



memorandum

TO Phil Heffernan FROM Verity Kirstein
Winstone Aggregate DATE 13 August 2026
RE Hunua Quarry Development

This memo has been compiled to provide responses to the comments made on the Hunua Quarry Development Fast Track application, in relation to the stream diversion design and haul road culvert design. In preparing this memorandum I am continuing to comply with the Environment Court's Code of Conduct for Expert Witnesses.

PDP's report, *Mangapū Tributary Realignment – Preliminary Design and Effects Technical Report (March 2026)* and memorandum *West Haul Road Culvert – Design and Flood Risk Assessment (30 March 2026)* have been provided in support of the FTAA application. Page 6 and Appendix E of the Technical Report sets out my qualifications, experience and areas of expertise.

I have reviewed the comments made and Table 1 provides responses to those comments.

Table 1:

EPA Commentor Code	Sub Code	Response
8	0.025	Refer to the Technical Report, section 4.2 – Flood Hazard, pages 35 - 42
8	0.026	Noted – condition of consent has been offered
8	0.027	Noted – agree to amendment to condition <i>(e) methods for diverting upstream flows during the streamworks, including how upstream ponding and/or other adverse effects up and downstream, will be managed and avoided during works and how sufficient.....</i>
8	0.030	As per point 0.027
8	0.035	Propose the following condition of consent: <i>Prior to finalising detailed design for the two culverts, hydraulic modelling must be undertaken under blockage conditions to confirm sizing and performance. Modelling outputs and final</i>

		<i>design will need to demonstrate that flood levels will not overtop the gully or the haul road.</i>
8	0.039	As per 0.035
8	0.040	Agree to proposed condition 65A
8	0.298	As per point 0.035
8	0.299	As per point 0.030
8	0.300	As per point 0.035
8	0.301	yep
8	0.302	As per point 0.035

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Prepared by

Verity Kirstein

Service Leader – River Engineering