

Report pursuant to s42A Resource Management Act 1991

In the matter of:

A Notice of Requirement to construct, operate, use, maintain and improve approximately 11.5km of new State highway connection between Ashhurst and Woodville

And:

A hearing by Manawatū District Council, Palmerston North City Council and Tararua District Council pursuant to s102

Requiring Authority:

New Zealand Transport Agency

Hearing date:

25 March 2019

SJ-015652-992-954-V1-e



S42A Technical Evidence Addendum: Construction and Earthworks

By: Gregor McLean, 4 April 2019

SJ-015652-992-954-V1-e



1 Scope

1. In this addendum I provide comment on the following:
 - a. Matters arising since preparation of the s 42A report, including from the submission of expert evidence, Joint Witness Statements from expert conferencing, or at the Hearing;
 - b. Issues in relation to construction and earthworks that remain in contention; and
 - c. The draft conditions, including any differences between the conditions proposed by NZTA and the s 42A Reporting Team.

2 Matters Arising since preparation of the s 42A report

Designation Boundary and Management of Effects

2. It is still necessary, in my opinion, for NZTA to establish that the NOR corridor can provide sufficient room for any best practice mitigation (Erosion and Sediment Control (ESC)) to be put in place, including in difficult or vulnerable (high value) sites.
3. Mr Whaley's evidence (paragraphs 240 and 241) confirms that the NOR boundary has been set considering the need for ESC works. However, Mr Whaley also notes that ESC measures do not need to sit within the designation.
4. I agree that ESC do not need to sit within the designation. However, this approach could introduce environmental effects outside the effects envelope and also give rise to further approval complexities at a later date. To ensure that the NOR corridor can deliver a road with acceptable effects, it is my opinion that the effects envelope defined for vegetation clearance and stream disturbance needs to account for these additional mitigation works. This is

particularly the case in circumstances where there are high value watercourses and the ability for NZTA to be able to deliver best practice ESC is very important.

5. The above approach would also assist with NZTA ensuring that the Project can be delivered within the project programme and to minimise delay risk.

Vegetation, Wetland and Streams

6. The impact of temporary works could result in additional environmental effects that have not been considered or assessed by NZTA.
7. Dr Forbes (paragraph 136) confirms the effects envelope parameters were developed in careful consultation with the design, structures, access and construction disciplines of the NOR team.
8. It is however still unclear from Dr Forbes and Mr Whaley's evidence if, for example, the extent of vegetation clearance and stream disturbance has considered the required space for best practice ESC.
9. Alignment options to reduce the impact on sensitive sites such as the QEII covenant areas have been considered. Mr Whaley at (paragraph 141) acknowledges that the northern option is considered feasible and the NOR corridor has sufficient room for this option. Mr Whaley¹ (page 6 and 7) states that the alignment would not avoid the QEII area. It would however occupy less of it (approximately 40% of the indicative alignment). The total volume of earthworks would also increase (by 4 – 500,000m³ more than the indicative alignment) with the greater elevation on this alignment.

¹ Memorandum of counsel for the New Zealand Transport Agency accompanying legal submissions and responses to further questions from the Hearing Panel, dated 20 March 2019.

10. It is clear that there is a balancing act between reducing environmental effects (particularly on the significant habitat) versus the increased volumes of earthworks.

3 Issues that remain in contention

11. In my opinion the NOR boundary needs to provide sufficient room for ESC. NZTA's evidence has not demonstrated that there is sufficient room within the designation.
12. The impact on streams and vegetation from temporary works (ESC) needs to be clearly defined to ensure additional environmental effects that are unnecessary or have not been considered, are avoided.

4 Draft Conditions

13. I agree with the draft conditions as proposed by Mr Percy and Ms Copplestone.

5 Conclusions

14. I still consider that there is generally adequate area within the NOR corridor to accommodate the earthworks and the erosion and sediment control measures that may be necessary to manage them.
15. There are some areas of specific concern regarding the corridor width when accounting for additional mitigation works (over the effects envelope) for vegetation clearance and stream disturbance. It is unclear whether the extent of vegetation clearance and impact on streams have considered the required space for erosion and sediment control devices.

16. There needs to be sufficient width in the NOR corridor beyond the extent of the cuts and fills to accommodate necessary mitigation measures.

Gregor McLean

4 April 2019