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Event: Mount Messenger Bypass Hearing

Date: 3 August 2018 (Day Three)

Before: Mr S Daysh - Hearings Commissioner

Witnesses: Mr K Hamill - Ecology: freshwater
Mr S Chapman - Ecology: bats and lizards
Mr R MacGibbon - Ecology: restoration
package
Mr H Milliken - Construction management
Mr S Dixon - Statutory planning
assessment
Mr P Roan - Conditions and management
plans

Also present: Mr D Allen - Solicitor for NZTA
Mr T Ryan - Solicitor for NZTA
Mr P McKay - Hearing manager
Ms R McBeth - Reporting officer, New
Plymouth District Council
Ms K Hooper - Reporting officer,
Taranaki Regional Council
Mr J Winchester - Advisor

THE COMMISSIONER: Kia ora, thank you very much. Mr Allen?

MS ONGLEY: sir, I wonder if I could raise an issue before we start today?

THE COMMISSIONER: Certainly.

MS ONGLEY: Thank you. It concerns the timing of the conditions. There have been a number of changes that have been proposed in the rebuttal evidence to both the conditions and the management plans, and I have discussed with Mr Allen when the submitters might receive those. I hoped it would be today, but it is going to be Monday. That leaves quite a short time for the Department to comment on both of those things. I am wondering whether full comments could be held over until the 16th, depending on the scope of the changes that we receive because, as you know, the devil is always in the detail of these things. I have discussed it with Mr Allen and he might want to address you on it. I have promised to provide as much comment as possible on Wednesday when we present our case, however I would like to reserve the ability - and I am just speaking with you at this stage, depending on the scope of the amendments which look to be quite extensive.

THE COMMISSIONER: Mr Allen?

MR ALLEN: Yes, we have discussed that. In terms of the scope of the amendments, yes, they are extensive; yes, they are moving because the latest updated officer's reports were received on Monday. That is normal in a case such as this. In terms of our discussion, as my friend; sorry, as Sarah has already said, the issue --

MS ONGLEY: You could say learned friend.

MR ALLEN: As Ms Ongley has already said, that in terms of substantive fulsome comments on Wednesday, but to the degree DOC needs time in terms of tweaks, that is set for the following Monday, just so there is a bit more time. That gives us time to consider that before the hearing resumes on Thursday 16 August.

THE COMMISSIONER: Sure.

MR ALLEN: So discussed that and comfortable and can live with that, but do want the fulsome explanation on Wednesday, but recognise in terms of tweaks through to the Monday.

THE COMMISSIONER: Sure. So your proposition is that you will do your best before you present your case?

MS ONGLEY: Yes.

THE COMMISSIONER: You will have some legal submissions which deal with those, but you would like to reserve the opportunity to comment further?

MS ONGLEY: Yes, I would. Usually in these cases, and I realise that with these council hearings, they're extremely tight timeframes and that the applicant has been subject to those as well, but I would have expected to have the changes to the conditions received either with the rebuttal evidence on the first day of the hearing. And, as that has not occurred, that is why I would like to reserve the ability - and it is good that there has been that extra day set aside on 16 August - and I have said to Mr Allen I will endeavour to get our comments to him on the Monday before that Thursday.

THE COMMISSIONER: Sure. Would you like the opportunity to talk to those before the applicant closes? Is that something you would like to reserve as well?

MS ONGLEY: Yes, sir. That may be required. I will be able to advise you more on the Wednesday, once we get the changes.

THE COMMISSIONER: Yes, all right. So if that is agreed, we will have a roundup on that on 16 August in the morning, and see where things are at. If you would like to speak to any additional matters as a submitter prior to the submitter evidence period closing before the NZTA does its closing, I will allow you to do that.

MS ONGLEY: Thank you, sir.

THE COMMISSIONER: Thank you.

MR ALLEN: Thank you, sir. We have Mr Hamill just to briefly present some comments following on from his evidence yesterday, and questions from the Commissioner. And so we will hand back over briefly to Mr Hamill.

THE COMMISSIONER: Welcome back, Mr Hamill.

MR HAMILL: Thank you. I will just read it out as written.

THE COMMISSIONER: Sure.

MR HAMILL: I was asked what process is provided for within the management plans for reviewing culvert designs and ensuring the suitability of providing fish passage, in reference to the 2018 fish passage guidance. I can confirm that a process is provided within the proposed consent conditions, but this process is not yet reflected in the ELMP. The proposed conditions PVC2 and DIV5 respectively provide for provisions of culvert designs and stream diversion designs be provided to Taranaki Regional Council.

Proposed condition PVC10 provides for a peer review of culvert design by a freshwater ecologist to verify the detailed design process. It states -- at the moment it states:

"With the exception of culverts 210 and 13, the culverts shall provide for fish passage in accordance with the ELMP. For those culverts where fish passage needs to be specifically provided for, the consent holder shall arrange peer review by a suitably qualified and experienced freshwater ecologist to verify that the detailed design process for these culverts has appropriately addressed the effects on fish passage, and shall provide this written confirmation of such verification to the Chief Executive of TRC."

Provisions are currently being added to section 8 of the ELMP Freshwater Ecology Management Plan to effect these conditions. These will be provided to the Commissioner in the tracked change

version for consideration, along with other amendments that are currently being made. Mr Allen will confirm the timing of this later today.

There was another question asked regarding whether recommendations I have made in my rebuttal evidence have been reflected in the ELMP. And the answer is not yet; they are not yet reflected in there and, again, these will be reflected in the next tracked changes version and will be issued as above.

The third question they asked about the amount of stream restoration provided by the restoration package compared to that calculated by Dr Drinan. So a strict application of the SEV method requires matching of stream area 6.54, so for clarity I have just recorded stream area in the calculations I talk about now. I calculated that to achieve a no net loss, stream restoration will be required for 8,153 square metres of stream area. The proposed restoration would restore 10,738 square metres of stream area plus another 798 square metres from remediating stream divisions, so that is a total of 11,536 including remediation of stream divisions. We relate that number so you can get a like-for-like comparison. This is larger than the stream length calculation because the width of the -- the mean width for the restoration streams are a bit

wider than the width of the inland streams, for what is currently proposed for the restoration package.

I do not support the recommendations proposed by Dr Drinan for the reasons stated in my rebuttal evidence, which is supported by Dr Neale. However if all of Dr Drinan's assumptions and recommendations were to be accepted, there would be a requirement for about 12,627 square metres of stream restoration, and that is at paragraph 16 of his rebuttal evidence, and the proposed restoration package would have just under 1,100 square metre shortfall.

THE COMMISSIONER: Thank you.

MR HAMILL: Hopefully that is clear.

THE COMMISSIONER: I have just had a note to me that the gallery could not hear you for part of your delivery there.

MR HAMILL: Oh, sorry.

THE COMMISSIONER: And I have just switched on a switch here, which I think now, that you are clear. I think, because

everyone does not have a copy of your statement, can you just go through it again.

MR HAMILL: The whole lot?

THE COMMISSIONER: I think so. I think that would be -- sorry about that.

MR HAMILL: Should I paraphrase a bit more?

THE COMMISSIONER: No. Look, I think, you know, we have got time today, so let us just go through it again.

MR HAMILL: Okay.

THE COMMISSIONER: Everyone can then listen to your position. Thank you, and apologies.

MR HAMILL: That is fine. So it was asked that I provide -- so what process is provided for within the management plans for reviewing culvert designs and ensuring the suitability of providing fish passage. And I can confirm that a process is provided in the proposed consent conditions, but this process is not yet reflected in the ELMP. The proposed conditions PVC2 and

DIV5 respectively provide for provision of the culvert designs and stream diversion designs be provided to Taranaki Regional Council.

Proposed condition PVC10 provides for a peer review of the culvert design by a freshwater ecologist to verify the detailed design process. It states, I will read it:

"With the exception of culverts 210 and 13, the culverts shall provide for fish passage in accordance with the ELMP. For those culverts where fish passage needs to be specifically provided for, the consent holder shall arrange peer review by a suitably qualified and experienced freshwater ecologist to verify that the detailed design process for these culverts has appropriately addressed the effects on fish passage, and shall provide this written confirmation of such verification to the Chief Executive of TRC."

Provisions are currently being added to section 8 of the ELMP to effect these conditions. These will be provided to the Commissioner in the tracked change version for consideration, along with other amendments that are currently being made. Mr Allen will confirm the timing of this later today.

I was also asked whether the recommendations I have made in my rebuttal evidence are been reflected in the ELMP and the answer is no, not yet. These are going to be reflected in the next tracked changes version that will be issued as above.

And, lastly, it was asked about the amount of stream restoration provided by the restoration package compared to that calculated by Dr Drinan. A strict application of the SEV method requires matching of stream area, so for clarity I have just recorded stream area calculations here. I calculated that to achieve a no net loss, stream restoration will be required for 8,153 square metres of stream area. The proposed restoration package would restore 10,738 square metres of stream area plus another 798 square metres from remediating stream divisions, so that is a total of 11,536 including remediation of stream divisions to provide like-for-like. This is larger than the stream length calculation because the width of the mean -- the mean width of the restoration streams is wider than the mean width of the inland streams.

I do not support the recommendations proposed by Dr Drinan regarding SEV, for the reasons stated in my rebuttal evidence and which is supported by Dr Neale. However, if all of Dr Drinan's assumptions and recommendations were to be accepted, there would be a requirement for about 12,627 square metres of stream restoration in paragraph 16 of his rebuttal evidence, and the proposed restoration package would have a 1,091 square metre shortfall.

THE COMMISSIONER: Thank you for those clarifications,
Mr Hamill. I do not have any questions, thank you.

MR HAMILL: Thank you.

MR ALLEN: Thank you, Commissioner. After your reading on bats
last night, we now have Mr Chapman to talk to you about bats.

THE COMMISSIONER: And herpetofauna as well.

MR ALLEN: Oh, and lizards too, herpetofauna.

THE COMMISSIONER: Thank you.

MR ALLEN: I am not excluding the frogs and lizards. So, yes,
bats and herpetofauna.

THE COMMISSIONER: Thank you and welcome, Mr Chapman.

MR CHAPMAN: Good morning, Commissioner. Is it on?

THE COMMISSIONER: Yes, I think you are on and can be heard.

MR CHAPMAN: My name is Simon Chapman. I have been involved in the Mt Messenger Bypass project since November 2016. I designed and implemented bat and herpetofauna surveys, initially to assist in route selection and design, and subsequently to assess the project's effects on bats and herpetofauna. I participated in the first of two MCA workshops during which I provided expert input on the implications of the presence of bats and the likely presence of native herpetofauna, for the selection of route options, alignment optimisation and construction methodologies. I have also provided substantial input into the ELMP prepared for the project, particularly as it relates to bats and herpetofauna.

Acoustic surveys for bats were carried out using ABM, which is automatic bat monitoring units within the project footprint and wider project area. Long-tailed bats were detected at 99 of 105 survey sites. No short-tailed bats were detected. A bat trapping and radio-tracking programme was also implemented. No bats were captured during nine nights of attempted trapping, despite a substantial effort at the 11 trapping sites. Three herpetofauna survey methodologies were utilised. Artificial refuge surveys using ACOs and CCFCs, which is artificial cover objects and closed cell foam covers; VES, which is visual encounter surveys including manual daytime searching and

nocturnal spotlighting; and funnel trapping. No herpetofauna were found within the project footprint. However, a colony of copper skinks was found on a farm during manual daytime searching approximately 600 metres west of the project footprint.

Assessments of ecological effects for bats and herpetofauna broadly followed the EIANZ EcIA guidelines with some adaptation, including allowance for expert opinion to be applied within the context of the EIANZ framework.

For bats, I conservatively assessed the overall level of effects as moderate for long-tailed bats, and low for short-tailed bats. I conservatively assessed the overall level of effects of the project on herpetofauna as moderate.

Measures to avoid, mitigate and offset/compensate potential effects of the project on bats include: avoiding effects through project route selection and design; the implementation of vegetation removal protocols - or VRP - to mitigate to a negligible level, in my experience, the risk of felling occupied bat breeding roosts; and a large-scale pest management area of 3,650 hectares and habitat enhancement to mitigate and offset/compensate the overall effects of the project on ecological values. The PMA area has been increased from 1,085

to 3,650 hectares primarily to benefit bats in the wider project area.

Measures to avoid, mitigate and/or offset potential effects of the project on herpetofauna include: minimise effects through project route selection and design; implementation of a herpetofauna management plan aimed at salvaging and relocating native lizards to suitable habitats away from the project footprint; and pest control and habitat enhancement in the PMA to mitigate and offset the overall effects of the project on ecological values, which may also benefit some herpetofauna species.

In addition, as there is some uncertainty as to the precise level of effect the project will have on herpetofauna, an area no smaller than one hectare of known significance for herpetofauna outside the project footprint will be selected in consultation with DOC for the Transport Agency funded predator-proof fence area and pest eradication to offset the project's possible residual effects on herpetofauna. The location of the site is being progressed with the landowner and management specifications for the fence and pest management will be added to the ELMP.

I support the mitigation and offset/compensation package - the updated version of the ecological restoration package as presented in the supplementary evidence of Mr MacGibbon - proposed by the Transport Agency which, in my opinion, represents an appropriate response to the project's actual and potential construction and operational effects on bats and herpetofauna.

In my opinion, any effects of the project on bats and/or herpetofauna will be appropriately addressed. I consider the project will have a net positive effect for bats and no net loss for herpetofauna, and possibly a net positive effect. In particular, two aspects of the revised restoration package will ensure a positive outcome for bats and herpetofauna respectively. Specifically, these are a 3,650 hectare pest management area with intensive pest management to be carried out in perpetuity will ensure the long-term survival of a viable population of a bat species likely to be in decline across the vast majority of its range. This will go substantially beyond mitigating, offsetting or compensating the effects of the project on long-tailed bats. And for lizards, creating a 1 hectare pest-free lizard enclosure will make a substantial contribution towards the conservation of a poorly-known at-risk herpetofauna species with few known strongholds - the striped skink, and is also

likely to provide a safe and secure release site for herpetofauna salvaged from the project footprint.

Additionally, the reduced vegetation removal protocols will result in a clear focus on minimising the risk of communal roost trees being felled while occupied by bats. It enables resources to be targeted towards ecological management, certain to have substantial benefits for bats and the adverse effects of vegetation clearance on long-tailed bats is likely to be negligible.

In response to DOC's submission and evidence. Doc's submission raises a number of points, including (a) in relation to bats, the need for a pre-consenting mark recapture study, the measures needed to address effects on bats and the need for post-construction monitoring. And (b) in relation to herpetofauna, the need for a precautionary approach, the need for a compensation approach in addition to mitigation measures proposed. Possible unintended outcomes for lizards as a result of pest management, in particular, mice and rats and the need to include further specific measures in the ELMP and PMP.

In terms of the mark recapture study, this was attempted over a nine day period in December 2017, however no bats were

captured. Difficulties in trapping bats are not uncommon, however in the absence of the information that such a study could have, if successful, provided, a conservative approach to the assessment of effects on bats was required and has been adopted. The approach adopted, in my view, appropriately reflects the information obtained from the ABM surveys and will ensure potential effects on bat roosts will be appropriately avoided or mitigated.

In my view and as set out above, the measures included in the revised restoration package for addressing effects on bats are substantial and will provide for the growth of, and long-term sustainability of a long-tailed bat stronghold in North Taranaki. In my opinion, monitoring should only be required as a reflection of the level of effects of the project on bats and where monitoring results can be tied to the effects of the project. I do not consider acoustic monitoring is capable of providing such information about population size and trends.

I consider the proposed revised restoration package programme will be more than sufficient to address any residual effects of the project on bats. The size of the proposed PMA has been increased from 1,085 to 3,650 hectares to allow for uncertainty and to provide buffering. Combined with the

adjacent Parininihi pest control area, the total area of pest control exceeds the 5,000 hectares recommended by DOC for long-tailed bat population recovery.

In terms of herpetofauna, the avoidance and mitigation achieved through the selection and design process, on-site mitigation - salvage and relocation - the revised restoration package and the greater than 1 hectare sanctuary will collectively address the project's actual and potential effects on herpetofauna appropriately. To the best of my knowledge the lizard compensation proposed for the project - it is the greater than 1 hectare pest-proof enclosure known to protect rare lizards - represents a substantial step up from that proposed or implemented on any other project in New Zealand. The sanctuary approach is supported by Ms Adams, who is DOC's herpetofauna expert.

The response to the NPDC section 42A report. The section 42A report raised a number of points including in relation to effects of lighting on bats, using the correct conservation status of long-tailed bats in the ELMP, mitigation measures, the size of the PMA, monitoring conditions and designation conditions. A number of these points, for instance, lighting, conservation status and VRP have been addressed in the current

version of the ELMP and CEMP. I also note that the PMA has been increased to 3,650 hectares as set out in my supplementary evidence and above.

Finally, as set out in my EIC, I do not agree that monitoring for bats and herpetofauna should be included in the project, as it would not provide any worthwhile information in this case.

THE COMMISSIONER: Thank you, Mr Chapman. You have produced a series of evidence-in-chief, supplementary evidence and rebuttal evidence?

MR CHAPMAN: Yes.

THE COMMISSIONER: Yes, so I do have some queries on some of those, but I think I will pick up some questions on this statement and then go back and check if there is anything remaining. So just a question on your paragraph 2 of this summary statement, about the fact that no bats were captured during the nine nights of attempted trapping. Was that expected or is that usual for that amount of effort that you did not capture any bats at all?

MR CHAPMAN: Yes. I am probably more experienced than anyone in New Zealand in trapping bats in very difficult locations, and I think we had a bit of a perfect storm of certain movement time. We ran out of time to get the assessment done. But in talking to DOC through the discussions we had with them, certainly I am not alone in this. It can take a couple of years to get your first bat captured and then from there it takes -- it can take several more years to build up a picture of what is going on in bat populations. In fact, in even the best studied populations it takes upwards of ten years to get information on where all the roosted and foraging areas are.

THE COMMISSIONER: All right. So just on the reason why you are looking to capture bats, what is the purpose? Do you actually put some sort of trackers on them and then see where they fly to and move to and those sorts of things? Is that the purpose?

MR CHAPMAN: Yes, absolutely. So the idea is you trap one or more bats that you can then attach a really small transmitter to. That allows you to follow them. Typically that is done during the day when you try and identify the roosts, the roost trees which, in my experience, especially during the breeding season, tend to be the largest trees in the landscape. But during the night when they are active you can also track them to

their foraging areas, their feeding grounds. So that information is very useful, but invariably we find that the rules of thumb, which is the largest trees in the landscape is where they roost and open areas of streams and clearings tend to be their favourite foraging grounds. So we still can have a good guess as to what those are, but radio tracking can confirm that information.

THE COMMISSIONER: Okay, so my follow-on question with that is do you think that other studies where bats have been found and monitored provide a reasonable guide to bat behaviour in this area, or are there distinct behaviours in different parts of the country?

MR CHAPMAN: No. Look, I have travelled around New Zealand in the early to mid-2000s, tracking a number of locations throughout New Zealand including the South Island and some quite small populations. And the pattern holds true, whether it is a fragmented landscape or old whole forest. They tend to be roosting, especially the breeding roosts in the largest, oldest trees in the landscape, whether they are exotic or native. And the feeding grounds tend to be around streams, wetlands and open areas or along edges, whether it is forest edges or riparian edges, so those tend to hold true whether it is a big valley in

Fiordland or whether it is a kauri forest in Northland.

THE COMMISSIONER: In your evidence you can rely on examples from around the country in terms of the type of behaviour that might be expected here?

MR CHAPMAN: Yes.

THE COMMISSIONER: Thank you. You say in your paragraph 8(b) that the increase in size of the PMA from 1,085 to 3,650 hectares was primarily to benefit bats in the wider project area. Now, was that the main driver for the Agency expanding the area around this query about bats and their restoration or their offsetting compensation factors?

MR CHAPMAN: Yes, that is my understanding. In fact, I understand both Wildlands and DOC asked for 3,000 hectares during discussions.

THE COMMISSIONER: But the main reason was around the effects on bats, as you have stated here in your evidence?

MR CHAPMAN: Correct.

THE COMMISSIONER: Okay, thank you. I am interested in the 1 hectare sanctuary for herpetofauna. You say in your paragraph 18 that it is a step up from any other projects in New Zealand. Are there any other examples of these sorts of enclosures that you are aware of, and their effectiveness?

MR CHAPMAN: There are certainly unfenced lizard habitats that are created. I can think of the Christchurch Southern Motorway, for example. Their landscaping included lizard habitat creation and skinks being captured and translocated into those. So through the discussions with DOC and it was their idea, Ms Adams' idea, that with so much uncertainty around what is going to be affected and what might benefit and what might not benefit from the PMA, that the innovations around let us do something that will definitely have a benefit for bats. So that is where the 1 hectare came from, so I am not aware of it being done elsewhere though.

THE COMMISSIONER: Benefit for herpetofauna, not bats, I think.

MR CHAPMAN: Oh, herpetofauna, sorry.

THE COMMISSIONER: Yes. Okay, so this was a concept just to provide some certain offsetting or compensation for effects on

herpetofauna, as a certain measure?

MR CHAPMAN: Yes. We are hamstrung by certainty in just about every other aspect. We do know that if you control mice and keep them out with a predator-proof fence, that that will benefit herpetofauna populations.

THE COMMISSIONER: In terms of the scale and size of this action, do you think that is going to do the required offsetting or compensation?

MR CHAPMAN: Yes. Again, that was discussed at length with DOC in the discussions, and I think Ms Adams agrees in her evidence that anything greater than 1 hectare would achieve an appropriate benefit. I think that the site that we are looking at, at the moment, which is still in discussions with the landowner, is closer to 1.8 hectares and has records of striped skink within it. So if we can get that location sewn up, then that would definitely give us a guaranteed benefit.

THE COMMISSIONER: All right, thank you. I will just go through my other comments on your evidence to see if there is anything else, Mr Chapman. Oh yes, I am looking at your supplementary evidence, paragraph 29, and there is a debate between various

ecologists about the size of the trees that should be subject to the VRP. Now, I think you recommended a range initially and then, because of the wider PMA area you have reduced the requirement back somewhat, and it is a question about at what level size of tree do you actually apply the VRP to, which is a vegetation removal plan. So is that the nub of it?

MR CHAPMAN: Yes. Again, that comes from discussions with DOC. They were pushing for - and we came close to an agreement - was that DOC's position was 5,000 hectares of pest control in addition to and not inclusive of it, and dropping the vegetation removal protocols completely, mainly on the basis of pessimism around whether it was worthwhile even trying to do anything on the site. Now, I should advise the Agency that we can get some really good benefit out of the site without necessarily having to apply the full veg removal protocols, because they are difficult and expensive to apply in full, especially in this sort of landscape. So I recommended 80 cm as an established control; somewhat arbitrary, but it has been put forward even by Dr O'Donnell from DOC himself in other projects as the threshold above which most important roosts such as breeding roosts are in, those larger trees, where they are available. So you may have reached some information that says that the range of roost tree sizes can be from quite small to quite large, so 15 cm.

THE COMMISSIONER: Yes.

MR CHAPMAN: Those are typically in landscapes where you do not have reasonably high trees, and also they are often solitary roosts where you might have males or outside the breeding season where those trees are used. In my view, the important roost trees are those big ones and, for example, in the Waitakere ranges I found over 30 roost trees. The smallest one was 90 cm DBH and that includes solitary roosts, and we have got similar size scales of trees here as well. So I was really comfortable with the setting it at 80 cm and then we added back in the discretion for the bat ecologist, project bat ecologist to any other trees that they see when they are on site that they think are roost trees down to a lower threshold of 50 could also be included at their discretion. I am really comfortable with that on the basis that the PMA is one thing that we do have certainty, that the scale of pest control provides us that compensation or the benefit to the population is sufficient to offset any loss from 1 per cent of the PMA area being removed.

THE COMMISSIONER: Yes. And I think I have read that there is also a time of the year where you cannot fell those trees, where it might be in the breeding season. Is that right? Is there a

limitation on timing?

MR CHAPMAN: Yes. There is a slightly disagreement around that issue as well, between Dr O'Donnell and myself. So he is arguing that in this project we should restrict vegetation removal to only the summer months. In other projects the way it works is it is restricted from May through to October, so no tree felling during that period. The vegetation removal protocols have temperature and humidity criteria, so once you are below those thresholds, tree felling cannot occur anyway and I think that actually covers that quite nicely. So we do not necessarily need to restrict the felling any further when it is already covered by those criteria around temperature and humidity.

THE COMMISSIONER: So your evidence is the conditions adequately cover that risk of removing trees when there might be young bats involved?

MR CHAPMAN: Yes, correct.

THE COMMISSIONER: Okay, thank you. You mentioned that this is a relatively costly process, so if you did need to do this for smaller trees, is that a very high -- is the cost for an

ecologist on site and ...

MR CHAPMAN: Yes. I have been involved in a number of these so far in recent years between Puhoi to Warkworth and a couple of sections of the Waikato Expressway, and those do not have that many trees, but the costs are high. We started just running through some scenarios, that even the 80 cm and 50 cm thresholds, we are still looking at well over \$1 million to do this work. Potential delays as well. So I think the 80 cm gives us a really good compromise, but if we start to go down to 15 cm, and you are into the undergrowth at that point and these things are typically up in the canopy. It is very difficult to inspect them and then say that they are not a roost, because you cannot necessarily see up into the sub-canopy. So I would have thought the costs would be in the multiple millions to bring it down to 15 cm.

THE COMMISSIONER: I do not think I have seen that number in evidence anywhere, so you think it is in the order of perhaps \$1 million if you are just looking at the protocols around 80 cm trees and above?

MR CHAPMAN: Yes, we are certainly looking at north of half, somewhere in that.

THE COMMISSIONER: That range.

MR CHAPMAN: And being able to use low-cost labour and things like that. This is something that I have to deal with as a consultant, is providing these sorts of suggestions on these projects, so I do have an idea of how long it takes to check these trees and what the labour costs are. And you have got difficult terrain in this case and you need to get arborists in to climb trees that you cannot confirm as being low risk. It is a very expensive process and that is why we have really pushed on the pest management, because that is something that we know has benefits that really kind of negates the entire argument around the detail of these sorts of things. The benefits from that pest management just vastly outweigh any adverse effects from getting this slightly wrong.

THE COMMISSIONER: All right, so the bang for the buck of the PMA into the area, you think does the appropriate offsetting compensation without having to go to the extra expense which sounds significant, in your view?

MR CHAPMAN: Yes, it is certainly not the driving -- the cost is not the driving part of my argument. The main driver is just

that we have got a declining bat species that is heading towards extinction. If we do not do this big project, that is not going to change. We can muck around with vegetation removal protocols; all we are going to do is just either avoid bringing the extinction further forward or maybe push it out slightly. If we do this PMA, we can achieve a positive growing population going forward.

THE COMMISSIONER: Thank you. I will just look at your rebuttal evidence and see whether I have any other questions. Just in your rebuttal evidence, paragraph 21, this is under your title "Roost Availability".

MR CHAPMAN: Yes.

THE COMMISSIONER: Can you tell me about the behaviour of bats generally? If their roost trees are taken away, is your experience that they relocate to other trees? Do they have like a homing range, that if their roost trees they have been used to using are gone, is that a real problem or do they just move on?

MR CHAPMAN: I do not think it is a real problem, having followed bats around on numerous occasions. They switch roosts often - the average is 1.6 days - so almost every day they are

in a different tree and not just in a different tree, often in a different catchment or even multiple catchments. It causes us incredible problems radio tracking them, because even just finding them can be difficult. But their behaviour is that they move on a lot and that is probably in response to things like parasites and predators looming or predators looming where their roost is and homing in on them; moreporks, for example. So they switch roosts often, which gives us an advantage in the vegetation removal protocols, because we can wait until they have moved on and then take the tree down. And to put that tree removal into context, we are talking about a small proportion of the available habitat in the area, something like 1 per cent or less than 1 per cent of the PMA area and a tiny proportion of the forest available in the wider area.

And these animals are adapted to moving around; they are in a dynamic forest environment, trees fall naturally. And in one study, in fact the only study I could find that measured it, we had over 6 per cent of known roost trees fall naturally over a three-year period. We are talking 1 per cent of the habitat being removed, whereas in one study we had in the North Island as well, we had over 6 per cent roosts go just naturally. So these animals must be able to add to their pool of roosts, as trees drop out, so they are constantly cycling around. That is

why it has taken so long in the studies to actually find where the roosts are, because it takes them so long to cycle around these trees.

THE COMMISSIONER: All right.

MR CHAPMAN: I think that gives us an advantage in terms of tree removal. It is something that they are adapted to, or tree loss is something they are adapted to.

THE COMMISSIONER: So this mobility, the fact that they do move around, do you find that out by when you do actually have transmitters and you track what they are doing, and moving around? That is the information you have that confirms that?

MR CHAPMAN: Yes, correct. And so the colonies also spread; usually they are in multiple trees, so having to radio track multiple bats in the same area, we might have three occupied roosts with the colonies spread across those three roost trees. But they are moving all the time. The next night those bats will be in completely different trees and potentially even different catchments. That is what we experienced trying to track here, was they simply were not even in the valley that we were trying to track them, they were elsewhere. We picked that

up through our bat surveys as well.

THE COMMISSIONER: Thank you. Your last paragraph of your rebuttal evidence, there were some paragraphs Ms Adams thought needed to be included in the lizard enclosure proposal, and you agree that they should be incorporated into the ELMP. I presume that is one of the changes that we will be seeing in the next version. Is that your understanding?

MR CHAPMAN: Yes.

THE COMMISSIONER: And there is a consent condition change as well. Yes, all right. Okay, well thank you, Mr Chapman, thank you very much.

MR CHAPMAN: Thank you, Commissioner.

MR ALLEN: Thank you, Commissioner. The next witness is Mr MacGibbon and he is talking about the ecological mitigation and the offsets.

THE COMMISSIONER: Welcome, Mr MacGibbon.

MR MACGIBBON: Good morning. My role in the Mt Messenger

Project has been to prepare and present the ecological mitigation, offset, compensation and monitoring package. I will just add that I have been involved in the project for the full 18 months and attended the first MCA session and have subsequently been involved in this role since then.

Existing environment and effects. The forests and natural habitat along and adjacent to the project footprint east of the existing State Highway 3 retains indigenous plant and animal communities that are considered to be of high ecological value. However, the full ecological potential of the area has significantly diminished over many decades by the largely uncontrolled impact of browsing, grazing and predatory animal pests and unfenced cattle. The unmitigated ecological effects of the project will be significant and are likely to include removal of or damage to over 31 hectares of predominantly indigenous vegetation; the removal of up to 17 significant trees from along the project footprint; the loss or alteration of over 3,700 metres of stream; the loss or alteration of habitat occupied by indigenous bats, forest and wetland birds - including kiwi - lizards, aquatic fauna and invertebrates; increased fragmentation of habitat occupied by indigenous fauna; and the risk of indigenous fauna injury or mortality due to vehicle strikes.

The restoration package. A comprehensive restoration package has been developed to address all residual ecological effects of the project with the aim of achieving a net gain of biodiversity 15 years following road construction. The restoration package as a whole meets the key principles of offset, including: (a) establishment of an outcome target of no net loss of biodiversity, and in this case we are proposing a net gain; long term ecological outcomes, and in this case, our pest management offer is in perpetuity; ecological equivalence and proximity. All our proposed restoration activities with one exception are proposed on land adjoined or in close proximity to the Project site, the exception being the lizard enclosure.

Connectedness, so all mitigation and offset activities will be on adjoining land that is physically connected to the pest-managed Parininihi area operated by and owned by Ngāti Tama. Our high likelihood of success and in this case we are adopting practices and techniques that are well known and that have produced successful ecological outcomes locally nationally.

I refer to Mr Singers' evidence yesterday, referring to the pest management techniques that will be used which are well practised. Intensive, multi-species pest management in

perpetuity over a 3650 hectare area is the principal focus of the restoration package. Pest management has been chosen because it can be expected to result in considerably more rapid and more ecologically diverse recovery of forest biodiversity at the project site than could be achieved by more conventional restoration methods such as planting, although I note that planting is also included of course.

The restoration package proposed for the project, updated since the production of my evidence-in-chief and covered in my supplementary and rebuttal evidence, is as follows. The pest management area has been increased in size from 1085 hectares to 3650 hectares. Pest management over this enlarged PMA will be in perpetuity and will include the intensive management of rats, mustelids, possums, feral cats, goats and pigs to low densities, as well as the exclusion of all farm livestock.

Commissioner, I am just going to add a point of clarification here too, because I think through some of the DOC evidence submitted, there has been a bit of confusion. The entire 3,650 hectares area will be managed to the same intensity, so there are no exclusion areas. All the stretch of highway areas will have that same intensity of management.

The second part of the package; 6 hectares of kahikatea forest will be planted and that is new forest into the valley areas that currently do not have it. 9 hectares of mitigation planting; fencing and planting of 8.455 km of stream. The riparian planting will occupy an average of 10 metres each side of the streams that will be restored, and that equates to nearly 17 hectares of planting.

200 seedlings will be planted of the same species as each of the significant trees that will be felled along the project footprint. Currently 17 significant trees have been identified by Mr Singers, so at this stage 3,400 seedlings will be planted.

The residual ecological effects on lizards will be compensated for by the capture and translocation of striped skink and arboreal geckos salvaged during vegetation clearance, and they will be taken to a pest-proof fenced enclosure of a minimum size of 1 hectare, built around suitable habitat in an area where striped skink have recently been recorded. As Mr Chapman has just explained, we have identified a suitable area for that to occur.

Kiwi roadside barrier fencing will be built along areas

of roadside margin that are considered to be locations where there is a high risk of kiwi attempting to cross the road during construction and road operation. And we heard from Dr McLennan yesterday about that.

The bat vegetation removal protocol has been altered to include trees of 80 cm DBH or larger or, at the bat ecologist's discretion, trees greater than 50 cm DBH, rather than trees larger than 15 cm DBH. And we just heard from Mr Chapman - I will not repeat the next bit about the rationale behind that, but that is our approach in terms of the vegetation protocol.

We have agreed to the establishment of an Ecological Review Panel including personnel with recognised pest management expertise to review the pest management and monitoring programme, and to provide guidance and recommendations in the event that the pest management programme fails to meet any performance targets in any two consecutive years. Just note that the name of that panel has changed a little bit. Various iterations of evidence. What we have recognised and just as a point of explanation, is that there is a pest management component to that, which requires expertise that is different from the other elements of commentary or review for ecology. We have agreed they will all participate as one panel which will be

the Ecological Review Panel, but the functions of those people in there will be different. So for the pest management side we will have some pest management experts. For reviewing any other aspect of ecology, whether it is the freshwater outcomes, invertebrate or lizards for example, we will call on independent experts to be part of that panel to get that independent reviewed. So there are two components but they sit on the one panel. Hopefully that clarifies that a little bit.

THE COMMISSIONER: Thank you.

MR MACGIBBON: Details of the restoration package and the proposed methods and monitoring can be found in chapters 3 to 10 of the ELMP. As you have heard, there are elements that are being updated.

Projected ecological outcomes. The enlargement of the PMA to 3,650 hectares has increased the forest area under perpetual intensive pest management by 336 per cent compared to the originally offered 1,085 hectare PMA. As a consequence, this has substantially increased the magnitude and diversity of ecological recovery that will result. The size, duration and intensity of the proposed pest management programme is unprecedented as mitigation or offset for the construction of a

new road in New Zealand, and will, in my professional opinion, generate biodiversity gains that are significantly greater than the likely residual ecological effects of the project.

Intensive enduring control of rats, possums, mustelids, feral cats, goats, and pigs and the exclusion of farm livestock will induce regeneration of many palatable plant species, measurable improvement in forest canopy condition, and increased recruitment of many bird species including kiwi, long tailed bats, many invertebrates, and some lizard species. The kiwi population alone is estimated to increase by 1,220 extra birds over a 25-year period as a result of the pest management programme.

The 8.455 km of stream fencing and planting will create riparian and aquatic habitat that has not occurred at the proposed restoration sites since the land was cleared for farming, and the ecological benefits have a high likelihood of occurring because the restoration sites are physically connected to a reliable source of animals to colonise the restored reaches. And we heard both Mr Hamill and Dr Neale refer to that yesterday.

The proposed striped skink pest-free enclosure will improve

the long-term prospects for this at-risk declining species in the north Taranaki region, with opportunities likely to arise in the future for relocation of lizards back into the PMA and other North Taranaki locations.

In summary, I believe that the restoration package proposed, including a PMA of 3650 hectares, 32 hectares of mitigation and offset planting, and the establishment of a 1 hectare or larger pest-free lizard enclosure can be expected to create substantial biodiversity gains by year 15, well in excess of the effects caused, and of a magnitude that is unprecedented as mitigation/offset for a road construction project in New Zealand.

This response to submissions and section 42A reports. Three submissions from DOC, Forest and Bird and Ms Lacy were received that relate directly to concerns about the impact of the project on biodiversity and the proposed restoration package. Issues raised by DOC are addressed in detail in my supplementary and rebuttal evidence, and I suspect you will probably have some questions on those. I consider that the subsequent enlargement of the PMA to 3,650 hectares will address the concerns expressed by Forest and Bird and Ms Lacy.

In the NPDC Section 42A report, Wildland Consultants proposed several additional mitigation and offset measures that they believe will address the ecological effects of the project. The enlargement of the PMA to a minimum of 3,000 hectares, as they requested, has been adopted, obviously with the enlargement to 3,650 hectares. The other two main proposed additions of Wildland. Mitigation plantings to be at a 1:2 ratio not 1:1, and offset planting of 19.85 hectares of hill slope forest have not been adopted for reasons that I have discussed in detail in my evidence-in-chief.

Supplementary and rebuttal evidence. Summary of rebuttal evidence, in this case from DOC. I have responded to a range of comments and areas of disagreement expressed by Dr Barea about the restoration package in his evidence, and also addressed invertebrate biosecurity issues raised by Mr Edwards, and provided my views on some of the areas of concern related to the pest management programme expressed by Dr Shapiro.

Commissioner, I just want to add at that point, I have in my rebuttal evidence comments that related to Mr Edwards' recommendations for biosecurity aspects. While the broad tenor of what he puts in there, and his major point I do agree with, principally the need for doing biosecurity checks at nurseries,

I have no contention with at all. I also agree with the fact that a pre-construction survey for invasive invertebrate species should be done on site. I however do not agree that it is necessary to do any post-construction or during the time of the post-construction assessments of those animals. I think if we assess what is present at the site and determine what is there, naturally now and what is important to not allow to enter, and if we apply a rigorous biosecurity programme at the nursery sites, I do not believe there will be any necessity to come in later and do further surveys. So that is the one discrepancy from Mr Edwards' recommendations. Otherwise, I agree with what he has to say.

So just to conclude my summary, after giving due consideration to all of the issues raised, including the recent update of the section 42A report, and having responded in detail, I remain of the opinion that the restoration package, as currently proposed, will provide substantial biodiversity gains by year 15, well in excess of the effects caused by the project. Therefore, the restoration package appropriately addresses the ecological effects of the project and will provide substantial biodiversity gains in perpetuity. Thank you.

THE COMMISSIONER: Thank you, Dr MacGibbon, for that. I will

start with the question, and I will ask around your paragraph 6 of your summary statement. So, as you know, I was asked to adjourn the start of the hearing to provide some more time for the various ecological experts to get together and see whether a resolution could be found, and I understand you were involved on behalf of the agency leading those discussions?

MR MACGIBBON: That's correct, yes.

THE COMMISSIONER: And my read of the request was that while there was some disagreement between the parties, there was an opportunity to come to a resolution through further discussions. That was the intent of the requested adjournment?

MR MACGIBBON: Yes.

THE COMMISSIONER: Okay. So, in your opinion, how close to resolution did you get to? Is it a long way away? Is it a small number of matters that are still in contention, which is my read of the evidence that has been given to me by the agency experts, and I will hear from the other experts, certainly ask them the same questions but, you know, how close do you think you are from overall agreement on these matters?

MR MACGIBBON: Yes and, look, I have to be careful that I'm speaking my interpretation I guess of the meetings we had, but I think in fact we were quite close, and I'd have to personally say I was disappointed we didn't get to where we could have come to some agreement.

I think that the major area of discrepancy, and perhaps the only sizeable one, is around the size of the PMA for the purpose of managing bats for the bat population. I think the other areas, my interpretation of our discussions were that we were reasonably close and we could have sat down and battled through the conditions and come to an agreement.

THE COMMISSIONER: So my read of the evidence was both the Wildlands' team, the DOC team, were suggesting a larger PMA area was required, and they were consistent about that and you have responded to that.

MR MACGIBBON: Yes.

THE COMMISSIONER: But the figure 3,000 ha being cited in the evidence, I think it is the bat expert for DOC was suggesting 5,000 ha was the -- and you have come somewhere between 3,650, so that is where you have landed up as a reasonable compromise.

MR MACGIBBON: It is, and, look, what we've tried -- you know, the transition I guess from the original 1,085, we recognise, first of all, that there's a lack of a large amount of research on bat population recovery, and the only work that really -- of any substance that's been done, has been done, are two studies in Fiordland, one of which the bigger of the two has been done by Dr Colin O'Donnell.

Recognising it's a different part of the country and extrapolation for that work here is always a challenge, but it's the only piece -- standard piece of work that there is, and in that study it shows that above 3,250 they started to -- in terms of pest management, they started to record a population board increase improvement.

So we, in the absence of any other information, we felt it was legitimate to take on science that exists and recognise that, and our 3,650 ha offer is really in recognition of that bat research, so if we can get over that 3,350 ha threshold that seems to be in that paper, then we would be going -- increasing the likelihood of getting a positive outcome for bats. The 3,650 figure itself sits, because obviously my role in this is getting to find physical areas of land that we can do this work

on, and so it fits with some geographic boundaries. It makes some sense, so the key intent was to get over that 3,350 figure that was in -- that has come out of that research.

THE COMMISSIONER: All right. So a question around the area and its security to be able to be accessed. Have those agreements been made with the landowners, or is there conditions required to ensure that the land is, you know, locked up and agreements made?

MR MACGIBBON: You're talking about the PMA?

THE COMMISSIONER: Yes, the PMA.

MR MACGIBBON: The vast majority of the land is obviously Department of Conservation administered land, and we've had discussions about that, and I think the mechanism is present to enable that to occur, so in that part I think that's fine.

We've had discussions with Ngāti Tama, and clearly they've got a sizeable contribution to it in the Mangapepeke Valley. I think too we're progressing on that with support.

There's a little piece of NZTA land that sits between the area we are contemplating and the Parininihi that was land from Ngāti Tama. There's no dispute over that.

The one piece of land that we've yet to secure I suppose, and there's ongoing discussions, is a piece of land to the north owned by Tony Pascoe, which, yes, certainly from an ideal perspective we'd like that to be part of the PMA, but at this stage that's not confirmed.

THE COMMISSIONER: I will ask Mr Roan about, if the project is approved, how that PMA is actually guaranteed, and is that some sort of condition precedent before we get going that has to be locked in and underway in terms of a legal access rights perspective. Yes.

MR MACGIBBON: All the way through the process of course, I've had to look at multiple options in case land ownership's not available. We do have some, if you like, contingencies of land. We could have more DOC land. It's to the south, for example, southeast. There's a large tract of forested land that adjoins quite closely. In fact, I think, if you're interested, do you want me to throw that up for us just on the screen, I could perhaps show you.

You can see that the green area, Commissioner, if we look at the bottom right where it ceases across the valley at Pisa Forest immediately across the bottom corner. That is also DOC land, so that is an area we could move to.

Additional area you'll see up in the middle of the top, middle of the picture, is an EI cross hatched area as well. That is a privately owned QEII block. I've had discussions with the landowner there and she is interested in the project, supportive of it, but we haven't got to the point where I've asked whether she would commit that to the PMA, but it's an option if we should lose or not get any of the land, including Tony Pascoe's, for example. So there are options there I think where good quality forest that would benefit from pest management.

THE COMMISSIONER: So your evidence is that there are other options, but you would agree that they would need the legal ability to exercise pest control would need to be guaranteed before project commencement.

MR MACGIBBON: Absolutely, and of course the perpetuity thing becomes an issue, and so it's a perpetual right, has its own

requirements in terms of attachment to title, particularly on private land.

THE COMMISSIONER: Yes. All right. Okay, I will just see what else I have here.

I am interested in paragraph 10 of your summary statement. I am getting certainly opinion by, I have not counted them up, but well over a dozen or probably more ecological experts giving their opinion about whether the PMA and the other offset compensation requirements meet the no net loss or get into the gain basis. So you have made a statement in paragraph 10 of the summary that it is your professional opinion that construction of the new road will generate biodiversity gains. They are significantly greater than the likely residual ecological effects. So that is your opinion.

MR MACGIBBON: Yes, it is.

THE COMMISSIONER: Do you provide that as an ecologist that has got general knowledge across a whole range of different areas?

MR MACGIBBON: Yes, I do, and I've been fortunate perhaps in being a restoration ecologist I do work across all of these

fields, and I've clearly had to acquire what would be generalist skills right across. I have pest management expertise. I've participated in multiple bat survey work. I don't pretend to be an expert like Mr Chapman or Dr Colin O'Donnell, but I am aware of that. I have a vegetation and plant background. I run the Department of Conservation plant nursery and done restoration projects. So I have a diverse, if you like, range of skills.

Having said that, I am also reliant on the expertise of our project ecologists to feed into this. So that's not just my opinion. It is mine, but it's also a feed-in of the opinions of all the experts you've heard so far.

I would add too that with the exception of the bat question, the bat issue, all of our team, including myself, we're happy with our original 1,085 ha PMA as being sufficient to offset all the residual effects of ecology with exception of bats. That was the one that we weren't entirely happy with.

So, yes, all of the experts, I can't speak entirely for them, but if you were to have asked them, they would have I think expressed that they were happy with the 1,085 ha.

THE COMMISSIONER: I am not asking you to speak for them. You are giving your opinion.

MR MACGIBBON: Yes, and that's my opinion as well. So the extrapolation of that is that with 3,650 ha we are getting a substantial amount of additional biodiversity gain in addition to meeting the needs that we feel are required for bats, so in all areas, and certainly vegetation and native fauna and invertebrate life.

THE COMMISSIONER: So the increase to the 3,650 ha gets you to the measure that Mr Chapman and you think is required for the bat offset in compensation, and in doing that it elevates the benefits of all the other factors over and beyond, is that your opinion?

MR MACGIBBON: It is, yes.

THE COMMISSIONER: Well, I will take you to your supplementary evidence, at paragraph 9 where you do talk about this increase in the size of the PMA. My question really is, are the benefits of increasing it by three plus in size, are the benefits lineal? Do they follow that, so if there's three times the size, there's three times the amount of benefits? Does that --

MR MACGIBBON: Look, in general terms, yes. What we're getting is a larger scale recovery of habitat, both vegetation in it -- and the quality of the habitat or indigenous fauna to live in. The whole of the area that we have proposed for the PMA, including all of the Department of Conservation land, has for a very long time not only had animal pests, but also fund livestock. So very few of the valleys and the perimeters of this Department of Conservation block have got any fencing, and the destruction caused by cattle in particular in those river valleys is, you know, you don't see a lot of it in New Zealand, so what I recall from my days in the Forest Service in the 1980s where I used to look after exclusion plots, wild animals were a lot more numerous, particularly deer, so the amount of damage done in the wider area is as our other witnesses have said, substantial, and as a consequence, when you apply the pest management approach, the recovery that is likely is substantial as well. So, yes, I do believe it's proportionate to the area.

THE COMMISSIONER: In proportion. Thank you. I will just look at your rebuttal evidence now.

Yes, in your rebuttal evidence, I am looking around paragraphs 12, 13, 14 and 15, you are having a debate through

your evidence with Dr Barea about the definition of offset and compensation. Firstly, I think you have your opinion on that, which I would like you to tell me what is a difference, and then in the big picture, do you think in the overall restoration and requirement to look at mitigation offset compensation, it is really academic whether you would find something as offset or compensation. Does that really matter in your view?

MR MACGIBBON: Yes, look I don't actually think probably in terms of definition that Dr Barea and myself disagree. There is a definition of what offset is, and we recognise that, and the vegetation work that Mr Singers has done has been put through the offset calculator model that we used, I think has defined his offset and we accept that, so I don't think we have a great disagreement on what the definitions are.

My issue, as you've suggested, is though that as -- in confronting the effects of this project on the ecology, we've got to demonstrate that we are returning the litigating, offsetting, compensating, whatever it is, no less than the effects. In other words, we've got to create a no net loss situation in general terms, if we can use that definition, and we've preferred to try and approach it in a way that we can actually create a net gain.

Now, the strict definition of the terminology, it's not offset, and I'm probably not able to use that no net loss, but effectively what we are trying to do is create the same thing, and the best that we can determine is can we create a net positive gain in ecological values so that the outcome that we're pursuing is the same, it's just that we've had to use a compensatory approach for a large part of what we're talking about.

THE COMMISSIONER: So your way of looking at it is you are looking for a net positive gain, and the definitions as between offset or compensation, it does not particularly matter when you look at that objective?

MR MACGIBBON: No, and I accept that -- as I said, apart from vegetation, it is all compensation by definition. But we've still got to, you know, evaluate effects and what we're doing overcomes those effects, and in that regard, I think we're still pursuing the same thing.

THE COMMISSIONER: All right, thank you. Paragraph 20 of your rebuttal evidence, and again we have heard from Ms Ongley today about changes that are being promised to the various documents,

including the ELMP. So here you are talking about more intensive edge pest management needing to be recorded, or that the ELMP does not adequately emphasise the need for that, and that they will be added. So, again, those additions to the ELMP, they are going to be coming through in this next iteration in your view?

MR MACGIBBON: Yes, they are. In fact I think that that part is already being added this week. And, Commissioner, that's not really a great change in what we're doing. It's just to emphasise we accept that there is constant reinvasion pressure around the perimeter of any pest added area, and as you will see actually by looking at the area behind you, we've attempted to try and put as much farmland as a natural buffer. I'm not disputing that pests move across farmland, but we've looked to try and create some more substantial physical barriers to stop reinvasion, but as you will also see, there are areas there where the PMA merges with existing forest outside of it, and in those areas, where I'm suggesting that we'll increase the effort to try and reduce the amount of invasion from those unmanaged areas, and that's inevitable in a landscape as this part of Taranaki is. There will be areas of forest that will have large densities of animals that will remain unmanaged.

So those are the areas I'm talking about focusing on. There are things we can do to minimise reinvasion. We can't completely prevent it, but it's increased effort in those areas as proposed.

THE COMMISSIONER: So in reality, what sorts of things do you do, and I am looking at that right-hand area between some bush that is within the PMA and some without? So along that line, what would you do in terms of this issue?

MR MACGIBBON: So the intensity of devices, both traps and bait stations would certainly be one. So you just -- we often refer to the terminology "creating a rim of steel" around the perimeter, so certainly for animals like stoats, that's what you would do.

Stoats are the wild animal, if you like, that is the hardest to stop reinvasion. They move over long distances and sometimes they're averse to trap or trap devices, so you just simply have to increase the intensity of those devices and put extra effort into those to stop reinvasion.

THE COMMISSIONER: All right. In the same vein, paragraph 35 of your rebuttal evidence, again you are acknowledging some

insufficient detail around vegetation outcome monitoring. That is being added to the ELMP?

MR MACGIBBON: Correct, and I acknowledge that our ELMP did not have sufficient methodology in it in its previous iterations. There will be proposed methods for the two parts of the vegetation outcome monitoring, which is the palatal species recovery and the canopy condition recovery, so there is method being written into that as we speak.

THE COMMISSIONER: Yes. I am not quite sure, and I know this is a work in progress, but I am assuming that the changes are going to be tracked into the documents so we can see the new material that is coming in?

MR MACGIBBON: Yes, that's a good point to raise. I'll make sure that happens, Commissioner. I think that's ... yes.

THE COMMISSIONER: Because trying to keep track of this is going to be quite difficult. And also, and I will talk to Mr Roan about this, what would also be useful is where there is still contention about what should be in the plans and detail where you have not added that in, some sort of schedule of things that you have not agreed with, because bringing that all together

through the various evidence I think would be very helpful, and I think it would help Ms Ongley as well. I mean, we can look at that in terms of my decision-making at the end to see ... just some sort of checklist as best as could be done, I think that would be really helpful.

I just had some questions about your Mr Edwards' comments, which I think you have answered already, that some of his suggestions you have accepted, and others you have not.

MR MACGIBBON: Yes, there's only the one, 6.5 of his evidence that I don't necessarily agree with. The rest we do and happy just to have them built into the conditions or certainly into the ELMP. And, as an explanation, sir, we have a fairly substantial overall biosecurity approach, not only from invertebrates, but for other plants and animals and diseases, including myrtle rust, so that will be part of the package for overall biosecurity management.

THE COMMISSIONER: Paragraph 54 of your rebuttal evidence, so this is where you are talking about Dr Barea's evidence and Mr Inger, and there is some question about the certainty of ongoing pest management in the Parininihi area, and you make an assumption that it appears from these comments that DOC is

reviewing its ongoing support for pest control in this area. Do you have any information about that? Is that just you reading between the lines?

MR MACGIBBON: No. I mean, in our discussions with DOC, in particular with Dr Barea, that that conversation has come up. We have contemplated whether, for example, Parininihi could be part of the PMA, and the additionality issue was raised there, but then subsequent to that it's been suggested that perhaps the funding to support that may not be enduring. I'm not in a position to determine what that situation is, but it's been raised by DOC, so it's ...

THE COMMISSIONER: So you are saying that there may be some flexibility in the final PMA area that is determined to include some of that area possibly, or is ... Is that what you are alluding to?

MR MACGIBBON: Well, we could do, yes. We're not suggesting -- well, I'm not suggesting anything greater than 3,650 ha in total because I think we need that, but if as an option of land to use, if we can get over this additionality issue, which will have to be discussed of course, making sure that the work in the

Parininihi carries on. Ecologically, I think it will be fairly important.

THE COMMISSIONER: All right. Do you agree that that goes back to the initial discussion about needing to have the area of the PMA locked in in terms of legal access rights and authorities?

MR MACGIBBON: Absolutely, yes.

THE COMMISSIONER: Wherever it finally lands.

MR MACGIBBON: Correct.

THE COMMISSIONER: Yes. Paragraph 62 where you are talking about Dr Shapiro's evidence. This is a question about buffer areas, and I must admit I am not quite clear on what the debate is here, so could you elaborate on this for me?

MR MACGIBBON: Yes, certainly, and there has been, I think, confusion from a number of sources, so I can understand your confusion as well.

I have referred to the term "buffer" around the edge of the PMA, only in the context of performance monitoring of pest

outcome so, as we talked about, there is always going to be some edge invasion, and it's a generally accepted principle that when you've got a performance parameter to work to in getting pests down to certain densities, and this applies to contractors who are doing the work as much as anything, that that edge area is not included in the area that's evaluated. What you're trying to do is ensure those pests don't get to the core, but certain pests have a -- can, even in 24 hours, can invade into an area, and that can make your data look less than desirable.

So what I've suggested is for each animal type there is a buffer. I think if I recall it's 200 m for rats and possums, 500 m for feral cats and stoats, and a deeper buffer for feral goats in particular, and inside those areas that should be where the monitoring information is recorded and performance is measured. But what was interpreted I think by some is that, the way I've written it perhaps, it implied that we were not going to apply the same intensity of pest management. That's not the case. The whole area will be just as intensely managed. In some cases, some of the edges, as I've just said, will be more intensively managed. That's just where the monitoring, the performance monitoring data will be determined from. That's what the buffer is.

THE COMMISSIONER: So the buffer is inside the PMA, not a buffer outside?

MR MACGIBBON: That's right. So it's just simply a zone that is excluded from monitoring that comes from the outside edge in by a certain lineal measurement.

THE COMMISSIONER: So this is when you are measuring things like residual trap, capturing those sorts of things.

MR MACGIBBON: That's correct. So each animal type we have -- we've got performance targets --

THE COMMISSIONER: Yes, I see that.

MR MACGIBBON: -- and they're as much performance against the alliance, the agency, over time as -- and they are also performance targets for any contractor who's doing this work. So, as I said, we exclude the buffer area from that assessment just to make the targets moving forward.

THE COMMISSIONER: Thank you for that. Look, I think that is everything I had for you, Mr MacGibbon. Thank you very much.

Mr Allen, it is 10.30 am. Shall we take a break and, given that coffee time is upstairs, I think if we take 20 minutes by the time we order and come back, that is a bit of extra time, so back at 10.50 am.

(A short adjournment)

MR ALLEN: Commissioner, we have Mr Milliken ready to go giving his construction evidence.

THE COMMISSIONER: Mr Milliken, welcome.

MR MILLIKEN: Good morning, Commissioner. Can you hear me?

THE COMMISSIONER: Yes. Can everyone else hear Mr Milliken?

MR MILLIKEN: All right, so I was appointed alliance manager for the project team in March 2018, prior to which I was the earthworks manager, a role I've had since March 2017. As the alliance manager, I have the overall day-to-day responsibility for the delivery of the project by the alliance.

I've been to site at least eight times in varying seasons and weather conditions on both the east and west sides of the

existing state highway. I've expressed that poorly, Commissioner. What I mean is I've been to both sides, I've been the full length of the alignment for the new line.

THE COMMISSIONER: Thank you.

MR MILLIKEN: Based on my experience within the construction industry, the project, although significant, is not a particularly large-scale project. The total earthworks volume, the total length of roadway to be constructed as well as the total area of the site are not on the scale of several large high-profile projects currently underway in New Zealand. This means that the project resources and attention can be focused on the works, especially in relation to reacting to weather forecasts and seasonal changes.

The next section, section 4, I was proposing not to re-read. I feel like you might have seen the project stuff quite a few times, unless you would like me to go through it?

THE COMMISSIONER: No, I am happy with that. Thank you.

MR MILLIKEN: The project will be constructed in a region-based and zoned manner with works occurring in a staged manner within

each zone. All works will be undertaken to minimise environmental effects to the extent practicable, in accordance with the CEMP, C-E-M-P.

The programme also recognises the poorer weather conditions likely to be encountered in winter, and has used a higher number of stand-down days for earthworks in those periods to allow for managing sediment and erosion risks by employing the SCWMP process.

At any one time during the construction process, works will be carried out in multiple zones, across both regions, being the north and south regions. Works will commence in the ten different zones at different times. The general sequence of construction in each zone will be preparatory works will be carried out, such as surveys and investigations, monitoring, removal of stock and pests, such as pigs and goats, and fencing off of construction area, initial earthworks to begin to establish site access, tracks, construction yards and lay-down areas, soil disposal sites and erosion sediment controls. That'll be followed by establishment works to open the site through vegetation clearance, stream diversions and construction of further sediment control structures, and then the main construction works will follow, such as bulk earthworks,

drainage installation, bridge and tunnel construction, pavements and surfacing, and reinstatement and finishing works.

The main construction yard will be at the northern end of the alignment in zone 10, and will be accessed from State Highway 3. This 5,000 m² approximately construction yard will be the central hub for the construction of the project.

Ten site access points off State Highway 3 and associated access tracks and roads will allow for direct access to works and for works to progress in multiple locations at once. The site access points will be developed and managed in accordance with the Construction Traffic Management Plan to ensure the safety of access to and from the site from State Highway 3, so that's the safety of State Highway 3 users as well.

The site access points required would be built to applicable standards and codes, acting on the advice of traffic engineering professionals. I consider that approaches such as those outlined range from temporary and short-term solutions to ones that are semi-permanent and more extensive, and based on the length of time and number of traffic movements required, are a practical solution for site access and egress.

Bulk fill will be mostly accessed from cuts carried out as part of construction. Aggregates, concretes and pavement and surfacing materials and general construction items and fuel will be delivered to the site via State Highway 3.

Water will be required for dust suppression and other construction activities, and will be abstracted from one site in each of the Mimi and Mangapepeke Streams. Water abstraction will be carefully managed and limited to prevent adverse effects on water quality and in-stream ecological values, in accordance with the CDMP. That's the Construction Dust Management Plan. Wastewater, meaning sewage, will be removed from site via tankers. There'll be no wastewater, meaning sewage, treatment or disposal on site will occur. Truck washout will be provided onsite in accordance with the Construction Water Management Plan. That's referring most specifically to concrete trucks and that will drain to sediment ponds for treatment.

The project is designed in order to minimise earthworks, and to optimise the balance between cuts and fills so that large amounts of materials are not required to be either imported or disposed of offsite.

Having visited the site several times, I am satisfied that the areas to the north and south of the tunnel have had constructability options developed that demonstrate we are able to construct those fills in a way that manages erosion and sediment control, as discussed in the evidence of Mr Ridley.

The staging methods devised are consistent with best practice construction, industry erosion and sediment control.

The bridge type and construction method has been selected specifically to minimise the effects on the surrounding environment. That relates to bridge 1, the 120 m long bridge, most specifically.

Responses to section 42A. The 42A report sought further information in relation to the differences between the various MCA1 and MCA2 options, and in particular asked questions about the costs and general constructability of the chosen project route as opposed to previously considered "online" options.

I address those queries in my evidence. I note in particular there was a significant landslide feature across the path of the Z options. Large-scale works would have been required in order to make the Z option route appropriately

resilient, adding costs in the order of \$112 million for the retaining wall portion alone.

A Z option route would need to be constructed in very close proximity to the existing State Highway 3, significantly increasing construction difficulty and costs. It makes all elements, not just the retaining wall, difficult. The entire online option Z has constructability issues around live traffic.

The interaction of existing traffic with a Z option would be very disruptive to both the work being done and the road users. The construction of the E option will cause relatively little disruption to users of the existing State Highway 3.

Mr Symmans discussed issues associated with the resilience of the online option Z in more detail in his evidence.

Commissioner, I also made a note there in my capacity as alliance manager to talk a little bit more about the design, tunnel design intent. Could I draw a drawing for you?

THE COMMISSIONER: Certainly, yes.

MR MILLIKEN: So we talked about shoulder-width in the tunnel, and perhaps we didn't express quite as fully as we could what's happening. The road alignment outside the tunnel has got some barriers - giving a little bit of licence here - has a shoulder and then a -- on each side, and a shoulder of 1,500 mm and it repeats in the tunnel. That absolute width is no different. I'm having quite a bad time here, but that's okay. Egress passage, there's a barrier here, there's a barrier here, the centre line. What happens in here is there is the important part is that there is a deliberate joist to separate the traffic slightly because the risk of head-on collisions and associated fire inside a tunnel is a lot higher, so there's a 600 mm wide medium strip, which brings this width down to 1,200 mm, the lane remains unchanged if you see what I mean.

There will also be signage on the tunnel, outside of the tunnel, being very clear that the preferred route for cyclists and pedestrians is through the egress passage. If they choose not to use that, the tunnel will detect that there is someone in there, and it will warn -- that's a person, believe it or not, the tunnel will warn, using flashing lights, will warn traffic that there's some kind of obstruction in this area. Also the remote tunnel monitoring team can look on the CCTV in real time, decide what they think -- if they think that is more of an issue

than the automatic systems believe, they can reduce the speed environment inside the tunnel whilst that person or obstruction is on the shoulder. So it's, I guess what I'm flagging, is there's more going on than just a reduction in shoulder here. It's an interaction of a complex tunnel management system. I just thought I'd clarify that.

THE COMMISSIONER: Yes. Stay there. So, pedestrians and cyclists can move through the tunnel? There's no restriction, they can walk along the side?

MR MILLIKEN: They could do. But, again, it's our design preference and the operation preference, and the signage will say this, is that they use that.

THE COMMISSIONER: So they can go through that?

MR MILLIKEN: Yes. Yes.

THE COMMISSIONER: And are they directed to that in any way, or is that open?

MR MILLIKEN: They are, sir. The signage outside of the tunnel. They're still going through the design process, but signage

outside the tunnel will direct people to go through the egress passage. Not everybody always follows every sign they see on the road, so it does have a capacity to adapt to the situation.

THE COMMISSIONER: All right. I had not appreciated that egress passage will be used for conveyance of cyclists and pedestrians if needed. All right, thank you.

So I think you have finished pretty much with that diagram, is that where you got to?

MR MILLIKEN: Yes, I have.

THE COMMISSIONER: Thank you for showing that, or taking me through that Mr Milliken. The only questions I really had was when you respond to the section 42 responses in your note here, is that in respect to the matters raised by Dr Doherty in his 30 July letter to the Council?

MR MILLIKEN: There were some further questions asked again.

THE COMMISSIONER: Yes. So have you looked at those? They're all about option Z I think, and cost differences and costing bridges and bridge abutments. So I heard from Mr Boam, one of

the engineering witnesses, to say that the \$112 million difference between Z and E was only associated with the retaining wall. The fact, the actual difference in cost was something like \$183 million, overall cost. And I asked for evidence that the elements of each of those had been through rigorous cost-estimating processes, and I had evidence to say that. So have you got any reason to, in terms of Mr Doherty, think that any of the costs are underestimated?

MR MILLIKEN: No. So I was involved in that process of costing. So the 112, definitely around the retaining walls. The retaining walls were difficult to construct, just their size and duration, et cetera. But there was also the Z option on the southern side has multiple interactions with the existing alignment and so they added a significant number of dollars as well. So, yeah, I was involved in that process and I think that those -- the process does reflect the cost of an online option.

THE COMMISSIONER: Yes, and also just the theme of Mr Doherty's questions are he thinks you have perhaps overstated the construction challenges of an online option.

MR MILLIKEN: Yeah, so that's fair.

THE COMMISSIONER: And I think there is just a difference of opinion there, is that how you would regard that?

MR MILLIKEN: Yeah, I think -- I think it's a difference of opinion. I've done a lot of online construction work, tunnelling sites in the middle of the CBD in Brisbane. What's most interesting is going to lunch yesterday and seeing these people out here that are doing this footpath removal. So that task, with a 20-tonne excavator and a 30-tonne dump truck, would be done in an hour. Instead, it's two people. Instead, there's an eight-tonne excavator, there's a spotter, there's two labourers, there's an operator, a truck driver. It took them the best part of the day. Just -- it also involved them having to put pedestrians out onto the road with the associated signage and all the rest of it.

So even that very minor task, the minute there's an interaction with road users and pedestrians, changes the way you select machinery, it changes the way you do the task. They had to stop every time pedestrians are walking past; I know because I stopped them a few times myself by going to get coffee. So it's just a lot more disruptive. It's not just the number of vehicles, it's having the facility to allow vehicles to go through a site.

THE COMMISSIONER: In terms of the construction -- again, I am just looking at Mr Doherty's questions. The construction timeframes between the option Z and the option E, the overall programme, would that be similar?

MR MILLIKEN: So option Z is actually faster, which is interesting. It's -- the reason it's faster is because it's got multiple access points so you're assuming that you can build everything at once. If you go in and look at the individual elements inside of option Z, every individual element takes the best part of the three years.

So each -- you can do them all at once but they're all very slow to do, which is where -- a lot of where the cost comes from. It also means that the disruption -- it's difficult for me to see how an online Z option wouldn't cause three years of fairly significant disruption to road users, because you'd always be there.

THE COMMISSIONER: But I think he said the overall construction timetable for Z would be less than E.

MR MILLIKEN: Yes.

THE COMMISSIONER: Yes, okay. All right, I think I have done that as well as I can in terms of just trying to look at those questions. And I don't have any other questions, so thank you very much.

MR MILLIKEN: Okay.

THE COMMISSIONER: Thank you.

MR ALLEN: Thank you, sir. And we're moving to statutory planning. For some reason, the screen behind you is showing the surf break, so maybe that -- no, sorry, Sam, I was being cheeky. I'm just saying maybe that could be the statutory planning context, I'm not sure. Or planners like surfing. But now on to Mr Dixon for statutory planning.

THE COMMISSIONER: Welcome, Mr Dixon. Thank you.

MR DIXON: Thank you. Are you happy for me to proceed?

THE COMMISSIONER: Yes, I am. Yes.

MR DIXON: Okay. So I have been involved in the project since early 2016, which was prior to the appointment to the alliance in March 2017. During 2016, I shared my local knowledge of the area with the Transport Agency and the project team, with Mr Napier. I also undertook at that stage a range of planning-related tasks, including constraints mapping and various inputs to an initial multi-criteria analysis, some statutory assessment, early stakeholder engagement with the councils and Ngāti Tama.

I consider that I do have a very good understanding of the project environment. I live locally. I regularly travel north on State Highway 3 from New Plymouth for both work and pleasure. Since the appointment of the alliance in March 2017, I've continued to provide planning and local engagement support to the project. I've worked with members of the alliance design and planning team - in particular Mr Roan - and the various technical experts to identify and assess potential adverse effects.

I attended all of the route selection MCA workshops - MCA1 and MCA2, led by Mr Roan - and I've continued to support the community and regulatory engagement led by the Transport Agency.

So my evidence in chief provides my assessment of the notice of requirement and the resource consent applications, in light of the considerations set out in the relevant sections of the RMA. And in doing so, my primary focus has been to provide an assessment of the project against the relevant statutory planning instruments.

In summary, I consider that the proposed works for the project - as set out in the notice of requirement, AEE, and supporting technical reports and expert evidence - address the matters set out in sections 171 and 104 of the RMA; and that the designation is necessary to protect the land required for the project, so as to enable this construction operation and maintenance; and that the designation provides for land use under the District Plan, and additional resource consents are required for works pursuant to sections 9, 12, 13 and 14 and 15 of the RMA; and that the necessary resource consents have been sought in parallel with the designation as is appropriate. Also -- yeah. They've concluded that the -- yeah, the -- yeah, the AEE is comprehensive, supporting technical documents and evidence is comprehensive for the project, and that it, I guess, appropriately identifies and assesses the environmental effects of the project.

So in terms of matters set out for consideration under section 171(1) of the RMA, I have had particular regard to the relevant provisions of policy documents, the consideration of alternatives, reasonable necessity of the designation, and other matters. In terms of the matters set out for consideration in section 104 of the RMA, I've had regard to the relevant provisions of policy documents, actual and potential effects, and other matters. So the planning documents relevant to my assessment are set out in my evidence in chief at paragraph 8.

As detailed in the evidence of Mr Napier, Mr Roan, Mr McCombs, Mr Copeland and Ms Turvey, the proposed works will have positive effects and are reasonably necessary to enable the Transport Agency to meet both its statutory obligations and the project objectives.

THE COMMISSIONER: Mr Dixon, the reference to Mr Kenderdine, is that a mistake, is it?

MR DIXON: That is an error, yes.

THE COMMISSIONER: I will just put a line through that.

MR DIXON: So the positive effects are also consistent with the relevant objectives and policies of the planning documents and other relevant strategic documents for the region, which includes the Taranaki Regional Economic Development Strategy, August 2017, and the long-term plans for the Taranaki Regional Council and the New Plymouth District Council.

As detailed in the assessment of the environmental effects and extensive evidence provided on behalf of the Transport Agency in relation to potential adverse effects, the project will avoid, remedy, mitigate, offset or compensate the effects in a manner that is consistent with the relevant objectives and policies of the planning documents. So in terms of the objectives and policies, which are set out in my evidence in chief, paragraphs 70 - 112, there are key themes or issues in the relevant statutory planning documents as they relate to the project.

These themes flow through the regional policy statement and associated regional plans, and the District Plan. The key issues and themes that are expressed within the planning documents that are particularly relevant to the project are identified in my evidence in chief, and I've listed them there. They include growth and developments in Taranaki, regional

significant infrastructure, public health and safety, the avoidance or mitigation of the effects of natural hazards, tangata whenua values and cultural heritage, biodiversity and water quality, and natural features, landscapes and amenities.

In my evidence in chief, I identify these particular themes and I refer out to the various statutory plans, the project technical reports, the assessment of environmental effects, and the evidence of others. Overall, I conclude that the project is consistent with the outcomes sought by the planning instruments, which a planner and a decision maker are required to have particular regard to when considering the notice of requirement. So I note that Ms McBeth has reached a similar conclusion to my own, albeit cautiously, due to the complexity of the ecology and cultural effects, and the level of confidence or degree of certainty that the project can offset or compensate for these effects.

So, overall, I have concluded that the project is consistent with the outcomes sought by the planning instruments which the District Council and the Regional Council and the decision maker are required to have particular regard to when considering the notice of requirement and resource consent applications. Overall, I consider that the project is

consistent with the relevant objectives and policies of the planning documents, and with the purpose and principles in part 2 of the RMA.

So in light of the updates to the project since the Transport Agency's evidence in chief was filed, my assessment and conclusions as stated in my evidence in chief still stand. I consider that my assessment and conclusions are strengthened by the amended biodiversity offset and compensation package and, in particular, the increased size of the pest management area.

So with reference to submissions received on the applications, I have read the submissions that have been received. A large number of these submissions have been received which raised similar issues in support of the project. From my reading of the submissions, there are a very small number that explicitly challenge the project's consistency with part 2 of the RMA and the various planning instruments administered by the District and Regional Council.

In my evidence in chief, I respond to those submissions relevant to statutory matters, specifically those from Te Korowai and Forest and Bird. And with reference to the NPDC's section 42(a) report, I note that Ms McBeth has adopted the

assessment provided within appendix A of the AEE as it relates to the policies and objectives identified within that assessment. As I've mentioned, Ms McBeth has expressed reservations in her report regarding whether the adverse effects on ecology and biodiversity can be adequately addressed, where the level of mitigation and offsetting proposed is anticipated to result in a "no net loss" in biodiversity over the medium term.

In my opinion, on the basis of the evidence on behalf of the Transport Agency, the project will appropriately maintain and enhance ecological values. With reference to the evidence of Mr MacGibbon, in particular, I am given confidence that no net loss in biodiversity will be achieved over the medium term. Mr MacGibbon - just looking at paragraph 32 of his supplementary evidence - states that the proposed pest management programme will generate biodiversity gains that are significantly greater than the likely residual ecological effects of the project.

The ecology evidence on behalf of the Transport Agency identifies that there is conservatism built into their modelling and that they have a high level of confidence that the proposed offsetting and compensation package will deliver a net gain in biodiversity over the medium term.

So with reference to Mr Inger for DOC and Mr Carlyon for Te Korowai, in my rebuttal evidence, paragraph 11, I agree with Mr Inger on behalf of DOC that the particular section 6 matters that he has pointed to are required to be recognised and provided for, and are particularly relevant because of the unavoidable effects the project will have on indigenous vegetation and habitats. So Mr Inger identifies at paragraph 10.2 of his evidence that the main issues are the quantum of mitigation and/or compensation to address adverse effects on long-tailed bats and freshwater values. Also, Mr Inger identifies that he has relied on the evidence of the DOC ecologists to inform him that the level of biodiversity compensation is inadequate and that, therefore, the purpose and principles in part 2, section 6, are not provided for.

I disagree with that. It is my view that part 2 and section 6 matters are provided for by the project, and I am given confidence from the expert ecology and restoration opinions presented by the Transport Agency, and in particular their response in rebuttal evidence. In particular, in relation to bats, which is a matter contested by DOC's ecology experts, I note Mr Chapman's evidence that the present bat population in the Mt Messenger area is likely to be declining and, without the

project, that decline will continue. In my opinion, on the basis of the evidence on behalf of the Transport Agency, the project will appropriately maintain and enhance ecological values, and it does provide for section 6(a) and section 6(c) matters.

And, finally, with reference to Mr Carlyon's evidence on behalf of Te Korowai, I have addressed his assessment in my rebuttal evidence. From my assessment, none of the planning provisions that Mr Carlyon refers to are so directive as to be highly weighted in directing the Commissioner's decision to decline the notice of requirement and consents in the manner sought by Mr Carlyon. And I think in any regard, the matters that Mr Carlyon has chosen to address have been considered in my analysis and also in the detailed statutory and objectives and policies considerations which are presented in the assessment of environmental effects.

THE COMMISSIONER: Thank you, Mr Dixon. Just a question for you on the last points about the differences of opinion on the ecology evidence.

MR DIXON: Sure.

THE COMMISSIONER: Have you read all the evidence of the Department of Conversation ecology witnesses in your analysis?

MR DIXON: I have, yes.

THE COMMISSIONER: And I suppose you have picked out one area of difference that you have looked at around the bat evidence, where there is a difference of opinion and you favour Mr Chapman's evidence for a particular reason. But have you done any other analysis comparing the difference --

MR DIXON: I think I've picked on bats, perhaps, but I could have expanded upon that and, as we've heard from Mr MacGibbon, it's his view that there is conservatism built into all of the modelling that's been undertaken. And while there is never absolute, 100 per cent certainty, there is a high degree of confidence and certainty in the package that has -- well, the restoration package that has been proposed. So while at paragraph 22 there, I point towards bats in particular, I think there is, you know, there is confidence across all ecological disciplines that has been presented by the Transport Agency's ecologists that the package will deliver what it is promising to deliver.

THE COMMISSIONER: All right, thank you. I return to a few questions around your evidence in chief, and I would like to ask you firstly about this lapse period. You deal with it in paragraph 33 and 35 of your evidence in chief. We had some legal submissions about the lapse period on the notice of requirement. What is your position after listening to that, Mr Dixon? I notice in the conditions there is a ten-year lapse period written into the condition, so where do you stand on that?

MR DIXON: Just reading what I actually wrote, Mr Commissioner. I think I'd like to say I'm comfortable with it, with what I've stated in my evidence in chief.

THE COMMISSIONER: That a lapse period is appropriate of ten years on the designation. Okay.

MR DIXON: I guess I'd defer to the legal sections to clarify that.

THE COMMISSIONER: I think that is just a question about whether, in the notice of requirement, do we have lapse periods or what the appropriate mechanisms are in that. So you would just defer to the legal position?

MR DIXON: Yeah, accord, yeah.

THE COMMISSIONER: Okay, thank you. Your paragraph 58, the evidence in chief. So this is looking at section 6(e) and when you are referring to those matters, you have given a thorough consideration in terms of Ngāti Tama's interests, but you have not referenced any of the other iwi submitters. Is there a particular reason for that?

MR DIXON: I think I've held the view which is, I guess, supported by Mr Dreaver's evidence, that mana whenua is -- it's a complex matter, I acknowledge that. But I think I -- in my assessment, I have relied upon the values that have been expressed through the cultural impact assessment presented by Ngāti Tama. Does that answer your question?

THE COMMISSIONER: Well, I suppose you have only really acknowledged Ngāti Tama in terms of that 6(e) test. In your opinion, can other iwi bodies have relationships with areas apart from Ngāti Tama as expressed in submissions?

MR DIXON: I think they can certainly have the relationships and they can express them through the process they're in right now.

How much weight I have given to those, I guess, is perhaps the question you're asking. I --

THE COMMISSIONER: Have you given any weight to --

MR DIXON: I have given, I -- perhaps little weight to those. I have given, in my opinion, appropriate weight to Ngāti Tama's position. And I guess I've taken the -- I have taken the cultural impact assessment as representative of Ngāti Tama's people. So -- and by that, I mean it is my understanding that, while there are other individuals and groups that have submitted, that the cultural impact assessment -- it's my understanding that the cultural impact assessment is for the purpose of understanding cultural impacts for all the segments of Ngāti Tama.

THE COMMISSIONER: All right, thank you. Just change tack to section 7 matters. I notice that you deal with those in your paragraph 60 and following. Mr Allen talked about in his opening submissions, being able to reduce CO2 emissions in regard to section 7(i): effects of climate change. You do not mention section 7(b)(a) which is the efficiency of the use of energy. Do you think that might be a relevant factor in regard

to reduction in travel times, fuel savings and carbon emissions as well?

MR DIXON: I'm sure it would, yeah, absolutely. I can't recall if it's referenced within the AEE but it would certainly be -- would certainly be another matter, and another matter that would, you know, generate some positive effects.

THE COMMISSIONER: Yes. All right. Well, looking through section 7 I thought that might be relevant, so I was interested in your opinion. Thank you for that. And that is really all my questions for you, Mr Dixon. Thank you very much for your evidence.

MR DIXON: Thank you.

MR ALLEN: Commissioner, Mr Roan is next.

THE COMMISSIONER: Yes. Thank you.

MR ALLEN: Just before he starts, there has been some discussion this morning about upgrades to management plans.

THE COMMISSIONER: Yes.

MR ALLEN: And that has been in response to the council's comments just earlier this week. So Mr Roan can potentially inform you of our progress with that, but we do have two updated management plans that do reflect some, I understand, fairly minor changes in response to those comments. So that is the Contaminated Land Management Plan and the overarching scene, bearing in mind, obviously, there is a whole lot of things recently, those are not included here. In the time available, we have been able to print a copy for you, Commissioner, and for the counsels; and our intention would be to send the link through to get those onto the website, hopefully later today.

One other point is I noted your comment about tracked changes earlier this morning. These versions I do not think do track the changes, so Mr Allen and I were just discussing what we could do is, when we send the electronic versions through, just have an accompanying note in pointing the nature of those changes which, I think, given their relatively minor nature, hopefully makes it relatively easy for people to understand what the changes have been. Just wondering if that is your -- you would be happy with that approach?

THE COMMISSIONER: Well, I think if that is -- so is that just in relation to those changes?

MR ALLEN: Just in relation to those two. So certainly the ELMP, it's a big document and the changes might be difficult to detect, otherwise we will ensure our changes are tracked.

THE COMMISSIONER: Right. It is just very difficult when you are trying to compare documents; there is just thousands of pages.

MR ALLEN: Yes, well, I am just flagging here, we do have these available, if you'd rather we just (Overspeaking)

THE COMMISSIONER: Will Mr Roan be referring us to those today?

MR ROAN: The specific changes, sir?

THE COMMISSIONER: Those documents that --

MR ROAN: I make reference to the fact that they have been updated. My sense, and perhaps confirmed by the council officer, that the changes that have been made are pretty

straightforward, sir, and they will be able to go straight to them and identify that they're there.

THE COMMISSIONER: Okay. Look, I think if you have got copies for us, you should give us copies and we will see how we go.

MR ROAN: Okay. It is a very easy job for us to track change them and ...

MR ALLEN: And, sir, just while Mr Ryan hands those out, also just to make sure that you have got the full set of conditions out and ready to go, which you probably have already. But just the full suite of conditions as appended to Mr Roan's supplementary evidence.

THE COMMISSIONER: I have got a version here date 17 July?

MR ALLEN: That is correct.

THE COMMISSIONER: All right. With lots of tracking through it.

MR ALLEN: With red line and tracking through it.

THE COMMISSIONER: Yes.

MR ALLEN: What that red line and tracking shows is just the changes between the earlier version and the supplementary evidence of 17 July.

THE COMMISSIONER: Yes, got you. Thank you.

MR ALLEN: So, sir, Mr Roan is all ready to go.

THE COMMISSIONER: Right. Mr Roan, before you start, I have had a discussion with the council planners and I think in terms of questions and clarification on our conditions - because I think this is, perhaps, the last time we get to talk to you - I have asked them to chip in with any other questions they might have as we go through the conditions framework. So hopefully you have been warned about that, and I think that will just be a more efficient discussion and process than perhaps bouncing back and forth over the email and things.

MR ROAN: Very comfortable with that. I assume the questions will be as they have indicated through the former --

THE COMMISSIONER: Yes, I think they will just be picking up questions as they go and if they need some clarification from you on various points, you can make that as we go through.

MR ROAN: Yes. And I highlight in my highlights package that some of those conversations are still ongoing but we may be able to talk to some of those matters today.

THE COMMISSIONER: Okay, thank you. Carry on.

MR ROAN: Thank you. I guess in paragraphs 1 and 2 there, sir, it basically highlights here that my evidence today is in a slightly different context to that which you heard on Wednesday. This is more in relation to the assessment of effects process and the lock-in to the management plans and conditions and the role that I've had there. And I've also highlighted that throughout my involvement with the project, I have been quite closely involved in the stakeholding engagement process, and I've highlighted that in para 2 there. So if you're happy, I'll just carry reading -- carry on reading from para 3.

THE COMMISSIONER: Yes, thank you.

MR ROAN: So my evidence includes an overall planning assessment of the effects of the project on the environment, based on the technical reports provided by the application, the evidence of the other Transport Agency witnesses and discussions with these experts throughout the project, and, of course, my own analysis that you just heard from Mr Dixon on the statutory matters. My evidence also explains the designation and resource consent conditions proposed by the Transport Agency. In doing so, I explain the approach taken to the management of effects through the design and construction of the project and through development of conditions and management plans.

The project is located in a rural environment with pastoral farming characteristics being much of the land use within the valley flats north and south of Mt Messenger. The lowland areas are separated by steep hill country, with areas of contiguous vegetation adjoining the DOC Mt Messenger forest to the eastern side and the forested Ngāti Tama land to the west, referred to through all of the evidence that you have heard as Parininihi.

There are a number of cultural, ecological landscape values within the wider project area and surrounding area. The route selection process and consideration of alternatives, along with the design development of the project, has been undertaken

cognisant of those significant features, and has sought to avoid adverse effects on the environment to the extent of where has been practical.

The project will result in significant positive effects. The project will provide significant transport and economic benefits for the Taranaki region, along with the local community, and social benefits through improved wellbeing and way of life. In addition, and over time, it will be -- it will provide significant ecological and biodiversity benefits through the mitigation and biodiversity offset package, which is otherwise referred to as the restoration package, and that will enable the ecological values of the project area and -- will enhance, rather, the ecological values of the project area and the surrounding environment.

The effects of the project on cultural values of Ngāti Tama have been acknowledged by the Transport Agency and an extensive process of engagement has occurred. This included Ngāti Tama providing inputs through the assessment of alternatives process. Mitigation to address the effects of the project on Ngāti Tama and their cultural values has been developed. An important part of this mitigation has been the establishment of a Kaitiaki process, through which Ngāti Tama have provided and will

continue to provide input to the development of the project design and construction method.

Construction and operation of the project will result in adverse effects on the environment: some short term, others permanent and long term. Adverse effects on terrestrial ecology will arise from vegetation clearance and the loss of habitats for fauna. Freshwater ecological effects will arise from the modification of watercourses and the discharge of sediment from earthworks. Adverse landscape, visual and natural character effects can be expected during construction and into the operational phase of the project.

The project requires the acquisition of land from a number of local rural landowners, which includes a substantial part of the Pascoe property. The Transport Agency has undertaken extensive engagement with these landowners, as described by Mr Napier. And Ms Turvey has highlighted the uncertainty that comes with this process for landowners and I most certainly acknowledge that, particularly with respect to the Pascoes, and note that ongoing engagement is continuing.

The physical construction works will also result in temporary localised effects to a small number of people living

in proximity to the project. These effects will relate primarily from construction-related traffic works on State Highway 3 which may impact road users. The site is largely remote from neighbours and occupied dwellings, and other construction-related effects such as construction noise and dust are expected to be minor.

And where avoidance of adverse effects has not been practical, a comprehensive package of measures has been developed to mitigate, remedy, offset or compensate both the short-term and permanent long-term potential adverse environmental, cultural and social effects of the project. The measures are set out in the proposed designation and resource consent conditions, and include a suite of fulsome and comprehensive management plans. Elements of this package have been developed in consultation with key stakeholders, including Ngāti Tama and the Department of Conservation.

The proposed conditions require the project to be built in general accord with the information provided in the notice of requirement and the applications, the drawing set provided to the hearing, and the management plans. The proposed conditions also set out various standards, controls and requirements to manage actual and potential adverse effects during and after the

construction works, and these provisions are taken through into the management plans. And plans establish clear objectives and performance standards and describe the methods of implementation.

The management plans and conditions have been developed with extensive input from the subject matter experts, the designers, and from the construction team. Development of the management plans has drawn on the extensive experience in construction and environmental management from within the alliance. These inputs have enabled the development of what I term "construction-ready" management plans. The fully developed management plans and the appointment of the alliance to deliver the project in accordance with the plans provides a high level of certainty that the project can and will be constructed and operated to comply with the conditions.

In particular, the ELMP provides certainty that the effects of the project on ecosystems and biodiversity can be managed and offset, and that the project will deliver important positive biodiversity outcomes. The LEDF describes how landscape outcomes have been and will be incorporated into design to mitigate landscape, natural character and visual effects. The Construction Water Management Plan and the Specific Construction

Water Management Plans describe how land clearance and earthworks will be managed and monitoring undertaken. And these plans and the wider suite of management plans will be implemented through a Construction Environmental Management Plan, and all describe how effects will be managed through construction and - in relation to the ELMP - beyond.

As you're aware, further refinements to the project have occurred since my evidence in chief was filed. I've outlined those changes there, being the PMA expanding to 3,650 ha; addition of a pest-free lizard area; revising the VRPs; altering the drainage design, including to address the recent fish passage guidelines, and removing a culvert and changing one to a bridge; and updating the full suite of management plans and conditions. Based on the supplementary evidence of the ecology experts, these changes will all further avoid, remedy, mitigate, offset or compensate for the ecological effects of the project, and provide for positive ecological and biodiversity outcomes.

Overall, and relying on the evidence presented by the experts, it is my view that the project will result in a wide range of positive effects. There will also be adverse effects; however, it is in -- it is my view, informed by the experts, that the range of measures proposed by the Transport Agency and

required through conditions on the designation and resource consents appropriately avoid, remedy, mitigate, offset or compensate for these effects.

I've just got a very brief section here dealing with the responses to the 42(a) reports, and I'm sure we'll carry this conversation on. My evidence responds to the planning issues raised by the two councils. The substantive matters are outlined as follows in relation to the management plans. If the notice of requirement and application are -- the notice of requirement is confirmed and the applications are approved, the intention is for the management plans to also be approved through the hearing process. To address recent questions raised by the councils, minor amendments have been to the CEMP, CLMP - which are the documents that have been handed to you by Mr Ryan - and to the Construction Water Management Plan and the three Specific Construction Water Management Plans. And I understand that the councils are now generally satisfied with those plans and with the various other management plans. I note that discussions with the regional council are continuing in relation to the Construction Water Discharges Monitoring Plan, and that changes are also being made to the ELMP.

And we talked earlier about track-changing or tracking those changes; that's most certainly our intent. The ELMP changes will be more substantial, of course. And we have established, as you were referring to earlier, we have already established, in a tabular format, captured all of the questions that have been asked of Wildlands or asked by the District Council in particular for Wildlands' comments. Our team is working our way through those. Where we are making amendment, we are already recording in that table any amendment that's being made and where we believe that we are just slightly in an area of disagreement, where disagreement exists. So we will be readily able to provide you with that material that will enable you to see where our experts land in relation to those questions.

THE COMMISSIONER: Thank you, Mr Roan. That will be very helpful.

MR ROAN: So moving on to the conditions. A number of further changes to conditions have been proposed following ongoing discussions with the councils, and a revised set filed with my supplementary evidence, and those are the conditions that you've got sitting beside you there, sir. More recently, in my rebuttal, and as Mr MacGibbon has referred to, we have put

forward a condition in relation to the ecological review panel. I think I'd note that the process of ongoing discussions with the council has enabled us to resolve many of the areas where we had some differences back in May.

THE COMMISSIONER: Thank you.

MR ROAN: So just turning to submissions, and I've really just pointed to the key submissions here. In relation to the submission of Te Rūnanga o Ngāti Tama, I've outlined above how the Transport Agency has acknowledged and takes very seriously the concerns of Ngāti Tama. Mr Dreaver has broadly described the measures that have been proposed that will enable cultural effects to be addressed, and I have outlined the kaitiaki process. We just note that that's also in the document condition set.

The DOC submission, I just simply note that significant changes have been made to the restoration package, following discussions with the department. I've referred to those changes already. Relying on the advice from the Transport Agency's ecology experts, I consider that this package will create significant positive ecological effects, that the biodiversity

gains will be enduring, and that they will be significantly greater than the residual effects of the project.

And in relation to the Te Korowai submission and the evidence of Mr Carlyon, I make some comment on this in my rebuttal evidence and on the consideration of cultural effects and mitigation has been made broadly in relation to Ngāti Tama as a whole rather than simply in relation to the Rūnanga. I also note that I have now participated in two hui, where further information on the project have been shared with members of the Te Korowai group.

Now, sir, I'm in your hands as to where we go from here. I am very happy to do a page-turn on the conditions with you and talk you through how they work and point to specific conditions, if that is a benefit to you. But, I mean, I'm in your hands entirely, sir.

THE COMMISSIONER: Right, I think we will do that. But beforehand, I signalled at the start of the hearing, it is just that you have gone with a management planning approach, which is normal and usual for these types of projects that have been accepted by boards of enquiries and the court decisions as an appropriate way of dealing with them. We do agree that the key

elements of management planning is to have clear objectives for what the management plans are achieving, plus measurable performance standards that can be checked and repeated and verified.

MR ROAN: Absolutely, sir.

THE COMMISSIONER: Yes. I think I have heard from the legal team that it is the way that some of the performance standards are in conditions, some of them flow through into the management plans. I am wondering, and it would be helpful for me, is that - I presume you have - there are thousands and thousands of pages of management plans. I admit I have not read every single word but I have had a look at most of them. But just as an example, maybe we could take one of those management plans and you could just step me through the relationship between conditions and the management plans, and how they provide that certainty which we are looking for.

MR ROAN: Do you have any particular ones that you
(Overspeaking)

THE COMMISSIONER: I did not have a printed-out copy of the CEMP, but I wonder whether that might be an option? Or the

Ecology Landscape Management Plan, whichever might be more useful for you. Which one have you got there?

MR ROAN: Well, I think I've got them all. The easiest way to do it, sir, would be simply for us just to look at the table of contents, and that might help you see how the conditions relate to the (Overspeaking)

THE COMMISSIONER: Yes. I am looking at the interface between the condition wording and the way the management plans deal with the performance measures, in particular.

MR ROAN: Yes. Well, of course, the most complex of the documents is the ELMP and, if you would like, I'm happy to perhaps have a go at talking through that.

THE COMMISSIONER: Yes.

MR ROAN: I would note that if you turn to the first page, you will not find my name there as an author. So I am not an author of the ELMP, so I'll just make that as a -- just as a starting point. I have been very closely involved in its production, of course, involving numerous discussions and workshop sessions

with the ecology team. But it -- I'm just simply noting that it's not my -- it's not my document.

So I'll perhaps -- no, perhaps we'll go to conditions. I might start you -- I might start you, sir, with condition -- in fact, if we start with the designation set of conditions, sir, because I think what you find is that, particularly in relation to the plans, the designation conditions and the resource consent conditions are very similar.

THE COMMISSIONER: Yes, they are. Yes.

MR ROAN: So if you're happy just to -- for me to focus on designation conditions?

THE COMMISSIONER: Sure.

MR ROAN: So condition 8, perhaps, is where the management plans start. And there's reference to the plans there, including two in this case for the ELMP. I might also just point you to the - - so there's an advice note sitting there in that condition as well because it is important that you understand that there is a single set of management plans. Not all of them relate to district matters and not all of them relate to regional matters.

And, in fact, the council have been quite clear with me to indicate that they want to clearly define which areas of interest are theirs, and so the advice note there simply points to the fact that that is the case and that, while there is a single set of plans, some of them are for the region and some of them are for the district.

THE COMMISSIONER: Yes, that is fine. I understand that.

MR ROAN: So from there, I think we'll head probably through to condition 27, that basically establishes the basis for the plans, and 28 which sets out the shape and broader areas of content for the plans. Now, you can just simply, looking through the table of contents, establish quite quickly that all of those areas are addressed by way of different sections within the ELMP.

THE COMMISSIONER: Okay. Can I just back up for a moment? The condition 27 says that the requiring authority shall have in place and implement a ecology and landscape management plan to identify how the project will avoid, remedy, mitigate, offset, compensate for potential adverse effects on the ecological landscape and biodiversity values in its surrounds, as well as pre and post works.

So that condition - and I think you are expecting that I will be approving, if I grant or recommend approval of the notice of requirement - that I would be recommending approval of each of these management plans, including this one, as part of that process. So you're anticipating that. Should that condition refer to the actual document you have put up? Like "August 2018" or "as set out in August"? Because this is like an anticipatory condition.

MR ROAN: Absolutely. I think you'll find that condition 1, in fact, does that. Condition 1 forces the general accordance condition, refers to the documents that support the concerns. And there's reference there, I believe, to the date of the management plans and that, and that's the plans that were filed -- well, the most recent set of plans that have been filed. And, of course, you're absolutely right that there have been changes just in the course of today, as you've seen, and could be further changes to this plan. And, absolutely, we need to indicate which version of the plan it is that you are --

THE COMMISSIONER: Yes. So in that condition, it says that it shall implement an ecology, when what I think you are saying is the ecology management plan dated August because that is what

the condition has got to -- otherwise, it is uncertain what that condition is referring to.

MR ROAN: Yes.

THE COMMISSIONER: I will be looking for actual real certainty around documents and links between conditions, and actual documents and management plans. So that was the first point I had there.

MR ROAN: I am 100 per cent in agreement with you, sir, and the position, as I am sure you are aware, we're trying to interpret which of the documents it is that the conditions reference.

THE COMMISSIONER: Right. Thank you.

MR ROAN: So, sorry, just turning back to condition 28. And I was simply noting there for your benefit, sir, that if you skim through 28, you'll find that in the ELMP there are the respective sections of the plan which deal with each of those -- I'll just use the term "matters", rather than point to the specific ecological components of it, but each of the matters, sir.

And then you were interested in objectives and principles, and what you find in the ELMP is that the first, probably the first two -- first three sections of the ELMP, particularly section 3, set out those higher-level objectives, and that's then carried on through condition -- section 4. But then what you'll find, sir, once you get into the specific chapters, you will see there, just simply from referring to the table of contents, that each of the specific chapters in fact set up purpose and objectives. And those matters adopt the provisions that are coming through from condition 28. And then turning to condition 29 --

THE COMMISSIONER: Maybe on 28, could you give me an example in the plan of definitive performance measures and standards in, maybe just by example --

MR ROAN: Can we come to that, sir, because I think what you'll find is that the performance matters are actually a little bit further through in the conditions.

THE COMMISSIONER: All right.

MR ROAN: I'd be happy to come back to those. So if we just work our way through condition 29. So the vegetation provisions

which really set out the restoration plantings, being the specific area references that you've heard through the evidence of the ecologists. The swamp forest plantings, so swamp forest planting, you'll see it sitting there at the bottom of that page. Again, if you flip over the page you'll see the other references to the specific areas that have been referred to by Mr MacGibbon and Mr Singers.

THE COMMISSIONER: So this condition 29 is really setting the performance standards.

MR ROAN: It is doing a number of things, sir. It's starting to set some of the content for the plan. It contains those specific performance conditions in relation to vegetation and in relation to -- you'll see, in fact, when we carry on, we move directly into bats, performance targets for the vegetation, global protocols. And the -- I guess the other key performance target, really, is the pest management area. Now, I'm going to -- I'll get you to that point, sir, but it's not -- the pest management part of the conditions sit a little bit further down.

THE COMMISSIONER: Sure.

MR ROAN: So I think if we turn to the vegetation conditions -- or the, sorry, the vegetation management part of the ELMP, you'll find --

THE COMMISSIONER: So that is section 4?

MR ROAN: Section 4, sorry. Yes. Find there at the front end some of the high level objectives reference to the information that's informed, the development of the plan. The subsequent sections through 4.4 refer to insignificant detail to those values further and how the removal process will be implemented in relation to different areas of the project and in relation to different education points and how that vegetation will be managed. What once has been brought down one step there is reference there to the provision for cultural use of the significant trends.

Once again to 4.6, the specific details about how the re-vegetation process will occur; and in turn I can point you to 4.6.2 which starts to deal with the swamp forest planting and the restoration process there. The performance measures are the six hectare figure you will see sitting there at the bottom of page 29, and then the detail of it, when back-planting might occur and how it is established flows through the rest of that

section, 4.6, including details as you might expect: pests and livestock exclusion and plant specifications; the planting requirements through pages 35 and 36 and significant detail around how that process works.

THE COMMISSIONER: Can we continue the 6 hectares in 4.6.2 as an example? So at the bottom of that, in the last paragraph, it says:

"Six hectares of valley floor for kahikatea forest restoration funding is proposed to fully offset the loss of the kahikatea component affected by the project".

That is the proposal?

MR ROAN: Yes.

THE COMMISSIONER: Is your evidence that that requirement as a standard is locked in by condition 29(a)(vii)(1)?

MR ROAN: Yes, it is.

THE COMMISSIONER: So this is actually a firm requirement?

MR ROAN: Yes, it is. In fact you'll see a summary of all of those, you will see at the very top of the page in bold printed. So the performance of those specific targets as standards are captured there through Roman numeral vii in relation to vegetation restoration.

THE COMMISSIONER: I suppose I do have a slight concern because this is supposed to be -- these management plans if they are going to approved have to specifically say what is being done, and just some terminology in this I think is important. Things like using words "proposed" and "possibly" and those sorts of things is loose. I certainly prefer the management plans to be quite specific and pointing to actually more specificity rather than proposals. So you may or may not agree and what do you think?

MR ROAN: I do not disagree with you, sir, I would just note that of course a condition locks in to requirement and while my ecology colleagues may well have heard some specific language and detail in those requirements, there is an absolute obligation through 29(vii)(1), et cetera, to provide those matters, to provide what to do in a restoration package.

THE COMMISSIONER: Deliver those. So you think those ways and means and the management plan there will be some flexibility needed. Obviously you have got some of these requirements, but the ultimate requirement and standard is specialise in the conditions; that is your position.

MR ROAN: I think there's an absolute requirement operating.

THE COMMISSIONER: Right. Carry on. Yes.

MS MCBETH: May I add to that submission?

THE COMMISSIONER: Yes, sure.

MS MCBETH: So how would items 1 to 4 be affected by the 4(a), so the subsequent measuring of the extent and the re-evaluation that would ultimately -- so we looked at 29(a). Can you explain the role that 4(a) plays?

MR ROAN: Right, okay; yes, indeed. I think condition 4(a) you'll see there, it starts there. I will give you a moment just to read it.

THE COMMISSIONER: Yes, I have read that.

MR ROAN: So condition 4(a) is there to acknowledge that where we sit now the work has not yet been done. The ecologists and the designers and the constructors working together have defined the extent of works, their expectations of how it works will be undertaken, detailed methodologies and detailed calculations about the extent of vegetation loss, et cetera; but it is not until the work has actually been undertaken will they know specifically how much vegetation has been removed. Now, we need to provide for the possibility that the area changes, so that the condition allows for establishing whether, once the work has been completed, more vegetation was removed than had been anticipated.

MS MCBETH: And in fact that this is --

MR ROAN: Yes. So we locked in some absolutes here, sir, and our intention is to deliver the absolutes. So these are norms, if you like. If, in fact we couldn't see a different way of doing this, the condition basically what it allows for is those numbers to go up rather than to come down.

THE COMMISSIONER: I do not think that condition 4(a) is that clear if that is the intention; and I think if that is the intention it could be improved, Mr Roan.

MR ROAN: Happy to look at it again. I think that what you'll see as you go through -- if you just start at row numeral 7.1, 2 and 3, they all start with the preface --

THE COMMISSIONER: At least.

MR ROAN: So that is the starting place.

THE COMMISSIONER: All right. There is a drafting thing at 4(a). Towards the end of that:

"The required body shall prepare report with extent of restoration and the timing required".

So what you are saying to us, I think, is that if the extent of vegetation affected is more than what you based your at least numbers on, there should be some increases.

MR ROAN: Yes. That's exactly right. We have debated this condition, I would say, within the team, because it would be possible to look at this in different ways and for these not to

be "at leasts" and to perhaps to set some parameters that would allow for - in fact, encourage - the construction team to continue their efforts of minimising the extent of vegetation removal and we had to base this as possible. But we felt it was important to lock in, now, those minimums and for a transport agency to make that commitment here.

THE COMMISSIONER: Yes, and I agree that that is a reasonable approach. What I am suggesting is that your 4(a) draft could be a little bit tighter about it. My reading of the extended restoration planting required might imply that you might --

MR ROAN: Improve.

THE COMMISSIONER: -- go back. So, I think just have a look at that again, would be helpful.

MR ROAN: Yes.

THE COMMISSIONER: Miss McBeth.

MR ROAN: Ms McBeth, does that help you?

MS MCBETH: Yes, thank you. Because I had a question, was that opening up the requirement for an alteration to the above conditions?

THE COMMISSIONER: I will grab some water too, it has been heavy going.

MR ROAN: Not sure whether everybody in the audience perhaps might have needed something.

THE COMMISSIONER: Yes, all right. Shall we carry on?

MR ROAN: This is an important matter. So carrying on through section 4.6, I know specialists say 4.6 deals with the restoration planting itself, and you can see through there that there is considerable detail around how that work will be undertaken and how including the sourcing planting depending on how it's propagated, how it's planted, how it's protected through its establishment phases, how it's protected on an ongoing basis; and 4.6.3 carries on.

In more detail, 4.6.4 is a section that starts to deal with -- the previous two sections have dealt with the swamp forest planting in the dry land planting. Seven 1,2 and 3. Number 4

is riparian planting; and 4.6.4 identifies just stuff on that area requirement and again details in significant measure the process for implementing the riparian plantings.

4.6.5, sorry, deals -- am I going too fast?

THE COMMISSIONER: No, I am just looking as we go along about rules of detail and 15, I think. You know, there is a reasonable -- there are a lot of words here, but there are reasonable specific items in here in terms of referring back to the requirements and the conditions.

MR ROAN: I think it would be fair to say that the document has been written as a guide so that when the project enters into a construction phase, its requirements are confirmed and the applications are proved and the project moves into a construction phase that the constructors and the environmental management team will be able to pick this document up and use it as a reference manual for implementing this work. So it does contain a very high level of detail and quite a degree of specification.

THE COMMISSIONER: Just an example again: this is back and forth between some performance measures in the conditions and some in

the management plans. I am looking specifically at 4(6)(3)(6) on page 42. So that is very specific performance standards relating to replacement mitigation plantings:

"Performance targets for replacement mitigation planting are 80 per cent indigenous plant cover six years following planting, 90 per cent of affordability of species planter remain after six years following planting."

So I think you would agree that some of the performance measures are conditions and some of them are in the management plans and we should be reading those clearly together to ensure the right level of specificities in the conditions and management plans.

MR ROAN: I think that's -- I would agree with you, but on the specific points that you've just dealt and referred to there, if I refer you on to condition 29(b) --

THE COMMISSIONER: They are in there, are they?

MR ROAN: They are; they are there: conditions, restoration planting (Overspeaking) provisions --

THE COMMISSIONER: Okay.

MR ROAN: -- and what's anticipated closure doesn't occur by those timeframes.

THE COMMISSIONER: All right. So is your evidence that the key performance measures in the plan are locked into the conditions? That is the whole process --

MR ROAN: I think they are. You are correct that there are matters that we might say could be considered as performance but are in the management plans arising, but the specific organisations that are fundamental to achieving the outcomes that the experts have referred to are locked in by way of the conditions.

So I have then come to section 4.6.5 which is the plantings to address the removal of those 17 significant trees that you have heard Mr Symmans referring to.

Then there's the section 4.6.6 which deals with just the estimation of the disturbed footprint of the works areas. So there's quite a lot to take in, I acknowledge, just in that one section alone.

THE COMMISSIONER: Yes. Look, I think that has been helpful and I do not think we need to go through. The vegetation example is useful. I can double check through the rest of -- riffling through.

MR ROAN: My point is that they follow a similar theme but they also involve obligation that the project is going to be more captured by way of the conditions. Those come through into the plans as you expect and the plans contain the details of implementation. Is there any more ...

THE COMMISSIONER: Yes, that has been helpful.

MR ROAN: I am very happy to look at any of the other documents and walk you through them.

THE COMMISSIONER: I think we would be here all day if we --

MR ROAN: I agree, but ...

THE COMMISSIONER: Yes. Looking at the council staff, do we assume we hand over to any other questions and queries on the management plan and conditions approach?

MS MCBETH: Are the reporting officers comfortable whether the wording and how difficult it would be for a monitoring officer to pick up the consent conditions and have something to measure the performance of these conditions because it's not just a handful of performance measures that are in the EONE but not in the conditions. It's really thinking about for the monitoring officers.

MR ROAN: Responding to that question, with the greatest of respect to the council's monitoring officers, many of these matters I expect will go beyond some of the level of expertise that the council offers, which is why we've provided for the council, if it needs to seek expert advice through the implementation phase, by the ecological review panel. I accept what Ms McBeth has just noted and we similarly anticipate that there will have been a need for the council to seek its own advice on matters that go beyond the expertise of the officers.

THE COMMISSIONER: I do not think that was really the question. I think with the comment Ms McBeth is that you think that there are some measures in the management plans that are specified in the conditions that are hard performance requirements and should be in the conditions. Have you made a list of those or are they ...

MS MCBETH: Wildlands have noted quite a few along the way and I think it's the same concern that DOC have in terms of the management plans that they just could be more easy to check off the conditions. We would be happy to present a list.

MR ROAN: That would be very helpful.

THE COMMISSIONER: In terms of time and motion study, in terms of the hearing, the time lines, I think that would be specific, because I think we are down to really needing to have checklists and areas where the applicant - to be fair to the applicant - they can have a clear list of matters.

MR ROAN: Am I able to respond?

THE COMMISSIONER: Certainly.

MR ROAN: The document that I referred to that we have got has taken those comments from the Wildlands advice absolutely. Wildlands advice does identify several performance measures and performance markers, we've listed those out and the end document we'll provide back to you will identify how those can be responded to, if that's helpful.

MS ONGLEY: I wondered whether it was worth having another sit down to go through that detail. Endeavour to do that.

MR ROAN: I think to be fair the approach that we've adopted right through is to keep an open mind on conditions. Conversation happened yesterday that could reach in council and some matters very open to sitting down to continue those conversations if that helps.

THE COMMISSIONER: I am comfortable with discussions continuing at that level, particularly prior to when the reporting officers formally report back to me. If there is any other parties that would like to be involved in that as well - I am thinking about Ms Ongley here- you know, if we are down to conditions and clarity and usefulness of conditions, the more discussion around those the better as far as I am concerned. But I want to make sure that parties that would like to be involved in that do have the opportunity, so that it is not just a limited discussion. So I will leave council to talk about that.

MS ONGLEY: I wouldn't like to say from the DOC perspective that we are bound by conditions but that would be appreciated to be involved in that.

THE COMMISSIONER: Yes, and perhaps if there is some way that could be formally organised and timetabled and reported back to me, that would be useful. But that is really for the parties to work out, but I tend to sanctioning that approach. I am very happy for that to occur.

Mr Allen, the 12.30, I think we have probably got another reasonable amount of time to talk to Mr Roan. So do you want to take the luncheon break now?

MR ALLEN: Thank you, sir. That means that we can follow on that discussion that you just led.

THE COMMISSIONER: I will signal that we have been encouraged to change our flight to a 3.00 flight. So we will be needing to finish up here probably by about 2.00. So ...

MR ALLEN: I am on a 6.00 flight so there's no hurry.

THE COMMISSIONER: On that basis to provide enough time if we do come back, I think, at 1.15 and is that okay with the staff? I think we will move Mr Roan to -- I've just been through your list and I've got various questions on a page turn basis, and

then we'll pick up any other comments as we go through the conditions from the staff as well. We will come back at 1.15. Thank you.

(Adjourned until 1.15 pm)

THE COMMISSIONER: Right, thank you Mr Allen. I think we should probably hoe into it

MR ALLEN: Thank you, sir. Very keen to start and make progress. So, back with Mr Roan.

THE COMMISSIONER: Thank you. Look, I think it probably goes without saying, but I do need to say this. We're talking about conditions on a "what if" basis. I've certainly made no decisions or any matters in terms of my key decision-making. But, if the NOR is approved and conditions are granted, making time to look at conditions on that "what if" basis is important.

So, I just want to re-stress that for everyone. As I say, it probably goes without saying, but I do need to say that. And, look given the fact that I think there is going to be some more detailed discussions off, sort of, applicant, the need for the officers to, sort of, chip in as we go along, may not be

that -- as necessary as -- because you're going to have another good discussion.

So, I think what I'll do, is I'll just go through your list of conditions and just make some comments and get some feedback, just to let you know things that are in my mind as we go through. You can certainly chip in, if you require -- if you'd like to, as we go through those.

So, I've got your 17th of July version, and I've had a look through those. Can we go to condition 3 first? This is the lapse period one, which there's a bit of confusion about. So, do you have a -- you have sought a 10 year lapse period in the condition, and is that on the basis that that's appropriate and permissible, in your view, Mr Roan?

MR ROAN: I have responded to this matter in my evidence in chief, as you'll probably be aware. Is it appropriate? I think, given the complexity of the project, yes. Is it permissible? I think that's a different question, that I might refer you to counsel in relation to that matter.

MR ALLEN: Commissioner, too, I have had a brief conversation with Mr Winchester.

THE COMMISSIONER: Yes, I was aware of that.

MR ALLEN: And once we're out of this and I have more time, we'll continue that conversation. The 10 years does align, as well, with the resource consents.

THE COMMISSIONER: Yes. All right. Condition 4 is the new Kaitiaki condition, Mr Roan. In your view, is there any reason that, if there was other parties over and above the rūnanga which could be involved in that, and that was determined it couldn't be a broader-based organisation, let's call it that?

MR ROAN: No, sir. I'd absolutely agree that that could be the case. In fact, I think you'll find the condition already envisages that possibility, under condition 4(a).

THE COMMISSIONER: 4(a).

MR ROAN: It refers there to the fact that the KFG may also invite other iwi, iwi representatives or other Ngāti Tama members to attend. So, I think -- I think, already that provision is envisaged.

THE COMMISSIONER: So, that could be done?

MR ROAN: Yes.

THE COMMISSIONER: And, also just a comment, in your 4(c) you're signalling regular monthly meetings through construction periods. So, three years and then six month after. Three or four years. Just whether -- just, from my experience, whether that's a bit heroic. That's a lot of meetings, but you might have already talked about that. I'm not sure. It just seems a very, very irregular session. But, it might be appropriate, in your view.

MR ROAN: I'm certainly aware that it's a very high level of interest in the implementation process.

THE COMMISSIONER: And that reflects that?

MR ROAN: Yes.

THE COMMISSIONER: All right. So, I've got no particular problem with that, if that's what the agency would like to do.

Your 4(a), I'm looking at (e) down the bottom there, about the cultural monitoring plan. So, that's something that hasn't been prepared --

MR ROAN: No.

THE COMMISSIONER: -- and will be prepared. What's your view on the vires of -- is there a certification process there? Or, I guess, some objectives, or something, that should be thought about?

MR ROAN: Sir, it's not part of the suite of management plans. It's not -- it doesn't live under the CEMP, so it's not one of those plans that's envisaged through implementation through those conditions. In my mind, it's a plan for Ngāti Tama to determine what it should appropriately address. I'm sure they will have their own views on that. There have been some discussions on cultural indicators and the development of that, and I would expect that Ngāti Tama, through the KFG would develop and put that plan forward through that process.

THE COMMISSIONER: I am concerned about the vires of that type of third party condition which, may be, implies the delegation

or something that is not appropriate. So, can you have a think about that and talk to the Council planners about that?

MR ROAN: I can. I would observe, sir, that it's a condition that I've seen in other places.

THE COMMISSIONER: Yes.

MR ROAN: In almost identical wording, and, as I've just indicated, in my mind, this is how -- this is the vehicle that Ngāti Tama uses to ensure that their kaitiaki matters are provided for.

THE COMMISSIONER: Yes.

MR ROAN: And, in that regard, it's up to them to determine the content of the plan.

THE COMMISSIONER: All right, I've flagged my issue there.

MR ROAN: Yes, indeed.

THE COMMISSIONER: Condition 9: again, this is this question about that you're providing something to the planning, you know,

in terms of the management plans, which I think are already locked in. So, this is a question about within the certain timeframes. So, I think the proposition you're saying is that they are already prepared and locked in. So, it doesn't anticipate something else being provided.

MR ROAN: No, it doesn't. Indeed, it's just confirming that they're there and ready to go. That's all it's doing.

THE COMMISSIONER: So, again, the wording there, "Shall provide the planning needs" --

MR ROAN: Yes.

THE COMMISSIONER: -- I think a question there. Condition 11: this is the amendments process. Material amendments process --

MR ROAN: Yes.

THE COMMISSIONER: -- which the 20 working days turnaround time. You know, this is that reasonableness question there. That's four weeks. It seems quite a lot of time, but I'm not sure whether you've had a discussion with the Council planners about that timeframe?

MR ROAN: Yes, we have talked about it, and as I understand it, both Councils are comfortable with the timeframe. You might hear differently from them, but that's my understanding.

THE COMMISSIONER: Thank you. Condition 14, about your disputes resolution process. Have you picked that from another consent you're familiar with?

MR ROAN: Yes, sir. In fact, my rebuttal evidence refers to -- specifically to the consents that that condition has been mirrored on. So, it's almost a lift-out of those other consents.

THE COMMISSIONER: So again, this vires question about decisions being made. By a decision, it seems to be -- I suppose if there's a process for looking at variations which are provided as between the applicant and the Councils, and just to get a final -- if there is this agreement, there does need to be a process of dispute resolution, doesn't there?

MR ROAN: Well, that's what it's there for, and it anticipates, you know, some elevation. It anticipates, first, that if there is a dispute, that the matter will be addressed at a management

level within the two organisations. So, taken beyond officer. And then from there, if it still cannot be resolved, out to another party to assist.

THE COMMISSIONER: So, is that case you referred to, was that sort of an Environment Court ratified case, or is it -- I do recall seeing that but I can't ...

MR ROAN: Yes. If I can point you to my rebuttal, 30th of July, and it's para 23, and I've, in fact, helpfully identified the specific conditions out of those specific consents. I'm very happy to, if it's of assistance, to provide copies of those documents to you.

THE COMMISSIONER: I'm just finding that. Can you read out the cases?

MR ROAN: Yes, I can. So, the wording for condition 14, which is the condition that we're talking about, is modelled on a very similar condition in the designation conditions for the Transport Agency's MacKay's to Peka Peka Expressway project, and it's condition DC8, and very similar conditions also appear in the consents for Peka Peka to North Otaki. Waikato Expressway and City Rail Link.

THE COMMISSIONER: Yes.

MR ROAN: So, there are a number of them.

THE COMMISSIONER: Yes.

MR ROAN: And they're almost -- they're almost identical.

THE COMMISSIONER: So, those Kapiti cases were determined by Boards of Inquiry. Was the City Link -- did that go through the Environment Court?

MR ROAN: Yes, it did.

THE COMMISSIONER: Yes. All right. If the Court's happy with that type of process, then I won't argue. So, that's all right. Carry on. Yes.

MS ONGLEY: Sir, can I just ask a question.

THE COMMISSIONER: Yes.

MS ONGLEY: I was wondering whether Mr Roan was aware of what Mr Inger's concern was about that condition?

MR ROAN: No, I'm not. I'm unable to respond there. I think Mr Inger's evidence was that he had a concern about a decision-making process being taken away from, or given to, a third party. I think that was the case.

THE COMMISSIONER: Which is that same point that I have.

MR ROAN: Yes. But, it's there, anticipating a scenario, which I think we all believe is unlikely to occur. But, if it should, a provision in a process.

THE COMMISSIONER: All right. Perhaps, Mr Allen, in your closing, you might want to give me some assistance there.

MR ALLEN: Thank you, sir. I've got the highlighter out.

THE COMMISSIONER: I think you know -- you know the issue, I think. So, all right. Condition 20.

MR ROAN: Was that 20?

THE COMMISSIONER: 20, yes. So, is that Construction Noise Management Plan one of those that will be -- has been provided and will be provided as a final?

MR ROAN: Yes.

THE COMMISSIONER: Again, maybe putting dates on those would be helpful. 25, the LEDF, so the Landscape, Environment, Design Framework, has that -- that's not a management plan is it? Or is it, to you?

MR ROAN: No. No, it's a design guidance or reference document that Mr Lister referred you to extensively yesterday I think it was, and I think, if I recall Mr Lister correctly that -- well, I'm sure I do, because the words came directly from him. The condition is his words.

THE COMMISSIONER: But has that been prepared, that document?

MR ROAN: Yes, it has and it has been reviewed by Council, the District Council's landscape advisor, and, in fact, I think it's referred to in the various advice from that specialist. Yes, it is. Yes, indeed.

THE COMMISSIONER: All right.

MR ROAN: Yes.

THE COMMISSIONER: So again, it's sort of the -- it's the tone of the -- it implies if it's already been done. It's a menu here of something that's already been done, by the look of things.

MR ROAN: If it assists with your thinking, sir, it's really, as I understand it, it's the way that the -- it's the framework that the landscape designers use for developing the detailed design. So, it's more of a framework document, which is why it's described as the title of the framework.

THE COMMISSIONER: Okay.

MR ROAN: It is fairly standard on these sorts of projects for that sort of document to exist and for it to be used in exactly the way that it's intended here.

THE COMMISSIONER: All right, so it's to inform detailed design.

MR ROAN: It's to inform detailed design.

THE COMMISSIONER: All right, 26. Again, this is a peer review to ensure that the design is in accordance with the LDEF. Is that a peer review in a certification role, that the Council should hold, rather than it being internal? What do you think there? Is it someone that provides that to the planning lead, and then what's the planning lead going to do with it? Has the planning lead got a certification role that the design has been completed in accordance with?

MR ROAN: That's -- the purpose of the peer review is specifically that. Is to confirm that it is in accordance with the framework document.

THE COMMISSIONER: So, the way you've framed this, is that that peer reviewer will provide the confirmation to the planning lead.

MR ROAN: Yes.

THE COMMISSIONER: What happens if the planning lead doesn't agree? Like, where's the control? What's the mechanism there?

MR ROAN: In the usual way that peer review works, the reviewer will make comment. If the reviewer is not satisfied with how the design has been developed, then that would be fed back to our designers and there would be some action that came through that peer review process, and the confirmation then comes when the peer reviewer is satisfied that that process has been undertaken satisfactorily. So, it's simply a confirmation that the intent is, or that the design is in accordance with the intent of the condition.

THE COMMISSIONER: But, from a compliance point of view, put yourself in the Council's position, what's it -- is it just sitting there receiving this and ticking it off, or does it have a role, in your view? Should it have a role?

MR ROAN: Well, I think, in my view it's had a role. By the time the review lands on the compliance officer's desk it's done its job. It's satisfied -- it has established that the particular condition has been complied with, or that the -- rather the design is in accordance with the condition.

THE COMMISSIONER: Isn't it a Council's role, not a -- this reads to me as though the consent holder -- the requirement authority's doing this. Employing a peer reviewer to do this

check. Is that the way you read that? "You shall arrange a peer review". All I'm getting at is that --

MR ROAN: Yes, I understand what you're saying.

THE COMMISSIONER: -- is this a --

MR ROAN: This is an independent process.

THE COMMISSIONER: Is it a process that's in the form of compliance, that the Council would want to know about, which I think it should, or is it just getting an internal peer review, just for its information? So, could you have a talk about that specific point with the Council staff when you meet? About whether that's --

MR ROAN: Yes. I can do that.

THE COMMISSIONER: -- where that obligation sits? We've been through these ecology ones. It's just really referencing the actual plan, if there is a plan to be referenced. 4(a) we've talked about in relation to any changes and just locking in the minimum requirement. 32, again, I think this is a pest

management plan that is -- will be an actual completed, approved plan, if it is approved.

MR ROAN: Yes.

THE COMMISSIONER: 33, the Pest Management Peer Review Panel, is now going to be called something else, is that right?

MR ROAN: Yes, that's correct.

THE COMMISSIONER: And there will be some changes, obviously, to that in relation to its functions and --

MR ROAN: Yes.

THE COMMISSIONER: -- personnel. Is that as I understand it?

MR ROAN: Indeed.

THE COMMISSIONER: Right. The Accidental Discovery Protocol, I talked with Dr Clough about this yesterday. Are you referring just to the standard P45 or has that been tuned to the local situation? Or does it need to be?

MR ROAN: It certainly falls out of the standard P45. It's got some referencing that makes it specific to the project, of course, but it follows the P45 framework pretty closely.

THE COMMISSIONER: Where's there contact people, and there's a reference?

MR ROAN: Well, the contact, of course is -- so, the Accidental Discovery Protocol is one of the plans that lives under the CEMP, and so, you know, those references out to contact, et cetera, live in the CEMP itself. But, yes, of course it does. It identifies the archaeologist, et cetera, yes.

THE COMMISSIONER: I'll have a look at that, certainly. Just backing up a bit, I suppose there was -- made a comment -- there's still some disagreement about the preparatory works, establishment works and whether they can be undertaken prior to approval or a part of the approval, I think. Ms McBeth talks about that.

MR ROAN: Yes.

THE COMMISSIONER: There's a footnote, advice note, about that on condition 26. But, where is that sitting currently, Mr Roan?

MR ROAN: Where did you refer to that footnote, sir?

THE COMMISSIONER: Well, there's an advice note about -- at 26. "The condition does not apply to preparatory works or establishment works" and I think there's a position that those are permitted activities, so you don't need to -- you can get underway prior to any final approvals. It was my understanding anyway.

MR ROAN: I see. There's been an on-going conversation about the preparatory works provision both in the definitions and in -- as it's referenced, and I think it's in condition 12, is where it appears. It would be fair to say that that provision reflects a scenario where, should the plans, for some, or for whatever reason, not be approved, or an element of them is -- some hold up that limits the ability of the construction team to start work, that there is some very minor type work that they might be able to get on with.

THE COMMISSIONER: As a permitted activity?

MR ROAN: As a permitting activity. It's really a flag in that nature.

THE COMMISSIONER: Yes.

MR ROAN: You'll see that there are definitions for establishment works, which quite clearly define the track formation and yard establishment. So preparatory works clearly are not those works, and they're clearly not construction works. They are very small-scale works.

THE COMMISSIONER: That seems sensible to me. But, Ms McBeth you had some issues with that, I think, in your 42(a) report?

MS MCBETH: I have agreed with Mrs Hooper's comments about that because we're looking at the proposal as a whole.

THE COMMISSIONER: But, if there are things like site surveys, monitoring, things are permitted.

MS MCBETH: Actually we're comfortable with the first three. It was really the permitted activity standard.

THE COMMISSIONER: So, you're looking at condition 12. Are you looking at which condition? The first?

MS MCBETH: Just hold on one second.

MR ROAN: The definition, I think.

THE COMMISSIONER: You're comfortable with the first three in that definition of preparatory works? All right, so that last bullet point you're not comfortable with. All right. I can see why that is.

MR ROAN: We've been quite clear that those works would not be undertaken unless the relevant management plan provisions were in place. There's no intention here that -- well, in fact, this is -- that the establishment works and the definitions for establishment works and construction works clearly indicate what's envisaged there, and what's envisaged under this condition, and they're quite different. And, that if there were some -- say, take some small scale land disturbance work that might occur, that there are appropriate provisions in place for that. It's been a point of conversation between -- and I would be more than happy to carry that on with Council.

THE COMMISSIONER: Yes, I think so. It's on the table still, so obviously you can talk about that. I did have a comment about

these supplementary plans. Three of them have been prepared already.

MR ROAN: Yes.

THE COMMISSIONER: They're anticipated that there's going to be more of those.

MR ROAN: Yes.

THE COMMISSIONER: And where does -- where is that process of approval come through? Is that -- can you point me to the conditions there?

MR ROAN: Yes, I think you need to go into the regional consents --

THE COMMISSIONER: Consents, okay.

MR ROAN: -- and they're the conditions there.

THE COMMISSIONER: I think I'm getting into those anyway.

MR ROAN: Do you want to go there now, sir.

THE COMMISSIONER: General conditions now. So, the regional consents.

MR ROAN: So, you're right. There are three of the specific plans that have been produced. They are yard. You need to remind me specifically what they are.

THE COMMISSIONER: Which condition are you looking at?

MR ROAN: What condition am I looking at?

THE COMMISSIONER: So, this is of GEN.11, is that right.

MR ROAN: It's established -- the management plans are established in the regional conditions, in the same way as they are in the designation conditions. So, yes, GEN.11 means that those plans need to be in place in GEN.11. It quite clearly states that no earthworks should occur until the site specific plans have, or the specific plans have been approved. And, at the moment, there are three plans that have already gone to the Council, which basically are the earlier Establishment Works plans, the establishment of a yard; the establishment of track crossings; and the establishment of -- the early works to

establish a fill site, and those plans are the three plans that have been with the Council now, for some, I'm going to say months, and have gone through a process of review, and I believe that the Council is happy with those three plans.

THE COMMISSIONER: So, GEN.11 and 12 talk about those documents?

MR ROAN: Yes, indeed, and then effectively beyond those three plans, every time the construction team are undertaking new work, there is a specific Construction Water Management Plan that is prepared that addresses that work, and Mr Wrigley talked you through that plan. Each of those plans requires an approval from the Council. It goes back to the Council for approval and as GEN.11 makes plain, work cannot commence until the plans have been approved.

THE COMMISSIONER: I suppose this raises the old chestnut about Council officers approving details that are over and beyond its delegating approvals. You'll be well aware of courts comments on those?

MR ROAN: Yes, indeed.

THE COMMISSIONER: And, I'm not sure whether Taranaki Regional Council, that you're happy with that general approval words, but it's pretty loose.

MR ROAN: My sense is that the Council would prefer the words "approve" than "certify" and I think we could make it clear that the capacity that they're making the certification or approval is within their technical capacity, and those additional words, most certainly, have been used to address that very issue that you raise.

THE COMMISSIONER: Previously?

MR ROAN: Yes, to make clear that it is a technical matter that they are dealing with.

THE COMMISSIONER: But, are they certifying against something? Like, is it just a general "I've had a look at it against" -- well, when you certify, you're certifying that the plan meets objectives and performance measures?

MR ROAN: Yes. I can -- if we race forward into the conditions that deal with the discharge of storm water and sediment which is --

THE COMMISSIONER: The water stuff.

MR ROAN: -- the said conditions. I'm just looking for the specific reference.

THE COMMISSIONER: So, SED.5, is this where you're --

MR ROAN: Yes, of course, SED.5. What I was also looking for, in fact there it is under SED.7, is reference out to the transport agency's guidance on sediment control provisions. So, I think what you find through those conditions, are a number of matters of details that define what the plans need to include, and --

THE COMMISSIONER: I think I'm getting the --

MR ROAN: Yes, I think that's the answer to your question.

THE COMMISSIONER: So, there's a list of specifications and requirements that the SCWMPs are required to achieve?

MR ROAN: Yes.

THE COMMISSIONER: They're listed in SED.5.

MR ROAN: Yes.

THE COMMISSIONER: And, then when they come through, the Council does have a certification role under GEN.12.

MR ROAN: Yes, indeed.

THE COMMISSIONER: That -- to the certifying that -- see I would prefer, for clarity, say certify that the requirements in X have been achieved. I think it's that linking. Because, when the certifiers are looking, what are they certifying? Are they just reading the thing, "Oh that looks all right to me" or are they saying, "Yes, this does meet the requirements that are set in the condition?"

MR ROAN: We can assist with some cross-referencing.

THE COMMISSIONER: Yes, I think just to make it really clear.

MR ROAN: Yes.

FEMALE SPEAKER: There is a definition upfront too on that.

MR ROAN: Yes, there is.

FEMALE SPEAKER: Certifying that it complies with designation.

THE COMMISSIONER: Conditions. All right.

FEMALE SPEAKER: The scope of --

THE COMMISSIONER: All right, but I think you've got my point.

MR ROAN: Yes.

THE COMMISSIONER: It's just that certification against some certain standards and measures. All right, I think I was looking at the regional conditions.

I was up to GEN.11, I think, which we've talked about, and 12, certification, and there's a lot of duplication here because you've taken the management plan through two processes.

MR ROAN: Yes. That's right. The general conditions look very similar to the designation conditions.

THE COMMISSIONER: And, I suppose a question about the specific conditions. So, after the general one, there's some specific conditions for each of the regional consents.

MR ROAN: Yes, indeed.

THE COMMISSIONER: I think the Regional Council's generally comfortable with those, I think.

FEMALE SPEAKER: They are.

THE COMMISSIONER: What needs to be specific, yes, and within the specific consents, there's the appropriate specificity, I suppose, for want of a better word, in terms of what's required.

FEMALE SPEAKER: Yes, subject to those few comments we've made.

THE COMMISSIONER: Yes, which you'll talk about next week.

MR ROAN: And we will carry on talking to the Regional Council about too.

THE COMMISSIONER: Okay, SED.9. It might seem pedantic, but it's a wording thing. Again, this is an audit of the erosion

and sediment devices and that will be sent to the Chief Executive TRC as confirmation. So, again, that's -- in my mind, that's a certification role, that the sediment control measures have been constructed in accordance. So, is that -- the word "confirmation" is that how you read that?

MR ROAN: I think I'd have the same answer to the previous conversation that we had, in this context, yes.

THE COMMISSIONER: Right, SWT.3. This is a fish passage condition, relating to the surface water takes. So, this has a general obligation to minimise the catching or capture of fish which, when I read that, looked pretty general but then SWT.3(b), are those the standards which the Council's comfortable with? The water velocity at the intake structure and the screen sizing? That those are the standards?

MR ROAN: Yes, I believe so, sir.

THE COMMISSIONER: I was a bit intrigued with SWT.4 in relation to water take to applying the best practical option. Is that in a section 16 sense? Because I thought that was normally a test around noise or discharges and that sort of context in a water take, I've never seen that. So, what's the intention there?

MR ROAN: Sir, I think we've picked that condition up out of the Regional -- the region's recommended conditions in their original 42(a) report.

THE COMMISSIONER: All right. Well, maybe just have a think about that, because BPO has got some specific definition in the Act.

MR ROAN: Yes, indeed.

THE COMMISSIONER: And, that is, I thought, was more of a discharge type condition.

MR ROAN: Yes, and in fact I'm not sure what more we could be doing, because we've reduced our rate of abstraction right down to an absolute. Minimised the potential for either adverse effects on the environment, the efficiency of conservation of use matters will be limited, of course, by the rate. So, yes, we'll look at that.

THE COMMISSIONER: Yes, and whether it was actually necessary given that option. But, it's just the particular use of that test. That section 16 test seemed to be out of kilter there.

MR ROAN: Sitting here, I think I'd agree with you, sir.

THE COMMISSIONER: Right. Looking at DIV.2 and DIV.3. These are the stream diversion conditions. Again, you're using some qualifying terms, "as far as practical" and "appropriate". In terms of condition drafting, I'm always quite wary about those sorts of words. They're quite -- yes, not really in favour of those types of things. But, I think those -- where those words are actually used are linking to specific provisions. One, in the LDF and one in the ELMP. So, they just raise a red flag for me, those sorts of words.

MR ROAN: Sure.

THE COMMISSIONER: I've been told off by the odd Environment Court Judge about using those sorts of words in conditions. "As far as practical" or "appropriate" type words.

MR ROAN: Some of those limitations come from the way that the design of -- replicating or providing for aquatic habitat and the constraints that might exist there.

THE COMMISSIONER: Yes.

MR ROAN: But, that's really the rationale for the use of the words, but I absolutely --

THE COMMISSIONER: Yes, but you might want to say, like DIV.3, if there is -- the ELMP does set out the provisions for each diversion --

MR ROAN: Yes.

THE COMMISSIONER: -- "Diversions shall be in accordance with the provisions set out in the ELMPs". Something just to try and get away from those sorts of loose words.

MR ROAN: Happy to accept that.

THE COMMISSIONER: Again, you've got "as far as practical" in DIV.6, which, the disturbed areas. Just have a think about that, I think. I think my other comments are just really repeating the same sorts of things. I didn't have anything more specific on the regional conditions. So, I hope that's been helpful, Mr Ronan, and Council team.

You know, as a decision-maker, there's a lot of work gone into these and if I do look at approving this project, I will be looking for a -- as you know concise and well-considered set of conditions as possible. Particularly ones that the Councils will be happy administering. Administering is a very key thing for me, looking at these sorts of projects.

So, if you are going to have further discussions on those, which I encourage you to do, I'd really appreciate that.

MR ROAN: I think you've given us some useful feedback, too, so we'll take that on board.

THE COMMISSIONER: Thank you. Mr Allen, I think that's probably about as far as I want to take this discussion on conditions, and Mr Roan, I didn't have any particular questions for your other -- your more, sort of, planning orientated evidence. I think I understood that pretty well, so your evidence is quite clear.

MR ALLEN: Thank you, sir. Well, then apart from potentially Mr Roan, or depending on how the hearing goes, any of the other witnesses who may need to come back, that then is the Transport

Agency's part of the case, and, of course the closing submissions following on as well.

THE COMMISSIONER: Yes.

MR ALLEN: So, we're a little bit behind the timetable, but we've finished all the witnesses for the agency, subject to the on-going planning discussions and anything else that comes up.

THE COMMISSIONER: Look, I do think, in terms of order, I think you've finished your case. You've got a right of reply, which is the legal right of reply. So, in terms of, you know, witnesses coming back, I'm not expecting to see your witnesses again.

MR ALLEN: It would only be if something new came out, for example, from the planners.

THE COMMISSIONER: Look, one of the things that would be helpful, is when the planners' report, towards the end of the process, if Mr Roan was here, and there was --

MR ALLEN: Mr Roan will be here for the full hearing.

THE COMMISSIONER: Yes, and again, you know, not being, you know, too pedantic about the form of -- if anyone had an objection about him being asked a question or two at that stage about details, even, if it's through me, I could do that. But I'd be happy with that.

MR ALLEN: Thank you, sir. Thank you.

THE COMMISSIONER: All right, so I think is your case finished?

MR ALLEN: That's correct, sir. Thank you.

THE COMMISSIONER: There is two things. Just to confirm we are reconvening next week on 8 August. Ms Ongley, with the Department of Conservation, as I understand it.

MS ONGLEY: Yes, sir.

THE COMMISSIONER: 10.30 am start and then 9 August we'll be hearing some other submitters. At the moment, 10 August is there but not required at this stage. So, next Wednesday and Thursday is when we'll be back. Does anyone have any questions about next week or any other details or any matters to raise with me?

MS ONGLEY: Just what I raised earlier, sir, is that we're going to use all endeavours to provide fulsome comments on the conditions and I understand that we're getting a set of those from Mr Allen on Monday. But, if I need to, I will ask you, at the time, to come back on the 16th, during that day, and I'll raise that during my case.

THE COMMISSIONER: Yes, I'm very comfortable with that, Ms Ongley. I think that's fair and thank you for raising that.

The only other matter is we forgot to close and karakia or mihi the last couple of days, and I think it's really important that we do finish today with that, and I apologise for not organising that. We've had a pretty busy week and I think that would be very appropriate. So, if I could hand over for closing please.

(Closing karakia)

THE COMMISSIONER: Kia ora. Thank you very much. We'll see many of you back next week. Thank you.

(Adjourned until Wednesday 8 August 2018 at 10.30 am)