the established residential communities of Avondale Heights and Springleigh. Deep tunnelling and the cut and cover construction are both alternative methods used by the NZTA (in lieu of other methods) to mitigate or avoid adverse effects of the Project.
- 349 The NZTA's decision to put forward the tunnels as part of the Project should therefore be taken into account when considering the effects of the Project on the environment. In particular, the tunnelling avoids and/or creates significantly less adverse effects than would a surface motorway through Sector 8 in this urban area, including impacts on archaeological sites, natural features, landscape and visual amenity and social impacts, and this is relevant to the Board's assessment of the SH20 corridor.
- 350 Living Communities accept that the tunnelling enables the Project to be implemented with far less adverse impact overall than would arise from an at-grade motorway.<sup>377</sup>

#### **Impact on trees**

- 351 In response to concerns raised by a number of submitters, including the Tree Council, Friends of Oakley Creek and the Star Mills Preservation Group, the NZTA has proposed a number of condition amendments and sought to clarify the intent of the management of impacts on trees over construction. The NZTA confirms the following:
- 351.1 Trees are recognised as contributing to amenity values a section 7(c) matter of the RMA;
- 351.2 The assessment of trees for the Project has been undertaken in three key areas:
- (a) In the assessment of the botanical or habitat values of vegetation undertaken in the assessment of terrestrial vegetation effects<sup>378</sup> and presented in the evidence of Mr David Slaven. It is recognised that this assessment is focussed on the degree to which

<sup>376</sup> AEE, Objective 1, section 3.3, at page 3.2.

<sup>377</sup> Legal Submissions on behalf of Living Communities (Auckland) Incorporated & Others, 7 March 2011, at paragraph 2.6.

<sup>378</sup> Assessment of Terrestrial Vegetation Effects (Technical Report G.17).

these trees and vegetation represent areas of significant indigenous vegetation and significant habitats of indigenous fauna (section 6(c) RMA), rather than their amenity value;

- (b) In the assessment of their contribution to landscape and visual amenity undertaken in the assessment of landscape and visual effects<sup>379</sup> and presented in the evidence of Mr Stephen Brown; and
- (c) The assessment of 'Amenity Trees' reported in the AEE and the preliminary register provided in Appendix E.7 of that AEE. This assessment was undertaken as a separate process from the above assessments in recognition of the contribution that trees make in the sense of 'locality'.

351.3 In addition, in response to the submissions made by Mr McCurdy and others, consideration has been specifically given to the contribution of the oaks and Monterey Pines<sup>380</sup> in Sector 5, Oakley Inlet, to the historic heritage values of the Star Mill site.<sup>381</sup>

351.4 As a result, the NZTA considers that the assessment has appropriately covered the areas of "amenity values which are relevant to amenity trees" as identified by Ms Haines.<sup>382</sup>

352 As provided by the current designation for SH16, existing trees within the designation which includes the *Macrocarpa* adjoining SH16 do not currently have any formal protection. In other words, they could be removed as of right by the Requiring Authority. It is recognised and acknowledged by the assessment team, particularly in the evidence of Mr Brown,<sup>383</sup> that the removal of these trees will have an impact on the amenity of this area. However, this is considered in the context of the existing status of these trees.

353 The assessment of trees undertaken in the AEE included a stock take of all trees outside the existing designation but within the proposed 'designation footprint' (surface) for the Project.<sup>384</sup> The purpose of that assessment was to highlight at a preliminary level those trees that warrant specific protection or management during construction (*Amenity Trees*).

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<sup>379</sup> Assessment of Visual and Landscape Effects (Technical Report G.20).

<sup>380</sup> Refer Mr McCurdy's Representation, 22 March 2011.

<sup>381</sup> Transcript, at page 606.

<sup>382</sup> Presentation by Ms Haines, 10 March 2011, at page 3.

<sup>383</sup> Stephen Brown EIC, at paragraph 36 also referring to the visual and landscape assessment of this in Assessment of Landscape and Visual Effects (Technical Report G.20), Section 6.5.4, at page 65.

<sup>384</sup> AEE, at Appendix E.7.



- 354 In response to the query from Ms Haines,<sup>385</sup> which asked where all these trees were, it is noted that where these trees are within the construction yards, they are mapped on the Construction Yard Plans (in F.06 of the AEE). In other areas (once the complete list of Amenity Trees is confirmed), these will be provided as a map layer in the environmental constraints mapping of the CEMP. However, as noted in the conditions (particularly proposed Condition CEMP.6), this is a preliminary schedule of Amenity Trees and this will be updated and included in the finalised CEMP.
- 355 With the removal of NOR 6, trees in Sector 8 will not be affected.
- 356 In total, the tree schedule provided in Appendix E.7 identifies 805 trees (or groups of trees) within the proposed designation footprint of the Project, reducing to 709 with the removal of Sector 8 not the 1121 asserted by Ms Haines.
- 357 Of the 709 trees potentially in the current surface designation area (e.g. excluding those in Sector 8), approximately 11% are identified as 'Amenity Trees' (subject to confirmation through assessment as provided by the proposed Conditions CEMP.6(o)), which are considered as 'worthy of protection, relocation or if these are not possible replacement'. Around 45%, the greatest number of these 'amenity trees', are identified in Sector 5 at the Great North Road Interchange, with 18% in Sector 9 and 17% in Sector 7.
- 358 Of the 709 trees referred to above, the following key details are noted:
- 358.1 46% of trees identified are 6m or less in height;
  - 358.2 90% of trees identified are less than 15m in height;
  - 358.3 65% of the trees identified are in 'good health' (with the remaining in either fair or poor health).
- 359 The intention of the stock-take of trees provided in Appendix E.7 was to provide a base-line survey of information for subsequent management and protection of trees over construction. On this basis, the following process is proposed for the CEMP by the revised proposed conditions:
- 359.1 Confirm construction methodology and footprint by contractor;
  - 359.2 Appoint a Project Arborist;<sup>386</sup>
  - 359.3 Undertake STEM assessment for trees in footprint areas, to confirm the list of amenity trees,<sup>387</sup>

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<sup>385</sup> Bullet 2 on page 6 of her representation for the Tree Council.

<sup>386</sup> Proposed Condition CEMP.6(o).

- 359.4 Undertake consultation with the Community Liaison Group on the STEM assessment;<sup>388</sup>
- 359.5 Confirm trees that can be protected through construction management<sup>389</sup> and assess the potential to relocate trees that need to be removed.
- 359.6 It is noted that Construction and Environmental Management Plan (Technical Report G.21) provides for the following:<sup>390</sup>
- (a) Prior to construction works commencing, site meetings with the Project Arborist and Auckland Council;
  - (b) Amenity Trees identified as 'at risk' being provided appropriate protection measures (e.g. temporary fencing);
  - (c) Monitoring of Amenity Trees over construction with remedial measures set out if monitoring indicates adverse effects on these trees;
- 359.7 Undertake necessary replacement of Amenity Trees<sup>391</sup>, in accordance with the provisions in Proposed Condition LV.10 and with species from planting schedule (if in designation) or in agreement with Auckland Council (e.g. this therefore includes exotics if Auckland Council want this), unless they are Oaks in Sector 5. In the latter case, if these trees require removal, they will be replaced by same species at rate of two for every one removed, as part of the Oakley Inlet Heritage Area planning.<sup>392</sup>

**Alternatives does not require the "best" option**

- 360 In cross-examining Ms Linzey about the options for undergrounding the southern ventilation building, Mr Allan's questions focused on what the "best option" would be, and which option "better meets the purpose of the Act".<sup>393</sup> In posing these questions, it is submitted that Mr Allan has not put forward the correct test under section 171(1)(b) of the RMA.

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<sup>387</sup> Proposed condition CEMP.6(o).

<sup>388</sup> Proposed Condition PI.6.

<sup>389</sup> CEMP.6(p) and the CEMP itself.

<sup>390</sup> Section 3.4.10.1.

<sup>391</sup> It is noted that the process for replacement trees set out in G.21 Construction and Environmental Management Plan, will be replaced by the process proposed by the Conditions (in accordance with proposed Condition CEMP.1).

<sup>392</sup> Proposed Condition ARCH.9.

<sup>393</sup> Transcript, at page 386, Mr Allan, and Opening Submissions on behalf of Living Communities (Auckland) & Others, at paragraph 3.9.

361 Section 171(1)(b) requires the Board to have particular regard to “whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work”. Alternatives must be properly considered, but section 171(1)(b) does not require the NZTA to demonstrate that it has excluded all possible alternatives, or that it has selected the best of all available alternatives, as this would be straying into matters of policy which falls outside the Board’s jurisdiction.<sup>394</sup>

362 When considering whether section 7(b) of the RMA requires an analysis of alternative locations in *Meridian Energy v Central Otago District Council*, the High Court considered the approach to alternatives adopted by the RMA and section 171(1)(b).<sup>395</sup> The High Court confirmed the test that applies to section 171(1)(b) as follows:<sup>396</sup>

Over time the courts have taken a relatively narrow approach to this provision. If the Environment Court is called upon to review the decision of the territorial authority, it is required to consider whether alternatives have been properly considered rather than whether all possible alternatives have been excluded or the best alternative has been chosen.

363 As a matter of law, the NZTA as a requiring authority must give responsible consideration to alternatives, and cannot decide on the chosen site and method in an arbitrary or cursory way.<sup>397</sup> Adequate consideration does not mean that a requiring authority must go to unreasonable lengths to support a chosen route or site.<sup>398</sup>

364 It is submitted that the NZTA has satisfied the test under section 171(1)(b) by giving adequate consideration to alternatives with respect to the various components of the Project, including the southern ventilation building.

**Relevance of “community opinion”**

365 Various submitters (in particular Albert-Eden Local Board and Living Communities) have made the argument throughout the hearing that if X is what “the community” wants, then the Board should grant X, seemingly above all other considerations.

366 In cross-examination of Mr Stephen Brown, counsel for Living Communities and the Albert-Eden Local Board appeared to suggest that if community groups want specific mitigation (for example

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<sup>394</sup> *Beda Family Trust v Transit New Zealand* (A139/2004, 10 November 2004) at [57].

<sup>395</sup> *Meridian Energy Ltd v Central Otago District Council* [2010] NZRMA 477 at [81].

<sup>396</sup> *Ibid.*

<sup>397</sup> *Villages of NZ (Mt Wellington) Ltd v Auckland City Council* (A023/2009, 20 March 2009) at [44].

<sup>398</sup> *Ibid.*

shifting the ventilation stack across Great North Road), the Board should require this.<sup>399</sup>

- 367 While it is certainly acknowledged that the views expressed by community groups and the Local Board are important, the weight given to relief sought by community groups must be balanced against expert evidence. As sometimes put, "this is not a numbers game". Case law indicates that evidence, rather than the number of submissions, provides the basis for determining arguments.
- 368 For example, the Environment Court gave very little weight to the filing of a petition with 1,950 signatures when determining a proposed road stopping.<sup>400</sup> The Court stated that:<sup>401</sup>

Arguments in the Environment Court are not decided on a basis of numbers, but on good, preferably scientific, evidence and related reasons.

- 369 In *Awly Investments Limited v Christchurch City Council*, the Court found that the fact that "a body has many members does not in itself give weight to evidence given to the Court by a witness called by that body".<sup>402</sup> Further, the High Court has commented that "RMA decision-making is not according to the number of submitters but rather to the quality of their submissions".<sup>403</sup>
- 370 While various community groups may wish the northern ventilation stack to be relocated across the road, the Board needs to consider this against the expert evidence before it. Taken to its extreme, if for example the community groups wanted a 50 metre high ventilation stack (because of concerns about air discharges), the Board would still need to weigh these aspirations against expert evidence on the impact of increasing the stack height.
- 371 Furthermore, while community groups have an important role to play in this approval process, those groups are not necessarily representative of the community as a whole. In *Auckland Volcanic Cones Society Inc v Transit NZ Ltd*, the Environment Court considered conditions proposed by a community group that would enable it to act as a peer reviewer, with the group also proposing to participate in policing the conditions.<sup>404</sup> The Court rejected this

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<sup>399</sup> Transcript, at pages 446 and 464. See also Bill McKay Supplementary Evidence, 7 March 2011.

<sup>400</sup> *Re the Proposed Stopping by the Wanganui District Council of a portion of Maria Place, Wanganui* (C211/2000, 19 December 2000) at [17].

<sup>401</sup> *Ibid*, at [17].

<sup>402</sup> *Awly Investments Ltd v Christchurch City Council* (C103/2002, 29 August 2002) at [137].

<sup>403</sup> *Upland Landscape Protection Society Inc v Central Otago District Council* (2008) 14 ELRNZ 403 at [66].

<sup>404</sup> *Auckland Volcanic Cones Society Inc v Transit NZ Ltd* [2003] NZRMA 54 at [202].

proposal, noting that the group was arrogant to assume that it had the support of the majority of the electors.<sup>405</sup>

Greenbelt did not appear prepared to concede that there may be many residents in the Mt Roskill area who would welcome a motorway which would be beneficial to them in commuting to and from Auckland central and other parts of the city and beyond ...<sup>406</sup>

- 372 Ms Linzey outlines the various consultation processes undertaken during the Project development process in her statements of evidence.<sup>407</sup> This consultation identified a variety of viewpoints across the community on a range of issues. Accordingly, it is relevant to bear in mind that community groups represent their members, rather than the community as a whole.

### **Economics and Benefit Cost Ratio Issues**

- 373 Several submitters, in particular Professor Hazledine, Campaign for Better Transport, Mr Tritt, and Mr Will McKenzie have made representations to the Board raising economics and benefit-cost ratio issues.

- 374 The key economic issues raised by those parties during the hearing can be summarised as follows:

- 374.1 The benefits of the Project have not been evaluated in the context of rising fuel prices;<sup>408</sup>
- 374.2 The robustness of the Project's benefits and the Benefit-Cost ratio (*BCR*) are challenged<sup>409</sup> and the *BCR* is extremely marginal;<sup>410</sup>
- 374.3 A post-construction audit should be required to validate the NZTA's claimed level of benefits;<sup>411</sup>
- 374.4 The benefits of the Project are inflated because the Do Minimum option is unrealistic;<sup>412</sup> and
- 374.5 The Project will not contribute to economic growth and productivity.<sup>413</sup>

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<sup>405</sup> Ibid, at [204].

<sup>406</sup> Ibid, at [207].

<sup>407</sup> Amelia Linzey EIC (Social), at paragraphs 49-60; Amelia Linzey Rebuttal Evidence (Social), at paragraphs 65-66.

<sup>408</sup> Representations by Campaign for Better Transport, 11 March 2011, at page 2.

<sup>409</sup> Ibid; Representations by Michael Tritt, at paragraph 4, at page 1.

<sup>410</sup> Representations by Professor Tim Hazledine, 9 March 2011, at page 1.

<sup>411</sup> Representations by Campaign for Better Transport, 11 March 2011, at page 2.

<sup>412</sup> Representations by Professor Tim Hazledine, 9 March 2011, at page 3.

375 This Reply addresses each of these issues in turn.

***Benefits not evaluated in context of rising fuel prices***

376 The assertion by Campaign for Better Transport that the benefits of the Project have not been evaluated in the context of rising fuel prices is not correct. The transport and economic assessments for the Project included substantial increases in fuel prices. In particular, the Traffic Modelling Report shows that fuel prices used in the models for 2026 are \$2.75 per litre.<sup>414</sup> Those values are in real 2006 dollar terms and hence represent a 77% increase over the 2006 fuel price. The BCR, as calculated from the ART3 model, uses those fuel price values.

377 It should also be noted that while the Auckland Regional Land Transport Strategy (*RLTS*) paid particular attention to fuel prices and car dependency, it still concluded that the Project was a critical element in the regional transport strategy.<sup>415</sup> The same forecasts of fuel prices used in the RLTS planning were used in the modelling for the Project.

378 In summary, the NZTA considers that high future fuel prices have already been considered in the modelling and benefit calculations. Therefore, further analysis would not add any value.

***Robustness of the Project's benefits and Benefit-Cost Ratio***

379 Mr Tritt considers the economic justification for the Project to be seriously flawed, based on a previous BCR of 1.1 (circa 2005) and that the BCR is "extremely marginal at best".<sup>416</sup> The apparent discrepancies noted by Mr Tritt arise because the 2005 value applied in relation to the Waterview Connection component only, while the current Project now includes the upgrading of SH16.

380 The BCR for the Project ranges between 1.2 and 2.1. The range depends on what traffic modelling data is used and whether wider economic benefits are included.<sup>417</sup>

381 Mr Copeland and Mr Murray responded to Professor Hazledine's criticisms of the NZTA's cost benefit analysis, concluding that the transport benefits of the Project exceed the expected costs by a significant margin.<sup>418</sup> Even with the most conservative measure

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<sup>413</sup> Representations by Campaign for Better Transport, at page 3.

<sup>414</sup> Traffic Modelling Report (Technical Report G.25), at Section 4.3.4, page 18.

<sup>415</sup> Andrew Murray EIC, at paragraph 68.

<sup>416</sup> Representations by Michael Tritt, 11 March 2011, at page 1, paragraphs 3-4. (Mr Tritt is not an economic or traffic expert).

<sup>417</sup> Tommy Parker Rebuttal Evidence, at paragraphs 36-38.

<sup>418</sup> Michael Copeland Rebuttal Evidence, at paragraphs 11 to 13; Andrew Murray Rebuttal Evidence, at paragraphs 8-9.

(i.e. a BCR of 1.2), the Project significantly exceeds the required 8% return on capital, with a surplus of \$300 million.<sup>419</sup>

382 Campaign for Better Transport claims that updating the models from ART2 to ART3 reduced benefits from \$4.2 billion to \$2.4 billion.<sup>420</sup> In response, it is noted that:

382.1 Those values are incorrect because they ignore the effect of discounting of future costs and benefits;

382.2 While the models were updated, the key differences considered to impact the BCR were the different inputs and assumptions used. The ART3 modelling included higher fuel prices, lower land use intensity in parts of the region, and higher assumptions on the effects of travel demand management policies.

383 Mr Tritt also queried the basis for a low estimate of induced traffic.<sup>421</sup> The basis for the predicted level of induced traffic was fully explained by Mr Murray in his rebuttal evidence<sup>422</sup> and was agreed to be appropriate by the transport experts.<sup>423</sup>

384 Mr Tritt also argues that the BCR will reduce when induced traffic, increased car dependence and negative externalities are included. As discussed above, induced traffic is already appropriately included, and as explained by Mr Copeland, externalities (or 'intangibles') are dealt with outside the BCR process.<sup>424</sup>

***Post-construction audit***

385 Campaign for Better Transport seeks that the NZTA be required to undertake a post-construction audit to validate the claimed level of benefits.<sup>425</sup> While no detailed audit of the Mt Roskill SH20 project has yet been undertaken, Mr Murray confirmed in cross-examination that a check showed that the recorded traffic flows on SH20 Mt Roskill to be within 5% of the model forecasts.<sup>426</sup> He also explained that such audits do not normally happen.<sup>427</sup>

386 The NZTA has plans to undertake a post-construction review as a matter of course for all RONS projects. However, requiring such a

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<sup>419</sup> Michael Copeland EIC, at paragraphs 32 and 33, and Rebuttal Evidence, at paragraph 12.

<sup>420</sup> Representations by Campaign for Better Transport, 11 March 2011, at page 2.

<sup>421</sup> Representations by Michael Tritt, 11 March 2011, at page 1.

<sup>422</sup> Andrew Murray Rebuttal Evidence, Annexure I, at paragraphs 14-17.

<sup>423</sup> Expert Caucusing Joint Report to the Board of Inquiry – Transport, 3 February 2011, at page 9.

<sup>424</sup> Michael Copeland EIC, at paragraphs 48-51.

<sup>425</sup> Representation of Campaign for Better Transport, 11 March 2011, at page 2.

<sup>426</sup> Transcript, at page 190.

<sup>427</sup> Transcript, at page 1452.

review by way of a designation condition would be outside the scope of the Board's jurisdiction under the RMA.

***Do Minimum scenario is unrealistic and benefits are inflated***

387 Professor Hazledine considers that the "Do-Minimum" scenario is not realistic as it assumes an "unchanged roading system" and does not consider improvements to public transport, active travel or traffic demand management. He therefore considers the BCR flawed because "... any relief in the form of additional motorway capacity is going to look quite attractive ...".<sup>428</sup>

388 With respect, Professor Hazledine's comments regarding the "Do Minimum" scenario are factually incorrect. The "Do Minimum" scenario does include substantial investment in the road network and substantial increases in public transport infrastructure and services.<sup>429</sup> Furthermore, this scenario includes significant assumptions about the effects of travel demand management policies and high fuel prices.

389 The contention that the "Do Minimum" scenario is not realistic is therefore disputed by the NZTA. Even against that option, the evaluations show a significant level of benefits arising from the Project.

***Economic and productivity benefits***

390 The Campaign for Better Transport asserts that the benefits of enhanced productivity and economic growth is "simply an unproven assumption".<sup>430</sup>

391 That assertion is simply not correct. The NZTA undertook a detailed assessment of agglomeration and wider economic benefits, as explained in Mr Parker's rebuttal evidence.<sup>431</sup> A summary document of the SAHA economic assessment report was appended to that rebuttal evidence.<sup>432</sup>

392 Furthermore, by reducing vehicle operating and travel time costs, the Project will result in cost savings, thereby contributing to greater economic efficiency (or productivity) and economic growth.<sup>433</sup>

***Mitigation of eco-tones***

393 As explained in the evidence of Mr Dave Slaven,<sup>434</sup> eco-tones are vegetation sequences, distinct bands of vegetation types which, in

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<sup>428</sup> Representation of Professor Tim Hazledine, 9 March 2011, at page 3.

<sup>429</sup> Traffic Modelling Report (Technical Report G.25), at Section 4.3, pages 14-19.

<sup>430</sup> Representation of Campaign for Better Transport, 11 March 2011, at page 3.

<sup>431</sup> Tommy Parker Rebuttal Evidence, at paragraph 89 and Annexure D.

<sup>432</sup> The full SAHA economic assessment is available online at: <http://www.nzta.govt.nz/resources/ronseconomic-assessment-2010-05/docs/full-report.pdf>.

<sup>433</sup> Michael Copeland EIC, at paragraphs 36, 42, 45 and 47.



the case of Traherne Island, progress through flax/cabbage tree wetlands, salt scrub, salt marsh and mangroves. The Project will result in the loss of 1.85ha of these eco-tones at Traherne Island (or 14.5% of the total eco-tone area for Traherne Island).<sup>435</sup> The NZTA proposal was for this loss to be off-set by replacement eco-tones adjacent to Eric Armishaw Park.<sup>436</sup>

- 394 However, Dr Julian for Auckland Council, Ms Myers for Living Communities, and Mr Havell for the Department of Conservation do not support this mitigation approach. Dr Julian considered that the proposed mitigation plantings would “fail to provide new eco-tone areas to replace the ones that will be lost in the operational footprint of the widened causeway”<sup>437</sup> and recommended instead protection and ongoing maintenance of the existing eco-tone areas within Traherne Island.
- 395 Mr Havell indicated, under cross-examination, that he was “philosophically opposed” to the proposed mitigation plantings adjacent to Eric Armishaw Park.<sup>438</sup> Similar to Dr Julian, his preferred mitigation was expressed to be management of the adjacent eco-tones on Traherne Island through weed and pest control under the existing Traherne Island Natural Heritage Restoration Plan 2009-2014 (the Restoration Plan), which he considered should be extended past 2014.<sup>439</sup>
- 396 While it remains the view of the NZTA’s expert witness that the mitigation planting at Eric Armishaw Park is preferable, the NZTA is prepared to accept the approach favoured by the Council, FOOC and DoC (as represented by Dr Julian, Ms Myers and Mr Havell).
- 397 To effect that approach, the NZTA proposes to delete proposed Vegetation Condition V.16 which provides for the Eric Armishaw restoration and amend proposed Vegetation Condition V.18. The latter provides for the continuation of weed and pest management under the Restoration Plan until 2014<sup>440</sup> and the NZTA proposes to amend V.18 to provide that weed and pest control will continue on Traherne Island until 2020.
- 398 After 2020 the NZTA’s ongoing obligations under the Regional Pest Management Strategy will apply, although we understand that the

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<sup>434</sup> David Slaven EIC, at paragraph 35.

<sup>435</sup> Ibid, at paragraph 48.

<sup>436</sup> Ibid, at paragraph 72 and Annexure D.

<sup>437</sup> Andrea Julian EIC, at paragraph 7.2.

<sup>438</sup> Transcript, at page 882.

<sup>439</sup> Ms Myers supported the caucusing position of Mr Havell and Dr Julian.

<sup>440</sup> The condition was originally included to address concerns that the Restoration Plan, while setting out a programme to 2014, did not have confirmed funding until 2014.

restoration of the Island's vegetation will, by that point, mean that very little weed management will be needed.

- 399 As for the area within the designation adjacent to Eric Armishaw Park, with the deletion of condition V.16, the NZTA proposes that it will revert to the original landscaping proposal for that area of coastal forest.

**Motu Manawa – Pollen Island Marine Reserve**

- 400 Several submitters, including the Royal Forest and Bird Protection Society consider that insufficient regard has been had to the status of the Motu Manawa Marine Reserve (*MMMR*). However, careful consideration has been given to managing the effects of the Project on the Coastal Marine Area and in particular the Reserve having regard to the purposes for which the land and water of the *MMMR* is managed.

- 401 Specific measures have been incorporated in the design of the reclamation to remedy or mitigate these effects. These include the provision of a marine mud remediation zone to re-establish intertidal habitat adjacent to the reclamation and the treatment of stormwater runoff from all of the causeway to capture over 80% of suspended solids and metals in solution.

- 402 An application to undertake works within the *MMMR* has been drafted and is currently being reviewed by officers of the Department of Conservation and Ministry of Transport prior to lodgement. This application includes additional measures which have been specifically designed to address the purposes of marine reserves set out in section 3 of the Marine Reserves Act 1971.

**Transparent noise barriers**

- 403 Through cross-examination, the Albert Eden Local Board expressed concern that the Project did not use transparent noise barriers.<sup>441</sup> Mr Andre Walter for the NZTA noted that such barriers are not generally favoured as they tend to attract tagging and vandalism, making maintenance of the transparency difficult. However, as Ms Wilkening noted, such barriers do have their place if there are suitable views to protect.<sup>442</sup>
- 404 For the Project, the urban design and visual team determined there were not views to protect. Rather, transparent barriers in places like Alan Wood Reserve would simply create views of the motorway for park users and surrounding residents. In that situation, Ms Wilkening noted that it was better that the motorway was visually shielded, as that reduces the perception of noise effects.<sup>443</sup>

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<sup>441</sup> Transcript, pages 110 (Mr Walter), 454 (Mr Brown), and 576 (Ms Hancock).

<sup>442</sup> Ibid, page 1168.

<sup>443</sup> Ibid.

405 The Local Board cross-examined Mr Brown and Ms Hancock on noise barriers in Sector 5 in particular. It is accepted that this area has views that are worth protecting, however the 'noise' barriers in this case are, as Mr Brown and Ms Hancock explained, only 1.1m high. Therefore, while they serve still provide some noise benefits, the barriers are simply the standard concrete 'Portland' barriers that are required for driver safety.

**Transport related matters**

406 Further transport-related issues were raised by submitters during the course of the hearing, and responses are provided to the key concerns raised.

***Need for three-lane links***

407 Mr Will McKenzie has asserted that only 2-lane links are required to connect SH20 and SH16 rather than the 3 that are proposed.<sup>444</sup> His view appears to be based on a comparison with other locations on SH1 and on his assertion that the maximum flow able to be accommodated by SH16 is only 3,000 vph.<sup>445</sup>

408 However, Mr McKenzie, who is not a transport expert, provides no basis for this figure of 3,000 vph and it appears to contradict his later assumption that the capacity of SH16 will be 11,000 vph.<sup>446</sup> Under cross-examination by Mr McKenzie, Mr Murray warned against comparing the capacity of Spaghetti Junction to SH16 because there are a number of different links with many different capacities.<sup>447</sup>

***Future proofing bus shoulder lanes***

409 Campaign for Better Transport is critical of the inclusion of SH16 bus shoulder lanes as providing only a small benefit to bus users.<sup>448</sup> Campaign for Better Transport also complains that the shoulder lanes have not been future proofed to provide a busway in this corridor in the future.<sup>449</sup>

410 The Board is reminded that this issue was addressed during expert transport caucusing, and there was agreement by the experts that the provision of bus shoulder lanes are an appropriate treatment for bus priority on SH16 in the Project area.<sup>450</sup> This section of SH16 forms part of the Quality Transport Network, rather than the future

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<sup>444</sup> Representations by Will McKenzie, 10 March 2011, at page 1.

<sup>445</sup> Ibid, at page 2.

<sup>446</sup> Ibid, at page 5.

<sup>447</sup> Transcript, at page 196.

<sup>448</sup> Representations by Campaign for Better Transport, 11 March 2011, at page 3.

<sup>449</sup> Ibid.

<sup>450</sup> Expert Caucusing Joint Report to the Board of Inquiry – Transport, 3 February 2011, at page 6. See also Andrew Murray EIC, at paragraphs 164-167, and Tommy Parker Rebuttal Evidence, at paragraphs 181-183.

Rapid Transit Network.<sup>451</sup> If the Region's plans were to change in the future, the Project would not preclude the opportunity to implement a busway at a later stage.<sup>452</sup>

***Widening and performance of SH16***

- 411 Mr Will McKenzie argues that the reduction from 5 lanes to 4 lanes on SH16 at Rosebank Road will be a problem.<sup>453</sup> He relies on an assumption that all motorway lanes provide 2,000 vph, when this approach ignores the actual pattern of on and off-ramp traffic. To avoid this over-simplification, the NZTA has relied on traffic models, which have a strong scientific basis (but which Mr McKenzie appears also critical of). The NZTA's traffic assessment does not reveal potential problems at Rosebank Road as alleged by Mr McKenzie.

***Locking in local road benefits***

- 412 CBT has queried how the traffic reduction benefits on local roads can be locked in through enabling better public transport, cycling and walking infrastructure.<sup>454</sup>
- 413 In response, the Board is reminded of the Western Ring Route (North-West) Network Plan that has already been developed by the NZTA with input from the former Auckland City Council, Waitakere City Council and ARTA. This Plan lists complementary projects to be progressed by Auckland Council / Transport, in order to make best use of the changes in transport patterns provided by the completed Western Ring Route.<sup>455</sup> Such projects are the responsibility of those organisations, as they apply to the local network.
- 414 Proposed Operational Traffic Condition OT.1 includes a similar requirement for the NZTA and Auckland Council / Transport to work together to integrate the State highway and local networks, focussing on the immediate interface of the networks, and addressing such matters as pedestrian/cycleways and provision for buses.

***Mr Mehaffy's issues***

- 415 Mr Mehaffy raised a number of criticisms of the Project's traffic assessment, many of which are based on factual errors. Some examples follow, with connections provided.
- 416 In paragraph 9 of his representations, Mr Mehaffy incorrectly interprets Mr Murray's evidence on the planned widening of SH20 Mt Roskill from its existing 4 lanes to 6 lanes. The widening will result

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<sup>451</sup> Regional planning shows that the western rail line (which was recently double-tracked and is soon to be electrified), and not SH16, forms the Rapid Transit Network.

<sup>452</sup> Tommy Parker EIC, at paragraph 183.

<sup>453</sup> Representations by Will McKenzie, 10 March 2011, at page 5.

<sup>454</sup> Representations by Campaign for Better Transport, 11 March 2011, at page 5.

<sup>455</sup> Tommy Parker EIC, at paragraphs 97-102.

in 6 lanes in total on SH20, not 6 lanes in each direction (i.e. 12). Furthermore, the suggestion that the capacity of the tunnels is 4.8 lanes is not correct, as capacity is not influenced by the speed limit being reduced from 100km/hr to 80km/hr.<sup>456</sup> These errors appear to feed into some of his other points, such as the alleged tunnel capacity shortfall<sup>457</sup>

- 417 Mr Mehaffy is not correct that Mr Murray does not explain the routes for local residents to SH20. Mr Murray discusses this very issue in his rebuttal evidence<sup>458</sup>
- 418 At paragraph 14, Mr Mehaffy appears to misinterpret Annexure F to Mr Murray's rebuttal evidence. While Mr Mehaffy may consider these routes to be "convoluted", Annexure F identifies those routes that local residents already use to access SH20. With the Project in place, those routes are expected to have net reductions in traffic. As a result, Mr Mehaffy's assertion that those routes will require upgrades is incorrect.
- 419 Mr Mehaffy is critical of the tunnel design and the risk of having to widen the tunnels to add lanes at a later date.<sup>459</sup> The short answer is that twin 3-lane tunnels are proposed so as to future-proof and avoid having to widen them in the future.

### ***Freight and Public Transport issues***

#### *Freight issues*

- 420 The Auckland Business Forum and the National Road Carriers (Inc) made written representations to the Board.<sup>460</sup> Both submitters seek that the Project, in particular, the tunnel and interchange designs, are future-proofed to ensure that new over-dimension, over-weight heavy freight vehicles would be able to use the route.
- 421 Mr Walter confirmed that the route and the tunnels have not been designed for over-dimension vehicles, as this would result in significant extra cost due to additional excavation, temporary support and ventilation, and greater adverse environmental effects.<sup>461</sup> Further, as Mr Walter explained, there is an existing over-dimension route across the Auckland Isthmus, and motorways do not generally form part of these routes due to the high speed and function of the motorway system.<sup>462</sup>

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<sup>456</sup> Transcript, at pages 164-166, cross-examination of Andrew Murray.

<sup>457</sup> Representations of Mr Mehaffy, 10 March 2011, at paragraph 13.

<sup>458</sup> Andrew Murray Rebuttal Evidence, at paragraphs 70-71.

<sup>459</sup> Ibid, at paragraph 20.

<sup>460</sup> Letter from Auckland Business Forum to the EPA, 28 February 2011, in lieu of an appearance at the hearing, at page 2. Representation by National Road Carriers (Inc).

<sup>461</sup> Andre Walter EIC, at paragraphs 212-213.

<sup>462</sup> Ibid, at paragraphs 213-214.

422 With respect to providing access for a larger class of HCV, the Project has been designed in accordance with Austroads standards. These standards cover all types of legal vehicles and loading and turning of vehicles.

423 In terms of National Road Carriers' request that during the construction phase existing freight vehicle movement is maintained through the Project area, the Construction Traffic Management Plan and Site Specific Management Plan processes will actively manage the temporary traffic effects of the construction phase on road users, including freight vehicles. This approach to managing temporary traffic effects of construction activities has not been challenged by Auckland Transport or any other party.

*Future-proofing for Public Transport*

424 The National Business Forum also seeks that the route, and the tunnels in particular, are future-proofed to ensure that new 'rapid-bus' services can be accommodated without major re-engineering (i.e. converting a bus shoulder lane into a busway).<sup>463</sup>

425 As SH20 is not identified in the ARTA Passenger Transport Network Plan nor the Regional Public Transport Plan, rapid bus services do not need to be provided for on SH20.<sup>464</sup> Regional planning has designated the western rail line as the Rapid Transit Network facility in this area, and the NZTA is providing land for an adjacent rail corridor, which will enable rapid transport along the SH20 corridor in the future. With respect to SH16, the Project would not preclude the opportunity to implement a busway at a later stage if regional planning were to change.

**INDIVIDUAL SUBMITTER ISSUES**

426 This section of the Reply addresses issues raised by individual submitters (again, only to the extent not already covered in evidence, etc). These include (in no particular order):

- Royal Forest and Bird;
- 1510 Great North Road;
- Albert-Eden Local Board;
- Te Atatu Pony Club;
- Auckland Council;

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<sup>463</sup> Letter from Auckland Business Forum to the EPA, 28 February 2011, in lieu of an appearance at the hearing, at page 2.

<sup>464</sup> This was agreed by the transport experts in caucusing and not previously requested by ARTA, as set out in the Expert Caucusing Joint Report - Transport, 3 February 2011, at page 6, SH16 and 20 Bus Facilities, at paragraph 2.

- Living Communities & Others;
- Star Mills;
- Friends of Oakley Creek;
- Margot Phillips;
- Brendon Vipond;
- Bryan Mehaffy;
- Waterview Primary School;
- Auckland Kindergarten Association;
- National Trading Company;
- Unitec;
- DoC;
- KiwiRail;
- Watercare Services Limited;
- Iwi concerns;
- Housing New Zealand Corporation;
- KiwiRail Group;
- Springleigh Residents Association; and
- Peter Allen-Baines.

### **Royal Forest and Bird Protection Society**

#### ***Historic Discharges***

427 The Royal Forest and Bird Protection Society raises concerns about the legality, and effects of, current and historic stormwater discharges from the SH16 causeway.<sup>465</sup> As noted in Opening Submissions,<sup>466</sup> the NZTA currently holds various stormwater discharge consents for the causeway, but accepts it is unclear as to whether they cover, between them, the entire causeway.<sup>467</sup> Mr

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<sup>465</sup> Representation and Legal Submissions on behalf of the Forest and Bird Motu Manawa Restoration Group by Mr McNatty generally, and Dr Bellingham EIC, at paragraph 19.

<sup>466</sup> Opening Legal Submissions on behalf of the NZTA, 7 February 2011, at paragraphs 164-166.

<sup>467</sup> Refer Assessment of Stormwater and Streamworks Effects (Technical Report G.15), at section 4.1.

Owen Burn confirmed in cross-examination, that the consenting history for the causeway discharges is "fuzzy".<sup>468</sup> Mr Burn explained that as the causeway was constructed in 1952, it is not clear what consents would have been required at that time, and whether any existing use rights would apply to stormwater discharges.<sup>469</sup>

- 428 The relief that the Society sought was originally to extend the Motu Manawa Marine Reserve, and then accepting that this was beyond the Board's jurisdiction, remediation of the effects of historic discharges.<sup>470</sup> The issue of remedying historic effects has already been addressed in this Reply.

***Rosebank culvert***

- 429 In its submission the Society sought that the Rosebank culvert be retained, extended and maintained in order to maintain tidal flow adjacent to the Rosebank Peninsula.<sup>471</sup> In the coastal processes caucusing however, the Society's representatives, Dr Bellingham and Mr Coote, accepted that the existing culvert needed to be decommissioned. Instead, they sought the creation of a replacement culvert and the excavation of a new channel in the Rosebank area.<sup>472</sup> It is noted that neither representative has any expert qualifications in coastal processes.<sup>473</sup>
- 430 A replacement culvert was opposed by Dr de Luca (the NZTA's expert Marine Ecologist), Dr Bell (the NZTA's expert Coastal Scientist) and Dr Stewart (the Board appointed Marine Scientist expert), given concerns with habitat loss and the mobilisation of historic sediment bound contaminants. Dr Bell's concerns with a replacement culvert or with an alternative tidal inflow are set out in detail in his rebuttal evidence.<sup>474</sup> Dr de Luca concludes that there would be "no ecological benefit, and potentially an adverse ecological impact, of retaining and clearing the Rosebank culvert"<sup>475</sup> given the risk of transferring contaminants to the northern side of the causeway where sediment concentrations are significantly lower.
- 431 It is submitted that the expert evidence and concerns expressed by Drs de Luca, Bell and Stewart with a replacement culvert are sound, clearly articulated, unchallenged by other expert evidence and

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<sup>468</sup> Transcript, at pages 487-488.

<sup>469</sup> Ibid, at page 487.

<sup>470</sup> Representation and Legal Submission on behalf of the Forest and Bird Motu Manawa Restoration Group to the Board of Inquiry, at paragraph 37.

<sup>471</sup> Submission on behalf of the Royal Forest and Bird Protection Society, at page 16.

<sup>472</sup> Expert Caucusing Joint Report to the Board of Inquiry – Coastal Processes, at section 11.

<sup>473</sup> Transcript, at pages 949-951.

<sup>474</sup> Dr Rob Bell Rebuttal Evidence, at paragraphs 23 - 33.

<sup>475</sup> Dr Sharon de Luca Rebuttal Evidence, at paragraphs 34 - 35.



should be preferred over the views of the Society witnesses.<sup>476</sup>  
Accordingly, a replacement culvert is not part of the Project.<sup>477</sup>

***The Volcanic Cones Decision – 95% treatment***

- 432 In his submissions, Mr McNatty for the Society submitted that the proposed stormwater treatment failed to achieve the best practicable option. He suggested that in the *Auckland Volcanic Cones Society* case,<sup>478</sup> which concerned the Mt Roskill extension of SH20, the NZTA (then Transit) had offered to achieve 90-95% TSS (Total Suspended Solids) removal.
- 433 The Society's submission is not correct. It confuses:
- 433.1 Treatment standards for erosion and sediment control measures during initial earthworks phases of construction (which the *Volcanic Cones* case was addressing); with
- 433.2 With treatment standards for stormwater that apply during construction (once earthworks areas are stabilised) and to stormwater during operation of the motorway.
- 434 The treatment standards for erosion and sediment control and for stormwater treatment are different and are not directly comparable.
- 434.1 The treatment approach for erosion and sediment control measures are based on ARC TP90 and are method based.
- 434.2 The treatment standard for stormwater is prescribed by the ARC Proposed Auckland Regional Plan: Air Land and Water (PARP:ALW) at 75% suspended solid removal on a long term average basis, which is implemented through the ARC TP10 guidelines.
- 435 The difference in treatment standards between the initial earthworks and subsequent construction and operation arises because of the different sediment generation activities, the magnitude of the sediment loads, the different treatment devices and the potential for environmental effects. The sediment yield (suspended solid kg/ha) from earthworks is potentially much larger than for stormwater due to the earthworks activities and the erodibility of exposed soils. As a consequence, there are potentially greater environmental effects during the earthworks phase from smothering of freshwater and seawater biota. Therefore, erosion and sediment control for earthworks use different methods, and for the Project have a higher

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<sup>476</sup> It is noted that the NZTA's continuing opposition to a replacement culvert is based entirely on the expert opinion and advice of Drs de Luca, Bell and Stewart that such a culvert could create adverse ecological impacts (accepting that construction issues and associated costs would not be significant).

<sup>477</sup> This confirms the NZTA's position, as sought in EMS Final Addendum Report, at paragraph 2.3.3.

<sup>478</sup> *Auckland Volcanic Cones Society Inc v Transit New Zealand Ltd* [2003] NZRMA 54, at paragraphs 184-185.

treatment percentage compared to stormwater. The treatment efficiency for stormwater is based on studies undertaken by ARC to find the marginal point of return for sediment removal versus device size.<sup>479</sup>

- 436 The Project intends to achieve 94% suspended solids removal through erosion and sediment control measures in accordance with TP90 during the earthworks phases of construction.<sup>480</sup> Subsequently, stormwater during construction will be managed using a BPO approach, with up to 75% suspended solids removal for new sections of motorway and for construction yards. Then, during the operation of the motorway stormwater treatment will achieve the PARP:ALW standard of 75% suspended solid removal for Sectors 6 and 9, with a higher standard of 80% suspended solid removal for areas discharging directly to the CMA (Sectors 1-5).
- 437 As previously expressed, the 75% removal of TSS on a long term average basis is the marginal point of return for sediment removal versus device size. Aiming for a higher level of stormwater treatment would require larger treatment devices, which would reduce the area of land available for open space and flood management, and (in relation to the causeway) potentially require additional reclamation.<sup>481</sup>
- 438 Furthermore, the Project team considers that, as levels of stormwater treatment to remove 95% of TSS are unprecedented, there is no design data to support the design of the larger treatment devices, and treatment at this level would be very challenging to achieve. In any event, the stormwater experts all agreed in caucusing that the level of stormwater treatment proposed was appropriate and adequately mitigated the effects of the Project.<sup>482</sup> The Society has not produced any expert evidence to suggest otherwise.
- Unitec**
- 439 Unitec's Mt Albert campus is the largest community and educational facility located in the vicinity of the Project. The NZTA and Unitec have worked together to address the latter's concerns with the Project, and the result is the Project Agreement which was produced as Hearing Exhibit 5.

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<sup>479</sup> Tim Fisher EIC, 12 November 2010, paragraph 123 (citing ARC Technical Publication No.4, Selection of Stormwater Treatment Volumes for Auckland (1992)).

<sup>480</sup> Graeme Ridley EIC, at paragraph 70.

<sup>481</sup> Tim Fisher Rebuttal Evidence, 2 February 2011, at paragraphs 41 to 42.

<sup>482</sup> Stormwater Caucusing Statement, at paragraph 5.

- 440 That Agreement addresses Unitec's concerns with:
- 440.1 Pedestrian access – through a condition requiring the maintenance of pedestrian access-ways;<sup>483</sup>
  - 440.2 Construction noise effects on teaching areas – through amendment to the internal noise criteria for educational facilities to reflect Unitec teaching environments and hours;<sup>484</sup>
  - 440.3 Operational Noise – through the early provision of building modification measures at Unitec;<sup>485</sup>
  - 440.4 Relocation of students from the hostel at 1510 Great North Road – through the provision of four weeks' notice, an agreement not to relocate students during exam time, and the provision of transport to the temporary relocation;<sup>486</sup>
  - 440.5 Settlement – through the pre-cautionary inclusion of various Unitec buildings in the list of 'at risk' buildings (despite expert assessment that the buildings were not at risk of damage from settlement), with the effect that the owners of the buildings will be offered pre and post construction building surveys and repair of any damage attributable to the Project; and
  - 440.6 Dispute resolution – through the inclusion of a dispute resolution clause (with wider effect).<sup>487</sup>
- 441 The NZTA considers that Unitec's constructive approach has resulted in improvements to the Project. In particular, Unitec's precautionary approach to the needs of its student residents in the hostel and to the effects of settlement on campus buildings, has led to agreement being reached on the amended wording of conditions so as to ensure that construction noise and settlement effects are appropriately addressed.

#### **1510 Great North Road**

- 442 The Unitec Hostel at 1510 Great North Road, has more than 30 owners, several of whom live overseas. The site is zoned Special Purpose 2 (Education) and can only be rented for student accommodation purposes. It is noted however, that the leaseholder, Unitec has reached agreement with the NZTA over the

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<sup>483</sup> Proposed Open Space condition OS.13. (OS.12 at the time of the NZTA/Unitec Agreement).

<sup>484</sup> Proposed Construction Noise Condition CNV.2(d).

<sup>485</sup> Proposed Construction Noise Condition CNV.1(xiv) and a related change to proposed Operational Noise Condition ON.10.

<sup>486</sup> Now Proposed Construction Noise Conditions CNV.10 to CNV.12.

<sup>487</sup> Proposed Public Information Condition PI.4(e).

Project indicating its concerns about the Project have been addressed.

- 443 Mr Tauber and Mr Richardson expressed concern about the effects of the Project on a stormwater treatment wetland that they advised is within or near the area required by the NZTA for temporary occupation.<sup>488</sup> A review by the NZTA of the LIM and Council property file did not turn up any plans for a stormwater wetland on the site. Accordingly the NZTA has written to the owners requesting a copy of the plans for the wetland, so that NZTA's consultants can determine how to protect it.<sup>489</sup>
- 444 In the meantime, the NZTA has recommended an amendment to proposed Construction Environmental Management Plan CEMP.16 to include reference to private services.
- 445 Mr Tauber and Mr Richardson have also expressed concern at the lack of consultation with NZTA.<sup>490</sup> In response, it is noted that there has been considerable consultation with the Hostel owners. Ms Linzey's planning rebuttal evidence discusses consultation with Mr Tauber<sup>491</sup> and then attaches, as Annexure D to her evidence, a summary of consultation with Mr Tauber, Mr Richardson and the Body Corporate.
- 446 In response to the concerns raised by Mr Tauber and Mr Richardson about the extent of the designation on the property at 1510 Great North Road, the following specific comments are made:
- 446.1 An operational sub-strata (or subsoil) designation for the tunnel is required from the property. The area of this requirement is defined in NOR 5 and is some 0.79ha (some 80% of the site area). Restrictions will apply to excavation or disturbance of land at depths greater than the 4 metres and the land within the sub-strata designation will be permanently acquired.<sup>492</sup>
- 446.2 A construction designation is required for the surface of the site over some 0.16ha, or 15% of the site. This designation is required over the tunnels as a precautionary measure during construction and for the cut-cover of the northern

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<sup>488</sup> Transcript, at page 1482.

<sup>489</sup> Correspondence to Mr Gallen, 14 March 2011 (A copy has been provided to the Board).

<sup>490</sup> Submissions on behalf of Apartments Limited and Townscape, paragraph 9.

<sup>491</sup> Amelia Linzey Rebuttal Evidence (Planning) on behalf of the NZTA, paragraphs 37 - 42 and Annexure D.

<sup>492</sup> Cross Section C - Diagrammatic Cross Section through Tunnels showing Proposed Designations under Reserves (and under 1510 and 1550 Great North Road), on NOR 5, at page 5, lodged in the AEE Overview, NOR and Consent Application Forms (Appendix A) provides a figure summarizing the nature of these effects on this property.

tunnel portal. The extent of the northern portal 'open construction' on the site is expected to be approximately 20m south (from the northern boundary) at approximately chainage 3800, extending over an area of some 400m<sup>2</sup>. The period of construction at this portal (providing for the driven tunnelling through the surface designation area and construction of that portal) is expected to be less than 6 months. On the basis of this moderately short term impact and the fact that much of the surface is not expected to be disrupted by construction works, a temporary occupation of the surface designation area is considered appropriate.

- 447 The Hostel buildings are not within the risk contours for building damage as set out in the evidence of Mr Gavin Alexander.<sup>493</sup> However, the NZTA recognises the unique foundations of these buildings and has taken a precautionary approach of identifying the hostel within the 'damage category 2' classification (for the purposes of monitoring effects during construction). This means that, while outside the predicted effects, the Hostel will be included in the survey, monitoring and management response process of the Ground Settlement Effects Plan.<sup>494</sup>
- 448 Construction Yard 7 adjoins this property, extending into it for the period of cut-cover tunnel construction. In recognition of the potential construction impacts and impacts of the Yard on the users of 1510 Great North Road, and the particular sensitivities of the buildings in terms of their foundations, a number of proposed conditions address potential construction effects on this property and the student accommodation activity on it. These include:
- 448.1 OS.13 – to maintain the pedestrian access between the Unitec student residential village and the Unitec Campus;<sup>495</sup>
- 448.2 CNV.2 – providing appropriate construction noise criteria, with the property enjoying the benefit of the night-time noise limits of Sector 8, even though it adjoins Sector 7 and Great North Road;<sup>496</sup>
- 448.3 CNV.4 – providing construction vibration and construction borne noise criteria. Given the depth of tunnelling, it is likely that the criteria will be met, but monitoring of

<sup>493</sup> Gavin Alexander EIC, at paragraphs 75 – 78 and Annexure B, and Rebuttal Evidence, at paragraphs 15 – 22.

<sup>494</sup> Provided by proposed Ground Settlement Conditions S.7 - S.13.

<sup>495</sup> As discussed in Andre Walter EIC, at paragraphs 77 - 78.

<sup>496</sup> As discussed in Siiri Wilkening EIC, at paragraphs 118–123 and Rebuttal Evidence, at paragraphs 46–59.

tunnelling works will confirm this and mitigation options (including relocation) will be available if required;<sup>497</sup>

- 448.4 CNV.10 and CNV.12 – providing specific requirements, which are agreed with the leaseholder Unitec, around how any temporary relocation of residents of the student hostel will be managed;<sup>498</sup>
- 448.5 TT.2 and TT.8 - in relation to Site Specific Traffic Management Plans and the management of truck movements<sup>499</sup> to mitigate construction traffic impacts;
- 448.6 G.1 to G.6, G.8 and G.9 - that (combined) require piezometers to be installed and monitored to check changes in water level, before, during and following construction, to provide sufficient understanding of water level changes in the vicinity of 1510 Great North Road to provide warning of potential groundwater drawdown induced settlement;<sup>500</sup>
- 448.7 S.10 to S.12 - requiring monthly visual inspections and settlement and/or wall inclination monitoring during the period of active construction to provide ongoing confirmation of the appropriateness of the settlement and damage predictions and the opportunity for mitigation measures to be adopted if estimated movements or damage levels appear likely to be exceeded for 1510 Great North Road;<sup>501</sup>
- 448.8 CEMP.16 – which, as discussed earlier, confirms the NZTA intent to ensure that any stormwater services affected by construction of the tunnel be repaired to their pre-construction state or better;<sup>502</sup>
- 448.9 AQ.1, AQ.4, AQ.10, AQ.18 and CNV.9 (for enclosure of the concrete batch plant) - which manage construction activities so that dust and emissions are managed appropriately to avoid adverse nuisance and health effects;<sup>503</sup>
- 448.10 L.2 – requiring the management of construction lighting including that of Construction Yard 7 so that it will have no greater than an average of 100 lux and so that the spill

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<sup>497</sup> As discussed in Peter Millar EIC, at paragraphs 59-64 and Rebuttal Evidence, at paragraphs 5 - 6.

<sup>498</sup> As discussed in Amelia Linzey Third Supplementary Evidence, at paragraph 48.7.

<sup>499</sup> As discussed in John Gottler EIC, at paragraph 127.

<sup>500</sup> As discussed in Ann Williams Rebuttal Evidence, at paragraphs 6-9.

<sup>501</sup> As discussed in Gavin Alexander EIC, at paragraphs 75-78 and Rebuttal Evidence, at paragraphs 15-22.

<sup>502</sup> As discussed in Tim Fisher Rebuttal Evidence, at paragraph 60.

<sup>503</sup> As discussed in Dr David Black Rebuttal Evidence, at paragraph 22-24.

lighting will be minimised such that it will not adversely impact on the residents;<sup>504</sup> and

- 448.11 CEMP.6, CEMP.7 and LV.10 - which require protection of existing vegetation (through the STEM assessment and identification of Amenity Trees), fencing and management of construction yards, and replacement of Amenity Trees, such that it is concluded that the student accommodation block will be adequately visually buffered from construction activities in Construction Yard 8.<sup>505</sup>

### **Friends of Oakley Creek**

#### ***Sector 8 Planting***

- 449 Notwithstanding that the Project tunnels underneath and therefore does not directly affect Sector 8, the Friends of Oakley Creek (FOOC) seek a condition requiring additional riparian planting and weed and pest management in that Sector.<sup>506</sup> FOOC's Representation argues that this mitigation is required to address cumulative effects and loss of habitat.

#### *Cumulative effects*

- 450 Cumulative effects have been assessed by the NZTA team of experts throughout their Technical Reports, evidence and caucusing. In particular, Mr Sides has considered the assessment of cumulative effects as they relate to Oakley Creek and concluded that the assessment was multi-disciplinary, taking in specialist assessment on freshwater ecology, stormwater, groundwater, and erosion and sediment control.<sup>507</sup> Further he concludes that, as the levels of environmental protection, monitoring and mitigation generally exceed relevant guideline levels, the cumulative effects will be lower than for a Project that simply met those guideline levels.<sup>508</sup>
- 451 The conditions and management plan approach also ensure the cumulative monitoring of effects. For example, the cumulative effects of changes to creek base flow that might occur in combination with sediment discharge will be monitored cumulatively in proposed Freshwater Condition F.5.<sup>509</sup>

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<sup>504</sup> As discussed in Geoff Waller EIC, at paragraphs 43-44 and Rebuttal Evidence, at paragraphs 11-16.

<sup>505</sup> As discussed in Stephen Brown Rebuttal Evidence, at paragraphs 72 - 73.

<sup>506</sup> Representation on Behalf of Friends of Oakley Creek – Te Auaunga Incorporated, at paragraphs 4.10 and 5.5.

<sup>507</sup> Eddie Sides Rebuttal Evidence, at paragraphs 25 - 30.

<sup>508</sup> Ibid, at paragraph 28.

<sup>509</sup> Although it is also worth noting that sediment discharges will be lowest when flows are at their minimum and greatest when flows are elevated. Assessment of Freshwater Ecological Effects (Technical Report G.6), at Section 6.2.1.2(c), at page 32.

*Habitat loss*

- 452 FOOC's Representation indicates that its concern is about loss of habitat "during and immediately post construction".<sup>510</sup> This concern is addressed by the NZTA's proposal to complete the realignment and rehabilitation works on Oakley Creek as one of the first stages of work.
- 453 Moreover, FOOC's ecologist Ms Myers accepted, under cross-examination, that the Project's 1:5 ratio of increase of vegetation along the Creek was a significant positive benefit for riparian vegetation.<sup>511</sup>
- 454 It is submitted that the provision though the Project of five times as much riparian vegetation along Oakley Creek as currently exists as an early mitigation measure, should address any residual concerns about any effects of habitat loss effects on Oakley Creek. This replanting exceeds, by some 670m of stream length, the mitigation required as SEV replacement or stream realignment, and on the wider north bank, is generally well in excess of the 20m width sought by Ms Myers.<sup>512</sup> This is also not the only additional planting occurring through the Project with, for example, approximately 10ha of native forest planting at Waterview Reserve.<sup>513</sup>
- 455 The NZTA avifauna, herpetofauna and freshwater ecology experts have all concluded that effects on birds, lizards and freshwater fauna respectively are adequately addressed. For example, Mr Don concluded that the effects of vegetation clearance and habitat reduction on birds would be minor.<sup>514</sup> And the FOOC's Representation records Mr Chapman's acknowledgement that there were sites within the Oakley Creek catchment which presently have habitat suitable for lizard relocation (i.e. further mitigation beyond the pest control required under proposed Herpetofauna Condition H.1 is not required).<sup>515</sup>
- 456 Moreover, the expert caucusing on avifauna, herpetofauna and freshwater ecology indicated there were no outstanding concerns. There is therefore no expert opinion justifying FOOC's conclusion that fauna in the Oakley Creek area will be adversely affected by habitat loss.

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<sup>510</sup> Representation on behalf of Friends of Oakley Creek – Te Auaunga Incorporated, at paragraph 3.3(b).

<sup>511</sup> Transcript, at page 1010.

<sup>512</sup> A point accepted by Ms Myers, Transcript, at page 1008.

<sup>513</sup> As shown on Urban Design and Landscaping Plans – 810 (Plans F.16), at page 226.

<sup>514</sup> Graham Don EIC, at paragraph 38.

<sup>515</sup> Representation on behalf of Friends of Oakley Creek – Te Auaunga Incorporated, at paragraph 5.2.



- 457 While the NZTA has great admiration for the work of FOOC, the planting and weed management measures sought in Sector 8 are simply not justified by the effects of the Project. Indeed, Mr Sides concluded that in the longer term, the Project will improve freshwater ecological values,<sup>516</sup> and the NZTA considers that the rehabilitation works in Alan Wood Reserve will contribute to FOOC's goal of restoration of the creek from a channelled drain to a natural state.

**Bank stability**

- 458 FOOC submits that a combination of vibration, earthworks and weather events may trigger bank failures.<sup>517</sup> No expert evidence was produced to justify this submission and the expert evidence of the NZTA's vibration expert Mr Millar that the risk of bank failures due to vibration is negligible<sup>518</sup> has not been challenged. Mr Millar observed that vibration standards designed to prevent superficial damage to buildings will provide more than adequate protection against stream bank instability.<sup>519</sup>
- 459 To the extent that bank stability may relate to ground settlement, the point has been addressed in the rebuttal evidence of Mr Alexander.<sup>520</sup> Mr Alexander considers that it is

highly unlikely that the extremely minor changes in bank steepness resulting from the estimated settlements will adversely affect bank stability such that the extent or frequency of this naturally occurring instability is increased to any measureable degree.

- 460 The expert caucusing on ground settlement concluded that "localised effects on stream bank stability from the Project will be minor or less than minor".<sup>521</sup>

**Additional freshwater monitoring**

- 461 FOOC seeks an additional freshwater ecological monitoring site below Construction Yard 7. The area already has water quality monitoring. Mr Sides has indicated that an additional site is not necessary and that it is appropriate to have the freshwater monitoring focused on Sector 9.<sup>522</sup> The water quality monitoring will pick up any sediment issues.

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<sup>516</sup> Eddie Sides EIC, at paragraph 11.

<sup>517</sup> Representation on behalf of Friends of Oakley Creek – Te Auaunga Incorporated, at paragraph 4.13 - 4.17.

<sup>518</sup> Peter Millar Rebuttal Evidence, at paragraph 25.

<sup>519</sup> Ibid.

<sup>520</sup> Gavin Alexander Rebuttal Evidence, at paragraph 61.

<sup>521</sup> Groundwater and Ground Settlement Caucusing Agreed Statement, 2 February 2011, at Item 2(a) of the Ground Settlement Section.

<sup>522</sup> Transcript, at page 644.

- 462 Monitoring frequency was considered during expert caucusing,<sup>523</sup> with the result that the frequency of freshwater monitoring is as set out in proposed Freshwater Condition F.3.

***Riparian planting***

- 463 FOOC seeks that specific reference to TP148 be made in proposed Streamworks Condition STW.20(d) as a means of ensuring that ecological planting objectives are achieved. However, a requirement to implement TP148 would not be appropriate in all riparian areas; because such planting could conflict with CPTED principles, and amenity and recreational concerns.
- 464 This point was accepted by FOOC's ecologist in cross-examination.<sup>524</sup> It is also reflected in the wording of Streamworks Condition STW.20(d) which requires that the TP148 requirement for 70% shading be an "overall average" applied to those areas where realignments or SEV off-setting mitigation are proposed.
- 465 Ms Myers also accepted in cross-examination that TP148 does not require a 20m buffer for Oakley Creek as she had sought, but rather sets a preferred width of 15m, and encourages wider riparian buffers if opportunities permit.<sup>525</sup> Notwithstanding the 15m preferred width (and 10m minimum), the Project's proposed riparian planting takes the opportunity provided on the wider northern bank to provide riparian planting that is mostly wider than 20m, consistent with TP148.
- 466 In short, the riparian planting proposed by the NZTA is generally consistent with the TP148 guideline.

***Loss of freshwater wetland***

- 467 FOOC raises a concern about the potential loss of a freshwater wetland in Sector 7 and considers this has not been adequately mitigated.
- 468 In cross-examination, Mr Slaven noted that the wetland was a small seep of around 50m<sup>2</sup> of *Carex lessoniana*, which is a very common species of sedge grass.<sup>526</sup> The wetland is located right on the edge of Construction Yard 7 and proposed Vegetation Condition V.4 which requires the NZTA to minimise the extent of clearance will apply meaning that the wetland may not be affected unless necessary.

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<sup>523</sup> As confirmed by Mr Sides, refer *Ibid*, at page 654.

<sup>524</sup> *Ibid*, at pages 1008-1009.

<sup>525</sup> *Ibid*, at pages 1006-1007.

<sup>526</sup> *Ibid*, at page 665.

- 469 Mr Slaven's opinion is that the potential loss of the wetland will be more than adequately mitigated by the establishment of stormwater treatment wetlands required for the Project.<sup>527</sup>
- 470 The stormwater wetlands are designed to provide wildlife habitat and will have considerably greater biodiversity than the sedge present in the existing wetland.<sup>528</sup>
- 471 FOOC's Representation submits that the existing wetland will "provide completely different ecological values to stormwater treatment wetlands".<sup>529</sup> Mr Slaven suggests that the difference will be that the Project's treatment wetlands will have much better diversity.<sup>530</sup> His opinion is supported by FOOC's own ecologist Ms Myers who, in response to a question from the Board, stated that stormwater treatment wetlands "are being planted with a good range of native species to act as a wetland system and they will create habitat".<sup>531</sup>

***Litter trap***

- 472 FOOC's Representation seeks the installation of an in-stream litter trap in Alan Wood Reserve. However, it also acknowledges that "[a]t present, significant amounts of litter wash into [Sector 8] after heavy rain". Accordingly, it is clear that this is an existing situation, rather than an effect of the Project.

**Waterview Primary School and Ministry of Education**

- 473 The NZTA has had detailed and constructive discussions with the School and the Ministry about how best to mitigate the effects of the Project on the School. The result, as counsel for the School and the Ministry advised the Board last Monday (March 21), is an Agreement which provides for an extensive suite of mitigation measures to address the effects of the Project on the School.
- 474 The Board has a copy of the Agreement,<sup>532</sup> and the School's legal submissions addressed the mitigation measures in detail. Key measures include:
- 474.1 Relocation of the junior classrooms to the opposite end of the School (which will require enlargement and reconstruction of the new junior rooms);
- 474.2 Construction of a new 'resource teaching learning and behaviour unit' on the former site of the kindergarten;

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<sup>527</sup> Ibid, at page 666.

<sup>528</sup> Refer Assessment of Stormwater Effects (Technical Report G.15), at page 54.

<sup>529</sup> Representation on Behalf of Friends of Oakley Creek – Te Auaunga Incorporated, at paragraph 7.8.

<sup>530</sup> Transcript, at page 667.

<sup>531</sup> Ibid, at page 1013.

<sup>532</sup> Hearing Exhibit 20 (yet to be signed).

- 474.3 Redevelopment of the School's entry, administration block, foyer, and staffroom;
- 474.4 Upgrading of all 'inhabited' spaces (such as classrooms, staffroom and the hall) to install insulation, electrical and data upgrades, and acoustic mitigation measures (including air conditioning and ventilation);
- 474.5 An extension to the School hall and the community annex to it; and
- 474.6 A number of other mitigation measures to the School grounds and facilities.
- 475 NZTA's Agreement also provides for measures such as monitoring of the school roll (and reimbursement of any funding shortfall up to 3 years after the operational designation footprint is confirmed<sup>533</sup>), and bussing students to an alternative pool for swimming lessons.
- 476 Finally, it is noted that the Agreement seeks to ensure, to the extent possible, that the redevelopment work at the School is carried out during school holidays, prior to commencement of Project construction in that area.
- 477 The cumulative effect of these measures is the redevelopment and upgrade of most of the School's spaces, grounds and facilities. The relocation of the junior school, for example, is intended to move the most noise-sensitive students as far from the construction area as possible. It will also mean that junior classes will be held in new upgraded rooms. Likewise, the insulation and acoustic measures, and the data upgrade, means all other students will experience upgraded rooms with new fit-out. The upgrade of the hall and community annex will provide the School and wider community with improved meeting and function facilities, and the upgraded entrance, foyer, and administration block, and master-planned grounds will give the School a fresh renovated and landscaped appearance.
- 478 During questioning, Ms Frasier (the School/Ministry's counsel) confirmed that the Agreement covered both the construction effects of the Project and operational issues.<sup>534</sup>
- 479 While the School's principal, Mr Skeen, accepted under cross-examination that the School Board would prefer the ventilation stack to be "as far away from the School as possible",<sup>535</sup> he advised that the School Board is "not seeking" the relocation of the stack.<sup>536</sup>

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<sup>533</sup> As per Proposed Social Condition SO.4.

<sup>534</sup> Transcript, at pages 1675.

<sup>535</sup> Ibid, at page 1675.

<sup>536</sup> Ibid, at page 1676.

480 It is also relevant to note that the 'option 1' relocated stack (across Great North Road) would still be visible from the School grounds (at either height).<sup>537</sup> As discussed earlier, in our submission the stack at that location would be even more visible to people arriving in Waterview than the NZTA proposal.

481 It is submitted the School Board's position – that it is not seeking any further mitigation (including the relocation of the stack) – recognises that the measures provided for in the Agreement, many of which are not necessary to mitigate construction effects, will provide it with an opportunity to present positive outcomes from the Project. That is, the improved visual appearance and facilities of the School will enable it to offset any visual or perception impact from the motorway or stack.

482 The NZTA agrees with the assessment of counsel for the School and the Ministry that "The mitigation measures are a positive outcome for the School and it is intended that the changes made to the School will be used to create an environment which will be beneficial for both current and future students."<sup>538</sup>

#### **Auckland Kindergarten Association**

483 The NZTA has also had detailed and constructive discussions with the Auckland Kindergarten Association (AKA) and the Ministry about how to address the effects of the Project on Waterview Kindergarten.

484 It is understood the following measures, offered by the NZTA, are agreed between the parties:

484.1 Permanent relocation of the kindergarten to 17 Oakley Avenue (a site owned by the NZTA).<sup>539</sup> This will involve construction of a new kindergarten facility.

484.2 That the new kindergarten facility will be expanded to accommodate 50 children (rather than 30 as now), with the AKA to fund the additional cost.

484.3 Roll monitoring and reimbursement of any funding shortfall.<sup>540</sup>

485 While the parties do not yet have a final written agreement, it is NZTA's position that one is not necessary for the purposes of this hearing. The areas yet to be finalised relate to matters which the

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<sup>537</sup> Visual Simulation Viewpoint 5/68, attached to the Memorandum of Counsel on behalf of the NZ Transport Agency concerning Visual Simulation Viewpoint 5/68, 18 March 2011.

<sup>538</sup> Legal Submission on behalf of the Waterview Primary School Board of Trustees and the Ministry of Education, 21 March 2011, at paragraph 14.

<sup>539</sup> As per Proposed Social Condition SO.3.

<sup>540</sup> As per Proposed Social Condition SO.4.

NZTA considers are not direct effects of the Project, and which counsel for the AKA agrees are outside the Board's jurisdiction.<sup>541</sup> For the Board's information, those issues relate to how best to calculate the cost share for the expansion to 50 children (albeit the principle as noted above is agreed between the parties); clarification as between the Ministry and the AKA as to how much of the adjoining School property should be used for the 50 child facility;<sup>542</sup> and issues relating to AKA's legal costs.

486 The NZTA and the Ministry are supportive of the AKA's proposals to expand the Kindergarten and it is expected that an agreement will be reached. The NZTA agrees with the opinion expressed by the AKA representative, Mr Pablecheque, that having additional children at the kindergarten will support the School roll and provide a community benefit.<sup>543</sup>

487 The NZTA considers that the permanent relocation of the kindergarten and the monitoring of its roll will adequately address adverse effects of the Project on the kindergarten. In response to a question from His Honour, Mr Pablecheque agreed that the permanent relocation of the kindergarten had addressed the specific relief sought by the AKA.<sup>544</sup>

488 Further, the AKA's visual expert, Mr Pryor, has stated that "permanent relocation of the kindergarten to the temporary site at 17 Oakley Avenue is an appropriate and practical measure that would mitigate the adverse visual effects of the ventilation stack to the kindergarten."<sup>545</sup> That statement was made in January 2011 and with respect to a 25m ventilation stack in the location proposed by the NZTA. Mr Pryor also stated during expert caucusing with respect to the ventilation stack, that "If the Waterview Kindergarten were permanently relocated, then 15m in the current location is acceptable."<sup>546</sup> Mr Pryor confirmed this opinion under cross-examination.<sup>547</sup>

489 During cross-examination, Mr Pryor also accepted that the effects of the stack would remain on that part of the School grounds vacated by the kindergarten but would be transferred to "whatever the activity is on that land".<sup>548</sup> In that regard, it is relevant for the

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<sup>541</sup> Submissions on behalf of Auckland Kindergarten Association, 22 March 2011, at paragraph 5, and Transcript, at page 1681.

<sup>542</sup> Replacement of the 30 child facility is possible entirely within the NZTA site at 17 Oakley Ave.

<sup>543</sup> Transcript, at page 1684.

<sup>544</sup> Ibid, at page 1682.

<sup>545</sup> Rob Pryor EIC, at paragraph 5.4.

<sup>546</sup> Expert Caucusing Joint Report for the Board of Inquiry - Landscape and Visual Design, 4 February 2011, at paragraph 2.11.

<sup>547</sup> Transcript, at page 1690.

<sup>548</sup> Transcript, at page 1686.

Board to understand that the Agreement between the School, MOE and the NZTA provides that a new RLTB (Resource Teaching Learning and Behaviour) Unit will be constructed on the existing kindergarten site (i.e. on the vacated land). The RLTB Unit (which will have acoustic insulation) is a base for psychologists and teacher aides, who will have their offices there but will undertake their work off-site at various schools throughout the school district. This activity is distinct from the School activity itself and will mean that the vacated area is not occupied by students. It is submitted that visual or perception effects of the stack need to be considered in that context.

### **Te Atatu Pony Club and Construction Yard 1**

- 490 The Project requires 4.7ha of Harbourview-Orangihina Park for Construction Yard 1<sup>549</sup> affecting land currently leased by the Te Atatu Pony Club from Auckland Council. The NZTA and the Club have had a series of constructive discussions attempting to address the Club's concerns about the effect of the construction yard on its activities.

### **Mitigation Measures**

- 491 The NZTA has proposed modification to the shape of Construction Yard 1 to ensure that a more useable area of land remains for the use of the Club. To this end, the NZTA sought and obtained resource consent to establish a 1.6ha construction yard immediately south of the yard identified in the NOR. This resource consent will effectively allow Construction Yard 1 to be 'rotated' to include the land subject of the consent, and will enable an equivalent area from the eastern side of the original yard to be removed from the designation.<sup>550</sup>
- 492 This modification enables the passage of horses and ponies to the east of the Construction Yard, and provides space for grassed dressage and raceway areas.
- 493 In addition, the NZTA proposes to:<sup>551</sup>
- 493.1 Develop a Construction Yard Plan in consultation with the Club to minimise effects on ponies and set up communication protocols;

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<sup>549</sup> AEE, at Part D, 14.2.2.3. A further 0.7ha is required for the operational designation.

<sup>550</sup> A copy of the resource consent granted by Council on 18 March 2011 was produced for the Board on 22 March 2011. As requested by the Board, a plan showing the 'rotate' construction yard and remaining Pony Club land is attached as **Annexure E** to this Reply.

<sup>551</sup> The NZTA mitigation proposals are set out in detail in the letter to the Pony Club dated 21 March 2011, which was attached as Appendix 2 to the Representation of Ms McBride on behalf of the Club. The measures are dependent on the obtaining of any required consents, protection of bird roosting areas and Council approval as landowner.

- 493.2 Fence the boundary of the Construction Yard using a solid 17mm thick plywood or 9mm fibre cement sheet fence of 2.4m height (it has no preference on the material used);
- 493.3 Face all construction yard lighting inwards to ensure minimal spill onto the Club paddocks;
- 493.4 Relocate water systems and horse jumps;
- 493.5 Provide surface water drainage in the paddock adjacent to the motorway;
- 493.6 Construct a new level grassed area for dressage; and
- 493.7 Construct a new fenced grass raceway.
- 494 The NZTA specifically identified that the Construction Yard Plan would (with the assistance of the Club's expertise) address activities which could affect ponies and would control where and when those activities take place and how they would be managed. The Plan would also cover monitoring of those activities and provide for communication between the Construction Yard Contractor, the Community Liaison person and the Club.
- 495 It is understood that the Club supports that proposed mitigation,<sup>552</sup> except for the grassed dressage and raceway areas. The Club considers all weather facilities are required for both areas.

***All-Weather Facilities***

- 496 The NZTA considers that the costs of establishing an all-weather arena and an all-weather raceway (neither of which the Club currently has) are not justified as mitigation for the Project, particularly given that the Club is on a month-to-month lease. The Club asserted that this tenure simply reflected a legal dispute between Council and a former property owner, and that the Club's long term presence on the site (on a similar scale) was anticipated by the Harbourview-Orangihina Open Space Management Plan.<sup>553</sup> With respect, that is not a realistic view of the Club's correct position.
- 497 The Management Plan seeks to "identify the feasibility and extent of equestrian facilities within the Park" and proposes a "three year trial period".<sup>554</sup> The Management Plan does include a concept plan showing Club facilities and an equestrian show jumping area;<sup>555</sup> but

<sup>552</sup> Although the fibre cement sheet option appears to have caused some concern (as reflected in Ms McBride's comments at the hearing), either fence will achieve the required noise mitigation (and the Club can have whichever it prefers).

<sup>553</sup> Transcript, at pages 1696 and 1700.

<sup>554</sup> Harbourview-Orangihina Open Space Management Plan, Policy 10.5, at page 62. It is understood that the implementation of this 2003 Plan is delayed pending resolution of the legal issue referred to by Ms Dostine.

<sup>555</sup> Ibid, Harbourview-Orangihina Landscape Concept Plan, April 2003.



it is clear from the concept plan that the areas concerned are far less extensive than the grazing areas that the Club enjoys today. All-weather facilities as proposed by the Club would appear to be inconsistent with Council's aspirations (as the landowner) for the development and use of the Park.<sup>556</sup>

- 498 Moreover, when the Club requested an expansion of its lease onto Park land to the north of the current Club area for the duration of NZTA's construction activities, the Council Officer's report to the Henderson-Massey Local Board, noted:

The Waitakere Parks and Open Space Strategic Plan 2009 encourages pony club activities to move to three sites – Te Rangi Hiroa/Birdwood Winery Estate, Henderson Valley Park and another undeveloped site in northern Waitakere. The long term continuation of Te Atatu Pony Club at Harbourview-Orangihina Park is inconsistent with this strategy.<sup>557</sup>

- 499 As the Board is aware, the Henderson-Massey Local Board resolved to decline the club's request, and further resolved that the Council should assist the Club "in identifying options for relocation".<sup>558</sup>
- 500 In these circumstances, the long term tenure of the Club at Harbourview-Orangihina Park appears at best uncertain (if not unlikely). It is therefore submitted that the expenditure of \$140,000 of taxpayer funds on all-weather facilities that are inconsistent with Council's long term aspirations for the Park cannot be justified.
- 501 However, the NZTA has considered the representations by the Club and is prepared to offer further mitigation in the form of:

501.1 Extra funding for additional feed to meet the shortfall in grazing land;<sup>559</sup> and

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<sup>556</sup> The Landscape Concept Plan does indicate potential for a small dressage arena in the future but it is outside the area presently leased to the Club, and smaller than that sought by the Club as mitigation. Further, it is anticipated that such investment would likely follow the trial period and a decision by Council on whether to retain the Club.

<sup>557</sup> Henderson-Massey Local Board Open Addendum Agenda, 2 February 2011, at page 8. It is noted that the Officer's recommendation was nonetheless to support the Pony Club expansion as a temporary measure. The temporary expansion also was (and remains) supported by the NZTA.

<sup>558</sup> Henderson-Massey Local Board Open Minutes, 14 February 2011, at paragraph 4. Amelia Linzey Second Supplementary Evidence, 26 February 2011, at Annexure I.

<sup>559</sup> The figure of \$12,000 per annum was advised by Pony Club members in discussion with NZTA representatives as an estimate of the cost of feed, but the NZTA would require that the Club produce proof of purchase as set out in proposed Social Condition SO.8. As this offer is based on the loss of grazing land, should the Local Board reconsider its current decision not to grant a temporary lease expansion to the Club, with the effect that additional grazing land becomes available, the additional feed funding from the NZTA would cease.

501.2 Funding to cover the lost fundraising from One Day Events.<sup>560</sup>

***Rotation of the Designation***

- 502 It is submitted that, rather than relying on the now granted construction yard resource consent, the Board may instead consider it appropriate to modify the designation boundaries in this area so as to 'rotate' the designation for Construction Yard 1.
- 503 As noted in the NZTA's Memorandum of Counsel on modifications to designations,<sup>561</sup> the purpose of the 'rotation' is to reduce adverse effects on the Club, and the properties across the road at the end of Titoki Street will be removed for the Project, meaning that the 'rotation' of the yard will not affect those residents. It is also relevant that Auckland Council considered it appropriate to process the consent application on a non-notified basis for the same activity.
- 504 In that context, the Board can have some considerable confidence that there are no parties adversely affected by such a modification, and that a modification to 'rotate' the yard would be within the Board's jurisdiction, notwithstanding that it alters the Project footprint.

**Margot Phillips**

- 505 Ms Phillips (175 Methuen Road) lodged a submission to the Project, but no written evidence. She appeared at the hearing on 7 March 2011 and her representations were headed and focused solely on the issue of "noise concerns", both during construction and operation.<sup>562</sup> She sought "a number of actions" to address her noise concerns (including double glazing, an air conditioning unit, further measurements and monitoring).
- 506 However, Ms Phillips' submission (No. 36) is entirely silent on noise and no relief was sought in relation to noise.
- 507 While the Board's procedure is not specified in any particular detail in sections 140 to 149 of the RMA, under section 39(2) the Board is to establish a procedure that is appropriate and fair in the circumstances. In this regard, the Board circulated a Direction on Hearing Procedures on 19 November 2010<sup>563</sup> and further Directions dated 17 February 2011.<sup>564</sup>

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<sup>560</sup> The figure of \$8,000 was advised by the Pony Club to the Board (Transcript, at page 1716). The NZTA would expect the Club to produce financial records from such events over the February 2008 to February 2011 period to demonstrate this, as set out in proposed Social Condition SO.9.

<sup>561</sup> Memorandum of Counsel on behalf of the NZTA on a preliminary legal issue (modifications to the designation), 18 February 2011, at paragraphs 32 to 35.

<sup>562</sup> See Transcript, at pages 931-936, and her written representation.

<sup>563</sup> The Directions included the following:

15. They [Submitters] can provide more detail of their submission (but not new topics) in writing before the start of the hearing ....

- 508 Taken together, it is clear that the Board did not consider representations could raise new issues that were not in an original submission. Ms Phillips' representations therefore failed to comply with the Board's directions.
- 509 As Ms Phillips did not file any evidence, and her original submission did not raise any noise issues, the NZTA has had no opportunity to specifically respond in its evidence to the noise issues raised by Ms Phillips. The NZTA is entitled to know the grounds of a person's opposition, rather than have new grounds emerge at the hearing.
- 510 Therefore, it is submitted that the Board should only consider Ms Phillips' written submission and should disregard her hearing representations, including the relief ("number of actions") sought, all of which relate to noise.
- 511 Having said that, Ms Wilkening provides the following brief response to Ms Phillips' hearing representations:

Ms Phillips' concerns relate to traffic noise effects outside the assessment areas (more than 100 metres from the alignment) and the potential that the elevation of her property would result in less shielding from the proposed noise barriers in Sector 9. The noise level contours in Appendix G of Technical Report G.12 (which extends beyond the 100 metre assessment area set out in NZS6806) shows that the property at 175 Methuen Road will receive noise levels which are slightly higher than current noise levels (by approximately 3 decibels).

The computer noise model has taken into consideration terrain, and therefore any potential loss of shielding. Therefore, the concerns of Ms Phillips relating to traffic noise are unfounded."

### **Star Mills**

- 512 In response to Star Mills' heritage related concerns, the NZTA has proposed the a number of amendments to the proposed Archaeology Conditions, including amendments to:
- 512.1 Require that a schedule of trees to be removed, be submitted to the Community Liaison Group for their consideration of potential provision for heritage use;
- 512.2 Add the tannery boiler to the list of items for restoration works;

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17. A submitter who is being heard may highlight the main points of the submission, and of their evidence (if previously lodged), and may respond to submissions made by others.

<sup>564</sup> These were directions regarding representations to be made by parties, and stated that "This is your opportunity to provide further thoughts to the Board on the issues raised in your original submission".

- 512.3 Ensure the design of structures in the Oakley Inlet Heritage area (excluding the State highway piers but including the pedestrian bridge) considers historic paths and structures;
- 512.4 Recognise the historic role and amenity of the Monterey Pines in the Oakley Inlet area;
- 512.5 Ensure that plantings of deep rooted trees do not encroach on identified archaeological sites.
- 513 Star Mills will be consulted on the preparation of the Waterview Reserve Open Space Restoration Plan, and so there is no need for additional consultation under the proposed Archaeology conditions. Nor is it considered necessary for the Archaeological Site Management Plan to continue in perpetuity, as the ongoing management of the Oakley Inlet Heritage Area will be addressed through the Waterview Reserve Restoration Plan.
- 514 Mr McCurdy expressed concern about what he considers are shell banks on the southern side of the causeway. Having now reviewed the photographs supplied by Mr McCurdy, the Project team shares His Honour's impression<sup>565</sup> that these are shells in mud rather than chenier shell banks.

**Watercare Services Ltd (Watercare)**

- 515 Ms Gotelli of Watercare provided an update at the hearing on the series of agreements between the NZTA and Watercare that address Watercare's concerns with respect to the Project.
- 516 The NZTA and Watercare have entered into an agreement regarding the relocation of Watercare's assets during construction of the Project.<sup>566</sup> Discussions are underway regarding an Access and Notification Agreement for the construction period.<sup>567</sup> With respect to the operation phase, the NZTA and Watercare have agreed to develop an access agreement for the wider State highway network, rather than for the Project alone.<sup>568</sup>
- 517 Watercare sought an Advice Note be included in the designation conditions to record that an agreement will be developed with the NZTA regarding notification and access protocols where works are to be undertaken on or adjacent to Watercare's infrastructure.<sup>569</sup> The

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<sup>565</sup> Transcript, at page 1727.

<sup>566</sup> Representations by Watercare, at paragraph 3.3.

<sup>567</sup> Ibid, at paragraph 3.5.

<sup>568</sup> Ibid, at paragraph 3.6, and paragraph 3 of the letter from NZTA to Watercare, 23 February 2011, appended to Watercare's representations.

<sup>569</sup> Ibid, at paragraph 3.9.

NZTA has included this Advice Note in the set of conditions accompanying this Reply.<sup>570</sup>

**Auckland Council/Auckland Transport**

- 518 Auckland Council and Auckland Transport support the Project in principle, subject to the effects of the Project being “more appropriately fully mitigated.”<sup>571</sup> As counsel acknowledges, the vast majority of issues Auckland Council/Transport initially raised have been resolved.
- 519 Further consideration of issues identified as “unresolved” at the start of the hearing<sup>572</sup> has resulted in resolution via further expert caucusing or during the course of the hearing of the following matters:
- 519.1 The wording of proposed condition OT.1 concerning bus lanes along Great North Road;
  - 519.2 Air quality conditions;
  - 519.3 Landscaping and planting maintenance period;
  - 519.4 Mitigation in relation to Traherne Island; and
  - 519.5 Certainty of conditions.
- 520 With respect to the latter, and as described previously, there has been considerable focus directed by the Board and parties’ expert witnesses on the wording of the proposed conditions, particularly in relation to the management plan certification process, the “where practicable” qualifications, and use of outline plan process – all issues which Council was particularly concerned about. And understandably so given Council’s future regulatory and enforcement role for the Project should the designations and consents be confirmed.
- 521 As a result of the further supplementary evidence (particularly from Ms Linzey and Ms Wilkening), examination during the hearing and the more recent expert planning caucusing sessions, the NZTA understands that Auckland Council/Transport are now largely comfortable that the condition wording provides sufficient certainty and clarity of process. That was confirmed by Council’s planner Tania Richmond during cross-examination.<sup>573</sup>

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<sup>570</sup> Annexure A, CEMP.16 Advice Note (b).

<sup>571</sup> Opening Legal Submissions on behalf of Auckland Council / Transport, 28 February 2011, at paragraph 1.2.

<sup>572</sup> Ibid, at paragraph 2.3.

<sup>573</sup> Transcript, at pages 1254-1255. Ms Richmond also confirmed that all of the Council experts had confirmed (page 1256) that their proposed amendments to conditions (attached to her EIC) had been resolved, other than Dr Julian and Vegetation Condition V.8.

522 Unfortunately final agreement could not be reached on a mitigation package relating to open space and cycleway mitigations.

523 As a result, the only outstanding issues are in relation to:

523.1 Open space mitigation;

523.2 Provision of a Sector 8 cycleway;

523.3 Location of the southern ventilation building.

524 These issues are all addressed separately in this Reply.

#### **Living Communities (Auckland) Inc**

525 Living Communities and its related submitters, the North Western Community Association, the Mt Albert Residents Association and Sir Harold Marshall, seek significant additional measures to address perceived effects of the Project.

526 At the commencement of the hearing, Living Communities advised it was no longer seeking local ramps at Waterview, and nor was it seeking a bridge across SH16 between Waterview and Eric Armishaw Park. It continues to seek, primarily:

526.1 Relocation of the southern ventilation building (Option 3);

526.2 Relocation of the northern ventilation stack (Alternative 1);

526.3 Provision of Alford, Soljak and Phyllis bridges and the extension of the cycleway through Sector 8.

527 The relief sought by Living Communities is discussed in detail throughout this Reply.

#### **Albert-Eden Local Board**

528 The Local Board opposes the Project and seeks that the Board decline the consent applications and cancel the requirements. In the alternative, the Local Board seeks an extensive range of mitigation measures. As with Living Communities, these measures include relocation of the southern ventilation building and northern ventilation stack, and provision of the Alford, and Soljak bridges and Sector 8 cycleway. The Local Board also seeks certainty that Saxon Reserve be expanded.

529 In legal submissions, the Local Board indicated it was not seeking Eric Armishaw or Phyllis Street bridges (albeit it sought that the costs of these measures – not part of the Project – be assigned to other relief sought).

530 The Local Board's concerns and relief sought are discussed throughout this Reply.

### **Iwi concerns**

- 531 As explained in Opening Submissions,<sup>574</sup> the NZTA has agreed that Ngati Whatua o Orakei will have the opportunity to provide input into the detailed design process, archaeological monitoring and assessment of cultural planting. As a result, Ngati Whatua advised that it does not seek any specific conditions and did not consider it necessary appear at the hearing.<sup>575</sup>
- 532 Te Kawerau a Maki's primary concern, as conveyed in Mr Pita Turei's representations at the hearing,<sup>576</sup> is to ensure that the Authority is able to participate, be involved in and informed about the Project as it progresses.
- 533 A number of conditions have been proposed to provide opportunities for iwi participation throughout construction and operation of the Project. These conditions include:
- 533.1 Public Information condition PI.5, which confirms that the Community Liaison Group(s) will be open to relevant iwi groups;
  - 533.2 Open Space condition OS.2, which requires the Open Space Restoration Plans to be prepared in consultation with iwi;
  - 533.3 Social condition SO.6, which requires the Working Liaison Group to invite Te Kawerau Iwi Tribal Authority to participate in this forum;
  - 533.4 Archaeology condition ARCH.1, which requires the Archaeological Site Management Plan to include whether iwi supervision is required for a specific site (as determined through consultation with the relevant iwi groups); and
  - 533.5 Streamworks condition STW.20, which requires the Streamworks Environmental Management Plan to include the outcomes of consultation with iwi.
- 534 At the hearing, Mr Turei raised lighting issues, and wished to explore the potential for lightpole spacing and dimming of lights to mitigate potential effects on Te Rangi Matariki. In that regard, the NZTA has offered in writing to liaise further with Te Kawerau a Maki at the detailed design stage to consider how the effects of motorway lighting might be mitigated, but without compromising traffic safety and/or breaching the Roadlighting Standards AS/NZS 158 and relevant district plan rules and bylaws regarding lighting

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<sup>574</sup> Opening Legal Submissions on behalf of the NZTA, at paragraph 199.

<sup>575</sup> Ibid.

<sup>576</sup> Transcript, at page 920.

standards.<sup>577</sup> It is submitted that this is an appropriate means by which to address this issue.

**Bryan Mehaffy**

535 At the hearing on 10 March 2011, Mr Mehaffy attached photographs to his opening statement showing a pumping test and discharge to the Oakley Creek, which he claimed was pollution and reflected on the NZTA's integrity. Neither allegation is correct.

536 In response, we attach a brief Memorandum prepared by Pattle Delamore Partners Limited (consultants to the NZTA) who have been carrying out a pumping test to determine the aquifer properties of the Waitemata Group Parnell Grit in the Phyllis Reserve area (**Annexure F**). The test activity itself is authorised by Auckland Council consent and the resultant discharge is a permitted activity. Approval was also obtained to use the Council reticulation network to receive the discharge before it discharged into Oakley Creek. Water quality measurements taken demonstrate that the discharges are suitable for direct discharge to the Creek with no adverse quality effects identifiable.

**Brendon Vipond**

537 Mr Vipond's concerns relate primarily to two issues – removal of vegetation located on land adjacent to this property designated for NZTA motorway purposes which he wishes to have replaced, and potential noise effects of the Project on his property (9 Berridge Avenue).

538 The NZTA has responded to and provided further information in relation to the vegetation removal issue (letter to the Board dated 4 March 2011).<sup>578</sup> Ms Wilkening's rebuttal evidence<sup>579</sup> had earlier confirmed that the vegetation removal complained of would have no adverse acoustic effect on dwellings in Berridge Avenue.

539 In relation to noise, Ms Wilkening has confirmed that the Project is not predicted to increase noise levels at the Vipond property, irrespective of the predicted increase in traffic volumes. Further, the retaining wall which Mr Vipond seeks to be extended for noise attenuation purposes is not an acoustic/noise wall.<sup>580</sup>

**National Trading Company (NTC)**

540 As noted in Legal Submissions,<sup>581</sup> NTC is the property holding company of Foodstuffs Auckland which operates the Pak'n Save

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<sup>577</sup> Geoff Waller Rebuttal Evidence, at paragraph 22.

<sup>578</sup> Notwithstanding that is not a matter relevant to the Board's determination of this Project.

<sup>579</sup> Siiri Wilkening Rebuttal Evidence, at paragraph 38.

<sup>580</sup> Ibid, at paragraph 37.

<sup>581</sup> Legal Submissions on Behalf of the National Trading Company of New Zealand Limited, at paragraph 2.



supermarket at 1161 to 1173 New North Road. That supermarket is the largest structure above the proposed sub-surface designation for the tunnels which run directly underneath it.

- 541 Given its location, NTC's submission raised concerns over potential vibration and settlement effects of the Project. The NZTA and NTC met to discuss these concerns with the result being suggested amendments to the proposed Ground Settlement conditions, providing the NTC with additional assurance. The relevant amendments were set out in NTC's Legal Submissions.<sup>582</sup>
- 542 As counsel for NTC noted,<sup>583</sup> those amendments are agreed by the NZTA and have been included in the proposed suite of conditions.
- 543 It is submitted that it is pertinent to the concerns of other landowners, that the owner of the largest structure within the proposed tunnel route is satisfied with the protections afforded by the settlement conditions proposed.

**Housing New Zealand Corporation (HCNZ)**

- 544 Counsel for HCNZ noted that the Corporation is a major landowner within the Project area, a point that was evident from the map attached to HCNZ's legal submissions.<sup>584</sup> The NZTA has been liaising with HCNZ for some years in relation to the Project and the parties have a memorandum of understanding about the Project dating back to 2007.
- 545 As counsel noted, HCNZ properties are affected either because they have been, or are to be, acquired for the Project; or because they are in the vicinity of the Project. As to the former, the long lead-in time of discussions between HCNZ and the NZTA has meant that the majority of tenants have already been relocated to new homes. The NZTA agrees with HCNZ that this means to the extent there were any adverse effects associated with this acquisition, they have already occurred.<sup>585</sup>
- 546 As HCNZ will still own properties adjacent or near to the Project, it has taken a detailed interest in the conditions of the designation relating to social, operational noise, public information, and construction noise and vibration effects. As recorded in HCNZ's legal submissions,<sup>586</sup> the NZTA and HCNZ have reached agreement on amendments to conditions in these areas, and the NZTA understands that the HCNZ is now satisfied with the proposed conditions.

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<sup>582</sup> Ibid, at paragraphs 6 to 7.

<sup>583</sup> Ibid, at paragraph 7.

<sup>584</sup> Legal Submissions on behalf of the Housing New Zealand Corporation, at paragraph 4.

<sup>585</sup> Ibid, at paragraph 8.

<sup>586</sup> Ibid, at paragraph 12.

### Department of Conservation

- 547 The Submissions presented on behalf of the Department of Conservation (*DOC*) record that it "is now satisfied that the concerns raised in its submission are able to be satisfied through the ecological conditions proposed by NZTA".<sup>587</sup> In particular, the Submissions advise that "the proposed Vegetation Conditions ... are adequate and sufficient to address the concerns [DOC] has raised relating to the adverse effects of the Project on significant indigenous vegetation in Sector 4 and in adjacent Traherne Island."<sup>588</sup>

### KiwiRail Group

- 548 The Avondale-Southdown rail designation through Alan Wood Reserve, although undeveloped, is a strategically important transportation route. Consequently, while the NZTA cannot designate for rail, it has sought to ensure that the Project maintains the opportunity to develop rail along this route.
- 549 For that reason, and as the parties confirm in the Joint Memorandum of Counsel on Rail Corridor Questions (*the Joint Memo*),<sup>589</sup> the Project seeks, through its alignment and design, to mitigate the effects on rail by ensuring that a 20m wide corridor has been maintained for a future rail development.<sup>590</sup> This approach is consistent with the Project objective to "support mobility and modal choices within the wider Auckland Region ... by protecting opportunities for future passenger transport development (e.g. rail)".<sup>591</sup>
- 550 The Agreement between the NZTA and KiwiRail<sup>592</sup> provides for the NZTA to transfer the proposed rail corridor to KiwiRail, so it may then designate that corridor for rail activity. In return, KiwiRail will sell NZTA land required for the motorway corridor and has granted section 177 RMA approval to the Project.
- 551 As noted in the Joint Memo, the Board cannot consider the effects of any future relocated rail activity now, and nor can it consider the cumulative effects of rail and motorway.<sup>593</sup> Cumulative effects will

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<sup>587</sup> Synopsis of Submissions on behalf of the Director General of Conservation, at paragraph 8.

<sup>588</sup> Ibid, at paragraph 28. As noted earlier, under cross-examination Mr Havell indicated continuing opposition to the eco-tone replacement planting adjacent to Eric Armishaw Reserve. As previously indicated the NZTA is prepared to accept the approach favoured by Mr Havell.

<sup>589</sup> Joint Memorandum of Counsel on behalf of the NZTA, KiwiRail Group, Auckland Council / Transport in relation to rail corridor questions, 16 March 2011, at paragraphs 2-10.

<sup>590</sup> AEE Part A, section 4.5.1, at page 4.62.

<sup>591</sup> AEE Part A, section 3.3, at page 3.3.

<sup>592</sup> Exhibit 6.

<sup>593</sup> Joint Memorandum of Counsel on behalf of the NZTA, KiwiRail Group, Auckland Council / Transport in relation to rail corridor questions, at paragraphs 11 - 12.

need to be assessed when the Avondale-Southdown rail designation is altered.<sup>594</sup>

- 552 A number of submitters<sup>595</sup> expressed concern that the rail and motorway projects are not advancing at the same time. This point was specifically addressed by counsel for KiwiRail who explained that it was not possible to progress a rail designation at the same time as the Project as no detailed work had been done or assessment of effects undertaken.<sup>596</sup> Moreover, as noted in the Joint Memo, it is not possible for the NZTA to pursue a rail designation itself.

***Soljak bridge***

- 553 In response to the Board's query whether "KiwiRail would have any objection to a cycle and pedestrian way being formed across the railway corridor extending north from 15 Soljak Place", KiwiRail has advised that any bridge placed at that location now may need to be replaced in the longer term once the Avondale-Southdown line is developed, as the area may be needed for the railway junction.<sup>597</sup> It is submitted that this likelihood makes the considerable investment in a bridge at Soljak Place unwise.

***Temporary sportsfields***

- 554 The Legal Submissions on behalf of KiwiRail supported the proposal for a financial contribution towards an upgrade of Phyllis Reserve, rather than the provision of temporary sportsfields at Allan Wood Reserve (on part of the existing rail corridor). This was on the basis that this would avoid issues in future with removal of the fields.<sup>598</sup> It is noted however, that the temporary sportsfields were intended to be "temporary" only (and not sand-carpeted facilities). As a result, these fields should not create any greater obstacle for rail development than the present playing areas in Alan Wood Reserve.

***General Designation condition DC.12.***

- 555 Proposed General Designation Condition DC.12 (previously DC.11) was proposed by KiwiRail to ensure that any conditions of the Project applying to the replacement rail corridor will be met by the NZTA until construction of the rail line commences, and that, after that point, the conditions will cease to be of effect.

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<sup>594</sup> Ibid, at paragraph 13. The possibility of additional mitigation costs from cumulative effects is addressed in the agreement between NZTA and KiwiRail at clause 12.

<sup>595</sup> For example, Kathryn Ennis and Donald Carter, Kathryn and Paul Davie, Rob Black, Margi Watson and Kim Ace.

<sup>596</sup> Legal Submissions on behalf of KiwiRail Group, 2 March 2011, at paragraph 4.1(b).

<sup>597</sup> Neil Buchanan Supplementary Evidence on behalf of KiwiRail Group, 7 March 2011, at paragraph 4.

<sup>598</sup> Legal Submissions on behalf of KiwiRail Group, 2 March 2011, at paragraph 3.2(c).

- 556 The NZTA recognises that this will ensure conditions for the Project do not inadvertently obstruct development of the rail line and therefore agrees with KiwiRail's suggestion.

**Springleigh Residents Association (SRA)**

- 557 This submitter raises a number of issues relating to the economic justification for the Project, the impacts (including cumulative impacts) on the Owairaka / New Windsor community and concerns regarding the national consenting process itself. Limiting our response to those matters that are within the purview of this Board of Inquiry:
- 558 There are a number of matters raised by the Springleigh Residents Association that are not accepted by the NZTA's experts, nor any of the experts who have presented in these proceedings. As a few (not exhaustive) illustrations:
- 558.1 The 'growth nodes', 'economic centres' and 'centres of future economic growth' which Ms Gruger appears to be challenging, are identified from the Regional Land Transport Strategy and Regional Growth Strategy documents (which are themselves reflected in the Auckland Council planning and future planning frameworks);
- 558.2 While the BCR as cited by Ms Gruger is accepted as a range (though it is noted this range 1.2 – 2.1)<sup>599</sup>, it is not accepted that on this basis it 'is impossible to establish positive economic effects' (paragraph 13). The positive economic effects of this BCR are discussed in detail in the EIC and rebuttal (particularly pages 7-9) of Mr Copeland;
- 558.3 It is not accepted that Annexure D of Mr Parker's evidence does not identify national or regional benefit of the Project. In fact, the conclusion of this report is that the '*RoNS portfolio (including the Western Ring Route, of which the Waterview Connection is a major component) generates positive economic benefits with an NPV of over \$4.5bn*' (Section 5(iv)) (which is a conclusion without reference to the 'WEBS' (wider economic benefits));
- 558.4 It is not accepted that '... a major landscape feature like Mt Albert is omitted' (paragraph 28). This matter has been comprehensively responded to in the rebuttal evidence of Mr Brown<sup>600</sup>;
- 558.5 It is not accepted that the demographic characteristics of or effects on the 'Owairaka' community have been ignored or overlooked or that the Samoan Church is the 'only affected ethnic community' (paragraph 52). In the rebuttal evidence

<sup>599</sup> As presented in the EIC of Mr Tommy Parker, paragraph 83

<sup>600</sup> Rebuttal evidence of Mr Stephen Brown, paragraphs 77 – 79.

(social) of Ms Linzey<sup>601</sup> respond to these matters in more detail, particularly noting that the Church is the only community facility physically or directly affected.

558.6 On the basis of the AEE, the associated technical reports and the suite of proposed Conditions to avoid, remedy and mitigate adverse effects, the NZTA maintains that the effects on the Owairaka community have been fully assessed by the Project team and that appropriate mitigation has been provided for both this community and the more northern Waterview community.

#### **Alwyn Avenue noise bund**

559 In response to questioning during the hearing and further review of the rebuttal evidence of Ms Lynne Hancock (Annexure F), an 'arrow linkage' has been identified (in gold) between the proposed Pedestrian/Cycle way and Alwyn Avenue (on Sheet 2, Plan 903 – 102). As set out in the rebuttal evidence of Ms Hancock, no noise wall is required at Alwyn Avenue and the bund design has been revised.<sup>602</sup> On this basis, it is considered this linkage will be feasible as was presented in the second supplementary statement of evidence of Ms Linzey, 28 February 2011 (paragraph 37.3).

#### **Peter Allen-Baines**

560 This submitter owns property at 12 Waterview Downs. He seeks a complete property purchase.<sup>603</sup> The property is affected by Notice of Requirement 5 (being substrata).<sup>604</sup>

561 The property title is 357m<sup>2</sup> and the proposed land requirement is a subsoil or substrata designation, that pertains to land 12.6m below ground level, over an area of 62m<sup>2</sup>. In those circumstances, the NZTA has declined to purchase the whole property. As the matters raised in Mr Allen-Baines' submission and his 21 March 2011 email concern property purchase and compensation, they fall outside the Board's jurisdiction under the RMA.

### **GENERAL ISSUES**

#### **Section 177 RMA approvals**

562 Since the hearing commenced, section 177 RMA approval has been obtained from:

562.1 KiwiRail Group,<sup>605</sup> and

<sup>601</sup> Rebuttal evidence (social) of Ms Amelia Linzey, paragraphs 91 – 100.

<sup>602</sup> Hancock rebuttal evidence, paragraphs 49 - 54 and Annexure F.

<sup>603</sup> Email from Peter Allen-Baines to the EPA, 21 March 2011, in lieu of hearing appearance.

<sup>604</sup> Property 14.04 on Notice of Requirement 5 Plans – Sheet 2.

<sup>605</sup> See Exhibit 6 and Legal Submissions on behalf of KiwiRail, 2 March 2011, at paragraph 2.3.

562.2 Vector Limited.<sup>606</sup>

563 We agree with the EMS Final Addendum Report that no outstanding issues remain in relation to approvals from requiring authorities with existing designations.<sup>607</sup>

**Other statutory approvals required**

564 In the Opening Submissions, a summary of the additional approvals required for the Project under legislation outside of the RMA was provided.<sup>608</sup> That summary has not changed, except that a draft application under the Marine Reserves Act 1971 is now with the Department of Conservation for comment prior to lodgement.

565 We agree with the EMS Final Addendum Report that no outstanding issues remain in relation to other statutory approvals required and approvals from requiring authorities with existing designations.<sup>609</sup>

**Additional resource consents**

566 In the Opening Submissions, we advised the Board that one additional resource consent is required for modifications required to restore a heritage sea wall (controlled activity). This application will be made when there is some certainty about the appropriate form of restoration, possibly at the time the application for HPA authority is made.<sup>610</sup>

567 By way of an update, with respect to the additional consents sought since lodgement of the Project with the EPA:

567.1 The resource consent for the 'rotation' of Construction Yard 1 has been granted by Auckland Council; and

567.2 The NZTA's application for resource consent for two new sections to extend Saxon Reserve has been lodged, but placed on hold, at Auckland Council's request.

568 During the hearing, it has become apparent that additional resource consents may be required for various activities (detailed earlier in this Reply).

569 We agree with the EMS Final Addendum Report's conclusions regarding the final embankment; the subsequent consenting process for reclaimed land; and the concrete batching plant.<sup>611</sup>

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<sup>606</sup> Amelia Linzey Second Supplementary Evidence – Annexure F (letter dated 7 February 2011).

<sup>607</sup> EMS Final Addendum Report, 7 March 2011 at Section 2.1.13.

<sup>608</sup> Opening Legal Submissions on behalf of the NZTA, at paragraphs 47-58.

<sup>609</sup> EMS Final Addendum Report, 7 March 2011, at Section 2.1.12.

<sup>610</sup> Opening Legal Submissions on behalf of the NZTA, at paragraph 68, and Owen Burn EIC, at paragraph 37.1.

<sup>611</sup> EMS Final Addendum Report, 7 March 2011, at sections 2.1.15 – 2.1.20.

### Community fund proposal

570 In the Final Addendum Report, EMS recommends the imposition of a condition requiring a community trust fund. EMS states at (paragraph 4.3.1):

We consider that rather than additional physical mitigation an appropriate response is to consider a fund for specific community-led initiatives during the construction period. Essentially what we are proposing is that [the] designation if granted, be subject to conditions that require the establishment of a Community Trust Fund for the Waterview and Owairaka/New Windsor communities.

571 EMS describes the proposed community trust fund as "a 'self-help' fund for the community to use at its discretion" during the construction period.<sup>612</sup>

572 The EMS report referred to three examples. EMS refers to a condition of consent offered by Contact Energy on the Waitahora wind farm project, for the establishment of a community fund.<sup>613</sup> Contact Energy Limited was successful in its appeal, and obtained resource consents to establish and operate the windfarm.<sup>614</sup> In an interim decision, the Court stated that the conditions of the consents would require some reconsideration in light of the Court's decision, and directed counsel to confer and produce a revised set.<sup>615</sup> The interim decision did not discuss the community fund, and the Court has not yet issued a final decision. (EMS has included the relevant condition at paragraph 4.3.7 of the section 42A Final Addendum Report.)

573 EMS also gave the Kate Valley landfill and the Mt Cass windfarm as examples of projects which have involved trusts during the construction period.<sup>616</sup>

573.1 A procedural decision has been issued concerning the Mt Cass windfarm,<sup>617</sup> but no substantive decision has yet been issued.

573.2 Regarding the Kate Valley landfill, a condition of consent required the consent holder to fund pest control, seedling transplant, and a walking track to provide public access.<sup>618</sup>

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<sup>612</sup> Ibid, at paragraph 4.3.3.

<sup>613</sup> Ibid, at paragraphs 4.3.6-4.3.7.

<sup>614</sup> *Contact Energy Limited v Manawatu-Wanganui Regional Council* [2010] NZEnvC 406 at [1] and [139].

<sup>615</sup> Ibid, at [140].

<sup>616</sup> EMS Final Addendum Report, 7 March 2011, at paragraph 4.3.5.

<sup>617</sup> *Mainpower New Zealand Ltd v Hurunui District Council* [2010] NZEnvC 409.

<sup>618</sup> *Transwaste Canterbury Ltd v Canterbury Regional Council* (C87/2004, 24 June 2004) at Annexure A, condition 13(i).

However, the funding was not required to occur through a trust, so the condition is not of particular relevance.

**Issues**

- 574 While the NZTA has some sympathy with such a proposal in the appropriate case, it is submitted that imposition of such a find is not warranted for this Project. Moreover, there would be substantial difficulties with drafting a practical delivery mechanism for such a community fund.
- 575 It is noted that the EMS Report does not attempt to propose wording for such a condition, but simply leaves it to the Board to consider the "legal structure, constitution and management framework for a Community Trust" should the proposition have merit.<sup>619</sup>
- 576 Issues that would need to be resolved include:
- 576.1 What communities should be addressed? (For example, the EMS report does not mention the Te Atatu community).
  - 576.2 How would community trust representatives be chosen (given the divergence of opinion and interests reflected by submitters within their own communities)?
  - 576.3 How would appropriate projects or services be determined, and within which community?
  - 576.4 How would an annual quantum be determined and what specific effects would it seek to address (presumably during the construction period)?
  - 576.5 How would that annual quantum be divided up between each community (e.g. equal shares)?

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<sup>619</sup> EMS Final Addendum Report, 7 March 2011, at paragraph 4.3.8.



## CONDITIONS

### Updated set of conditions

- 577 Accompanying this Reply is a further updated set of conditions proposed by the NZTA for the designations and resource consents (see **Annexure A**, condition booklet separately bound).
- 578 This set of conditions (the "Reply set") shows amendments made to the 1 March 2011 "green-line" set of conditions which accompanied Mrs Linzey's Third Supplementary evidence.
- 579 For clarification, the various iterations that have been made to the proposed conditions since lodgement of the application can be seen as follows:
- 579.1 The "green-line" set which shows:
- (a) in red, changes made since lodgement and the NZTA's EIC;
  - (b) in blue, changes proposed in the NZTA's rebuttal evidence and caucusing, and
  - (c) in green, changes proposed during the course of the hearing to end February 2010; and
- 579.2 The Reply set which shows in redline any further changes since the 1 March "green-line" set.
- 580 Further changes have arisen most particularly as the result of submitter evidence and representations since 1 March, and further expert witness caucusing in the areas of planning (March 8 and 16), open space (March 18) and noise (March 18).<sup>620</sup>

### Various amendments to proposed conditions

- 581 This section of the Reply will summarise the various amendments that have been made to proposed conditions by the NZTA, with a brief explanation why (if not covered previously).
- 581.1 Minor amendments to the Explanation to reflect the fact that this is an integrated set of conditions for both designations and consents, assuming that the conditions remain in the omnibus form they are in. Reference is also made to a new Schedule (Schedule B) proposed to set out the consents, their durations and which conditions are attached to which consents (planning caucusing 8 March 2011).

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<sup>620</sup> Referring to Expert Joint Caucusing Reports of those dates.

- 581.2 Deletion of "and subject to final design" from Condition DC.1, to respond to concerns raised in relation to level of certainty (planning caucusing 8 March 2011).
- 581.3 Minor amendment to Conditions DC.5 and CEMP.14 in relation to dispute resolution, to clearly define the process relates to certification as well as any approval processes (planning caucusing 8 March 2011).
- 581.4 The addition of definitions of terms in Condition DC.7, to provide an explanation of specific terms used in Conditions DC.8 and DC.9 (planning caucusing 8 March 2011).
- 581.5 Minor amendment to Condition DC.8(f) in response to clarification from Ms Absolum's evidence (8 March 2011, at pages 1049-1050).
- 581.6 Minor amendment to Condition DC.8(j) in response to requests by the Waterview Primary School and Ministry of Education (21 March 2011, page 1670).
- 581.7 Deletion of "as far as practicable" from Condition DC.9(j) to provide certainty on the configuration of the control building (planning caucusing 8 March 2011).
- 581.8 Condition DC.10 has been expanded to provide for the removal of conditions from the designation, once the Project is complete, that are not required for long term operation or maintenance (as confirmed in planning caucusing 8 March 2011).
- 581.9 New Condition DC.11 has been included in response to a request from KiwiRail to provide certainty on how the condition relate to the existing rail designation (2 March 2011, at page 907, confirmed during planning caucusing 8 March 2011).
- 581.10 New Condition RC.1 setting out the requirement that the conditions are to be implemented in accordance with Schedule B (which identifies which conditions relate to which consent and the duration of consents) (planning caucusing 8 March 2011).
- 581.11 Minor amendment to Condition CEMP.6 (o) and (p) to improve clarity on how amenity trees are to be managed during construction (in response to representations of Star Mills Preservation Group, the Tree Council, and Friends of Oakley Creek).
- 581.12 Minor amendment to Condition CEMP.7 to provide clarity on when the construction layout drawings are to be provided to the Auckland Council (planning caucusing 8 March 2011).

- 581.13 Condition CEMP.13 has been expanded to provide more detail on what constitutes "material change" (in response to direction from the Board, 8 March 2011, Transcript at pages 1104-1105).
- 581.14 Minor amendment to Condition CEMP.15 to clarify the role of Transpower in preparing the Electrical Site Development and Construction Management Plan (planning caucusing 8 March 2011).
- 581.15 New Condition CEMP.16 to respond to concerns about service relocations during construction, and provide certainty on NZTA's responsibilities to ensure they are undertaken to minimise disruption and manage potential environmental effects appropriately and to provide for on-site servicing within the Condition. This condition also includes an advice note responding to a request from Watercare (7 March 2011, Transcript pages 1001-1002, and 21 March 2011, page 1611).
- 581.16 Minor amendment to Condition PI.2 in response to planning caucusing 8 March 2011.
- 581.17 Minor amendment to Condition PI.6 to clarify the integration of the Community Liaison Groups and the Outline Plan of Works process (Condition DC.8 and DC.9), and to provide for the Community Liaison Groups to have input into the finalisation of the STEM assessment (Condition CEMP 6(o)) (in response to the representations of Star Mills Preservation Group, the Tree Council and Friends of Oakley Creek).
- 581.18 Minor amendment to Figure PI.A to include the Project Arborist in the Construction Team, and to clarify the relationship between the Community Liaison Group, the Education Liaison Group and the Community Liaison Person.
- 581.19 Amendment to Condition TT.1, including deletion of "where as practicable", to provide clarity on the circumstances where road closures or restrictions may be considered unavoidable (planning caucusing 8 March 2011).
- 581.20 Amendment to Condition OT.1 to reflect the fact that the NIP may be produced over a number of phases, and to ensure that the Richardson Road bridge is designed in general accordance with the structural plans submitted (open space caucusing 21 March 2011).
- 581.21 Amendment to Condition CNV.1, including deletion of "where is practicable", to provide clarity on the process to be undertaken should the criteria not be able to be met. In additional amendment to Condition CNV.1(xv), to provide

further guidance as to what will be included in the CNVMP in relation to preparing SSNMPs (noise caucusing 21 March 2011).

- 581.22 Amendment to Condition CNV.2 and CNV.4, including deletion of "where is practicable", which now provides a link back to the Auckland Council certification process and the SSNMPs (Condition CNV.13) should the criteria not be able to be met (noise caucusing 15 and 17 March 2011).
- 581.23 Amendment to Condition CNV.10 to provide clarity on any temporary relocation required for residents of 1510 Great North Road (planning caucusing 8 March 2011).
- 581.24 New Condition CNV.11 to clarify process to be undertaken should temporary relocation be required for any other properties, beyond 1510 Great North Road (planning caucusing 8 March 2011).
- 581.25 Amendment to Condition CNV.12 to provide clarity on when any temporary relocation (should this be required) be undertaken in relation to Unitec exams in order to minimise disruption (amendment requested by Unitec).
- 581.26 Amendment to Condition CNV.13 to provide more clarity on the SSNMP process and the Auckland Councils certification role (noise caucusing 15 and 17 March 2011).
- 581.27 Amendment to Condition OA.2, to provide for one ambient monitoring station to be located within the Waterview Primary School grounds, subject their agreement (amendment requested by the Ministry of Education and Waterview Primary School)
- 581.28 As agreed in Planning / Open Space Caucusing (21 March 2011):
- (a) Amendment to clarify Conditions LV.1 and LV.2 and certification function for these conditions.
  - (b) Minor amendment to Condition LV.4, so that it is clear that landscaping may be undertaken in stages, subject to the construction requirements.
  - (c) New Condition OS.1 to provide an explanation of terms that are used in the Open Space conditions.
  - (d) Amendment to Condition OS.2 to provide for the Open Space Restoration Plans to be prepared at least 12 months prior to practical completion. A new advice note has also been provided to explain how certain works may be required prior to construction which

may impact on the timing of the Open Space Restoration Plans.

- (e) Amendment to Condition OS.4 to clarify the requirements of the Open Space Restoration Plans and what they are to include.
  - (f) Amendment to Conditions OS.5 and OS.6 to specify the exact requirements of the Waterview Reserve and Alan Wood Reserve Open Space Restoration Plans respectively.
  - (g) Amendment to Condition OS.9 to clarify what is to be replaced prior to construction within Alan Wood Reserve.
  - (h) Minor amendment to Condition OS.9(b) so that it is clear that the passive recreation linkage refers to a gravel walkway.
  - (i) Amendment to Condition OS.10 to clarify what is to be replaced prior to construction within Waterview Reserve.
  - (j) Amendment to Condition OS.16 so that it is clear that the linkage provided to Erik Armishaw Park is via existing streets and directional signage.
- 581.29 Minor amendment to Condition SO.1(e) so that it is clear that it is both "learning and teaching" opportunities are to be provided (planning caucusing 8 March 2011).
- 581.30 Amendment to Condition SO.2 to link back to the SSNMP process (Condition CNV.1) (noise caucusing 15 and 17 March 2011).
- 581.31 Amendment to Condition SO.3 to confirm that relocation of the Waterview Kindergarten will be undertaken prior to construction commencing adjoining this site, as the legal agreement between these parties (which provided for this) has not been confirmed by all parties at the time of the Hearing.
- 581.32 Inclusion of a new Condition SO.7 to provide opportunity for a schedule of trees that require removal to be provided to the Community Liaison Group for their consideration and identification of opportunities to fell such trees for heritage (or other community) projects, in response to the opportunities identified by Mr McCurdy in his representation 21 March 2011, page 1721;

- 581.33 Inclusion of new Conditions SO.8 – SO.11 to provide confirm the financial and operational support proposed by the NZTA to assist the ongoing operation of Te Atatu Pony Club over construction, in response to the representations made by various parties on behalf of the Te Atatu Pony Club, 22 March 2011;
- 581.34 Amendment to Condition V.4 to provide for the Auckland Council or the Community Liaison Group(s) to have input into any weed management programme, where “weeds” may be considered to have other environmental or ecological benefits, in response to the representations of Friends of Oakley Creek and the Star Mills Preservation Group.
- 581.35 Deletion of Condition V.16 and amendment to Condition V.18 (renumbered V.17) to provide for extending the period of weed and pest management on Traherne Island through to 2020 and removing the proposal to undertake ecotone restoration in Eric Armishaw Park, as the ecologist for Department of Conservation did not support this proposed mitigation (2 March 2011, pages 882-883);
- 581.36 Minor amendment to Condition S.7(d) to provide a reference to a map showing the particular Unitec buildings being referred to in the condition (planning caucusing 8 March 2011).
- 581.37 Amendments to the archaeological conditions, in response to matters raised in the representation of Star Mills Preservation Group and Friends of Oakley Creek (22 March 2011), including:
- (a) Condition ARCH.5 to include consideration of the historic heritage in the design of structures (excluding the ramp piers at the interchange);
  - (b) Condition ARCH.6 to recognise the importance of the proposed Oakley Inlet bridge considering the historical design / form of the bridge crossing in the final design and to reiterate that the planting of coastal rock forest (required by Condition V.14) needs to be planned to avoid the potential for some species to impact on archaeological sites (it is noted this is already acknowledged in Condition V.14);
  - (c) Condition ARCH.9 to include the specific provision for Monterey Pines (as well as oaks) as Amenity Trees in the Oakley Inlet Heritage area and to enable their replacement with trees of the same species;

- 581.38 Minor amendment to Condition C.12 to clarify the replaced shell bank configuration.
- 581.39 Updated Schedule A to include additional plans referred to in the conditions.
- 581.40 New Schedule B, setting out the consents, their durations and the conditions associated with each consent. This schedule is a template only, and will be completed once a direction is obtained from the Board as to what the final form of the consents will comprise (planning caucusing 8 March 2011).

## CONCLUSIONS

- 582 The Waterview Connection Project will complete the Western Ring Route by providing the final and critical link between SH16 and SH20. This nationally significant strategic corridor will reduce dependence on the existing State Highway 1 route through Auckland and improve connectivity between the Auckland Isthmus, Manukau, Waitakere and North Shore. Its completion will open up the regional and national economic growth and productivity benefits of that broader route.
- 583 The regional significance of this Project is most recently reflected in the Auckland Council's discussion document on the Auckland Spatial Plan (released on Wednesday 23 March 2011).<sup>621</sup> This document identifies completion of the Western Ring Route as part of the Region's plan for transport over the next decade.<sup>622</sup>
- 584 Over the course of this Inquiry process, the overall focus of submitters' concerns has narrowed. Few parties appear to have seriously argued that the Project should not go ahead. There appears to be general acceptance by most submitters that the current form of the Project is, in principle, sustainable.
- 585 The key issue is therefore to determine the form and manner in which the Project should be delivered in order to achieve the appropriate balance of providing for the communities' social, economic and cultural wellbeing, while appropriately avoiding, remedying and mitigating the adverse effects.
- 586 Submitters have focussed on the effects of specific elements of the Project, the opportunity to provide additional or 'complementary' works, and the adequacy and robustness of the suite of consent conditions. Particular examples include:

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<sup>621</sup> "Auckland Unleashed – The Auckland Plan Discussion Document" (released 23 March 2011).

<sup>622</sup> Ibid at page 166, paragraph 468, fourth bullet point.

- 586.1 Whether to locate the southern ventilation building underground;
  - 586.2 The location of the northern ventilation stack;
  - 586.3 The need for a cycleway connection through Sector 8; and
  - 586.4 Adequacy of open space provision during construction and the operational phases.
- 587 It is submitted that the majority of effects will either be avoided through design measures or mitigated by a comprehensive package of mitigation provided for in the proposed suite of conditions. However, it acknowledged that there will be some remaining adverse effects on the environment, which is unavoidable for an infrastructure project of this scale in a built up urban environment.
- 588 In addition to the substantial wider socio-economic benefits arising from the Project, there are other positive environmental benefits (including the rehabilitation of Oakley Creek and additional treatment of stormwater).
- 589 In undertaking the overall balancing judgement required by Part 2 of the RMA, it is submitted that the wider benefits and significance of this State highway corridor in completing the Western Ring Route outweigh the remaining adverse effects.
- 590 On balance, it is submitted that the Project will achieve the sustainable management purpose described in section 5 of the RMA, by enabling people to provide for their social and economic well-being while appropriately avoiding, remedying or mitigating adverse effects.
- 591 It is submitted that the totality of information before the Board from this Inquiry justifies the Board determining that the Project achieves the purpose of the RMA, such that the requirements should be confirmed, and the consents granted to enable the completion of this strategic link.



592 On the basis of the AEE and evidence presented by the NZTA, the NZTA respectfully requests that the Board confirm the requirements and designations sought and grant the resource applications sought, subject to the detailed set of conditions proposed.

Dated: 25 March 2011



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S M Janissen / C Law

**Counsel for the NZ Transport Agency**

**ANNEXURE A**

**REPLY SET OF THE NZTA'S PROPOSED DESIGNATION AND  
CONSENT CONDITIONS (SEPARATELY BOUND)**

**ANNEXURE B**

**LETTER TO THE BOARD DATED 24 MARCH 2011 (REGARDING  
RELOCATION)**

24 March 2011

Judge L Newhook  
Chairman – Waterview Connection Proposal  
Board of Inquiry  
C/- Specialist Courts and Tribunals Centre  
Level 2, 41 Federal Street (Corner Wyndham Street)  
Auckland 1010

FROM: Suzanne Janissen  
DIRECT: +64 9 357 9079  
MOBILE: +64 27 488 9566  
FAX: +64 9 357 9099  
EMAIL: [suzanne.janissen@chapmantripp.com](mailto:suzanne.janissen@chapmantripp.com)  
REF: 091212799/1772089.1

Attention: Kim Morgan

## **RESPONSE TO MINUTE AND DIRECTIONS OF THE BOARD – RELOCATIONS OF SCHOOL ENTRANCE AND KINDERGARTEN**

- 1 This letter responds to the Minute and Directions of the Board of Inquiry dated 23 March 2011 (*Minute*). The Minute refers to an email message from a submitter who queried how the environmental effects of a relocation of the School's main entrance would be managed, with the same issue possibly arising in relation to relocation of Waterview Kindergarten.
- 2 The Minute asks that the NZTA address the matter of gaining consents, the timing and cost of doing so, and the impact that might have on the commencement of construction works (should the Project be granted approval).
- 3 As directed, we have consulted with counsel for the MOE and the School Board (Ms Fraser), and counsel for the Auckland Kindergarten Association (AKA) (Mr Ryan), in preparation of this response and they concur with the following analysis.

### **Waterview School Entrance Relocation**

- 4 The draft agreement<sup>1</sup> between the NZTA, the School and the MOE addresses each of the issues raised in the Board Minute, as it relates to the redesign of the Waterview School entrance. The draft agreement provides that:
  - 4.1 The MOE will, at the NZTA's cost, designate the current School access at 19 Oakley Avenue and uplift the designation for the current unformed (and privately owned) access from Great North Road;<sup>2</sup>
  - 4.2 The works at the School will be carried out prior to the commencement of construction adjacent to the MOE land, provided that the MOE and School Board have given approval to the Master Plan by the required date,<sup>3</sup> and

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<sup>1</sup> Hearing Exhibit 20.

<sup>2</sup> Clause 9.1 of the draft agreement.

<sup>3</sup> Clauses 5.4 and 5.5 of the draft agreement. The date is included in the agreement to ensure that there is sufficient time to complete the construction works prior to Project construction and during the summer holidays.

- 4.3 The NZTA will undertake, and therefore fund, the works.<sup>4</sup>
- 5 There is an existing undesignated entrance to the School at 19 Oakley Ave and that section already forms part of the School grounds. It is not therefore a new entrance. The primary purpose of the alteration to the MOE designation is simply to formalise this access, so that the School boundary matches the MOE designation.<sup>5</sup>
- 6 The redesign of the entrance is occurring entirely within the MOE owned land at 19 Oakley Ave. That work is expected to involve landscaping and access improvements and it is not anticipated that classrooms or playgrounds would be relocated onto that section. Accordingly, it is not at this stage anticipated that any of the work proposed for the entrance redesign would require designation, but if there are any additional effects arising from the designation (as distinct from works or effects that could occur anyway under the present zoning) then these will be assessed as part of the alteration to designation.

**Waterview Kindergarten**

- 7 While the NZTA, AKA and MOE are yet to finalise an agreement relating to the relocation of the Kindergarten, all matters relevant to the Minute are agreed.
- 8 The NZTA, AKA and MOE recognise that resource consent will be required for the relocation of the Kindergarten. The NZTA has agreed to pay the full cost of consenting the relocated Kindergarten, including any additional consenting costs which may arise because of the Kindergarten's desire to expand to a 50 child facility.
- 9 The NZTA, AKA and MOE recognise that any effects of relocating the Kindergarten (which may potentially include traffic effects) will need to be assessed when resource consent is sought. The NZTA has already acquired 17 Oakley Avenue expressly for the purpose of relocating the Kindergarten, and it is the parties' intent to relocate the Kindergarten there. The parties recognise that, in the unlikely event this becomes impossible, they will need to consider other relocation options.

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<sup>4</sup> Clause 5.1 of the draft agreement.

<sup>5</sup> Council approval to an outline plan of works for this Project would not be required (if that is what was referred to in the Board's Minute at paragraphs 4 and 5).

- 10 The NZTA, AKA and MOE are also agreed that the relocation and associated works should be completed prior to Project construction commencing adjacent to the existing Kindergarten site. The NZTA will undertake the Kindergarten construction work at its own cost, except that the AKA will pay the additional costs associated with the expansion of the Kindergarten to 50 children (from the present 30).

Yours faithfully



Suzanne Janissen/Cameron Law  
PARTNER/SENIOR SOLICITOR

DIRECT: +64 9 357 9079

EMAIL: [suzanne.janissen@chapmantripp.com](mailto:suzanne.janissen@chapmantripp.com)

cc: Mr Stuart Ryan (for AKA)  
Ms Katia Fraser (for MOE and the School Board)

**ANNEXURE C**

**MEMORANDUM FROM ANDREW MURRAY DATED 18 MARCH 2011**

**ANNEXURE D**

**ACCESSIBLE OPEN SPACE AREA BY CENSUS AREA UNIT (CAU) –  
EXISTING AND POST CONSTRUCTION**


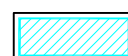



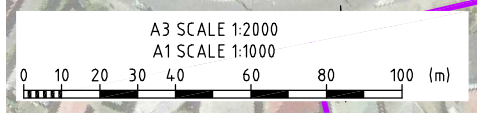
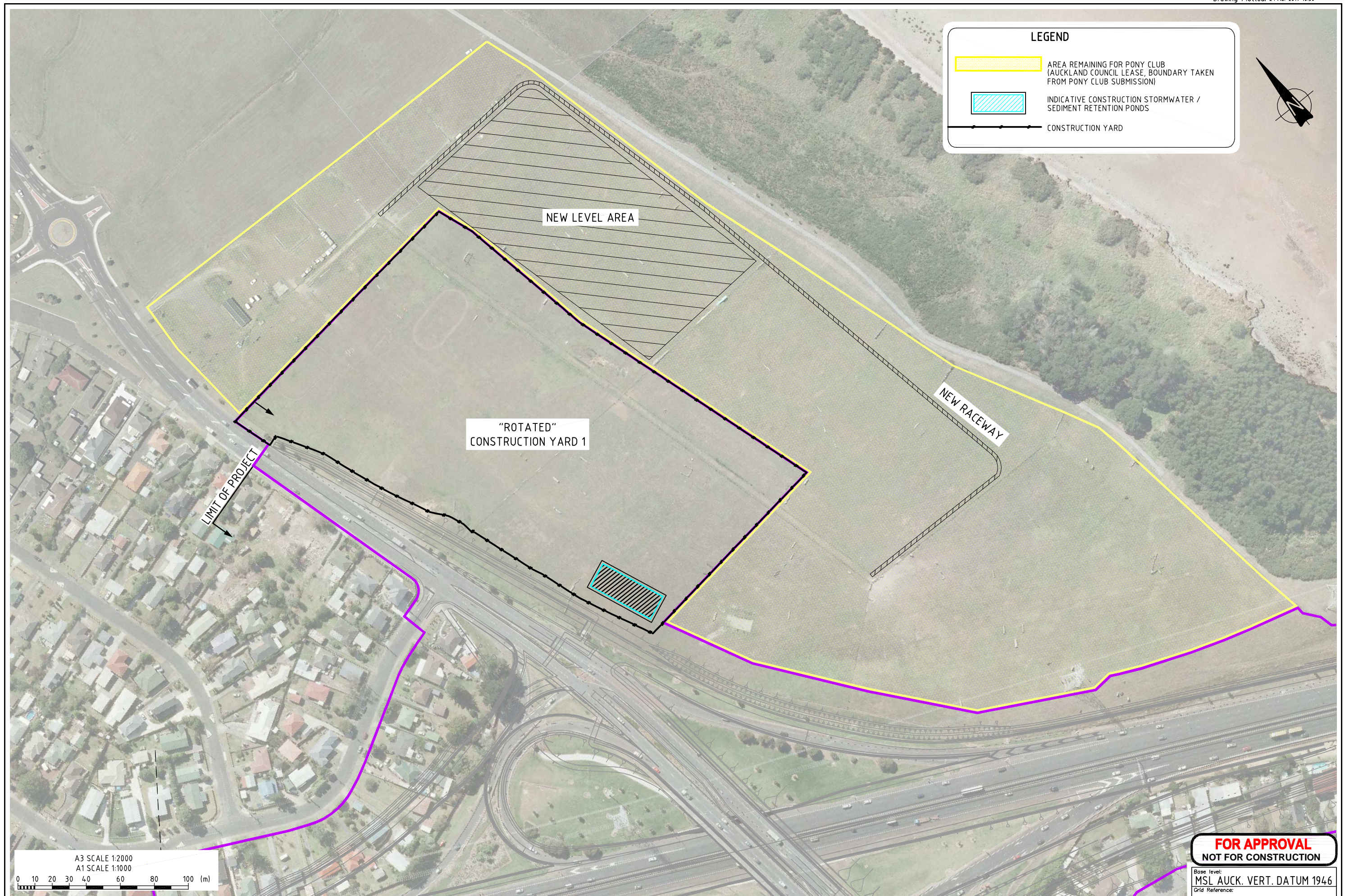
**ANNEXURE E**

**PLAN SHOWING CONSTRUCTION YARD 1 AND TE ATATU PONY CLUB AREA**



**LEGEND**

-  AREA REMAINING FOR PONY CLUB (AUCKLAND COUNCIL LEASE, BOUNDARY TAKEN FROM PONY CLUB SUBMISSION)
-  INDICATIVE CONSTRUCTION STORMWATER / SEDIMENT RETENTION PONDS
-  CONSTRUCTION YARD



**FOR APPROVAL  
NOT FOR CONSTRUCTION**

Base Level:  
MSL AUCK. VERT. DATUM 1946  
Grid Reference:  
MT EDEN 2000

No.	Revision	By	Chk	Appd	Date
C	ISSUE FOR INFORMATION	JRH			24.03.11
B	ISSUE FOR INFORMATION	JRH			04.03.11
A	ISSUE FOR INFORMATION	JRH			23.02.11

Drawing Originator:

Original Scale (A1)	1:1000
Reduced Scale (A3)	1:2000

Designer	RM
Reviewer	BM
Drafting Checked	-
Consultant Approval	AL
Received by Beca	-



Project: **WATERVIEW CONNECTION PROJECT**  
SH16 / SH20

Title: **CONSTRUCTION SCHEME PLANS  
ALTERNATIVE CONSTRUCTION YARD 1**

Project No.	20.1.11-3-D-N-912-201	Rev.	C
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**ANNEXURE F**

**MEMORANDUM FROM PATTLE DELAMORE PARTNERS DATED  
16 MARCH 2011**



# memorandum

TO Tom Ireland FROM Clare Maginness, Parviz Namjou, Alan Pattle

DATE 16 March 2011

RE Waterview Connection Project – Response to Bryan Mehaffy

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This memo has been prepared in response to the claim from submitter to the BOI process regarding the discharge to Oakley Creek.

As background, PDP is engaged by NZTA to advise them on groundwater and settlement issues during the contractor procurement process for the Waterview Connection Project. As part of the scope of these services PDP is carrying out a pumping test at the Phyllis Reserve.

## 1. Consent No.

The test is authorised by Auckland Council under Resource Consent number 38833, granted on the 17 January 2011. The discharge of groundwater to Oakley Creek via the stormwater system conforms with Permitted Activity rule 5.5.57 of the Auckland Air Land and Water Plan. No discharge consent is required or was sought although details of the discharge were documented in the consent application letter.

## 2. Outline of activity (i.e. pump test)

A pumping test is currently being undertaken at the Phyllis Reserve to determine the aquifer properties of the Waitemata Group Parnell Grit in the general Phyllis Reserve area. The pumping bore intake zone is deep (38 to 100m). Pumping commenced on the 7/2/11 and stopped on 9/3/11. A comprehensive programme of groundwater level monitoring is currently being carried out according to the AC resource consent conditions. The water pumped from the bore was discharged into the existing reticulated stormwater system which discharges into Oakley Creek. Approval to use the Council reticulation network to receive the discharge was obtained from AC.

## 3. Details of the discharge management

The rate of discharge from the pumping bore was monitored during the test. Visual inspections of the discharge zone for erosion were undertaken as requested by Auckland Council. The rate of discharge to the stormwater network and to the Creek at the discharge location is within the flow rates that are carried during normal storm events. Hurricane fencing was erected around the pumping bore to secure the site.

## 4. Any water quality measurements undertaken.

Regular measurements of electrical conductivity (EC), dissolved oxygen, temperature and pH of the discharge water quality have been undertaken during the discharge test and the results indicate no change in water quality parameters during the test. This is confirmed by continuous monitoring of EC with an EC probe, in the discharged water. In addition, two water quality samples from the pumping bore have been sent to the laboratory for detailed laboratory analysis. The results demonstrate that the bore discharge water is of high quality

suitable for direct discharge to the Creek. No adverse water quality effects from the landfill in the Phyllis reserve are identifiable. The available water quality results during the test are attached in Appendix A.1.

The following photos were undertaken on the 6 March 2011.







Yours Faithfully

**Alan Pattle**

Director

Appendix A.1: Water Quality Laboratory Results (Pumped bore – BH944)			
	Sample Date:	7 Feb 2011	17 Feb 2011
	Lab Number:	870054.1	870054.2
Dissolved Boron	g/m3	0.074	0.073
Total Ammoniacal-N	g/m3	In Progress	In Progress
Heavy metals, dissolved, trace As,Cd,Cr,Cu,Ni,Pb,Zn			
Dissolved Arsenic	g/m3	< 0.0010	< 0.0010
Dissolved Cadmium	g/m3	< 0.00005	< 0.00005
Dissolved Chromium	g/m3	< 0.0005	< 0.0005
Dissolved Copper	g/m3	< 0.0005	< 0.0005
Dissolved Lead	g/m3	< 0.00010	< 0.00010
Dissolved Nickel	g/m3	< 0.0005	< 0.0005
Dissolved Zinc	g/m3	0.0059	< 0.0010
Heavy metals, totals, trace As,Cd,Cr,Cu,Ni,Pb,Zn			
Total Arsenic	g/m3	< 0.0011	< 0.0011
Total Cadmium	g/m3	< 0.000053	< 0.000053
Total Chromium	g/m3	< 0.00053	< 0.00053
Total Copper	g/m3	< 0.00053	< 0.00053
Total Lead	g/m3	< 0.00011	< 0.00011
Total Nickel	g/m3	< 0.00053	< 0.00053
Total Zinc	g/m3	0.0106	< 0.0011
Anion / Cation profile, dissolved metals trace level			
Sum of Anions	meq/L	5.3	4.9
Sum of Cations	meq/L	In Progress	In Progress
pH	pH Units	7.4	7.4
Total Alkalinity	g/m3 as CaCO3	200	183
Bicarbonate	g/m3 at 25°C	240	220
Total Hardness	g/m3 as CaCO3	172	171
Electrical Conductivity (EC)	mS/m	51.6	47.9
Dissolved Calcium	g/m3	48	49
Dissolved Magnesium	g/m3	12.6	12.2
Dissolved Potassium	g/m3	2.6	2.4
Dissolved Sodium	g/m3	34	36
Chloride	g/m3	39	38
Nitrite-N	g/m3	< 0.002	< 0.002
Nitrate-N	g/m3	< 0.002	< 0.002
Nitrate-N + Nitrite-N	g/m3	< 0.002	0.002
Sulphate	g/m3	9.6	9.1