Fast-track Approvals Act 2024 – Delmore Substantive Application
Technical Addendum
FTAA-2502-1015 / BUN60444768

1.0 Technical Specialist – Surface Water

From:	Nick Hazard, Consultant Hydrogeologist, Water Allocation
Date:	9 July 2025

2.0 Executive Summary / Principal Issues

Temporary stream diversions are required during culvert construction within the site. There are thirteen proposed crossings requiring diversions that will be in place for a few days for minor crossings through to approximately one month for the more complex sites. The crossings are expected to be completed at periods of low flows during dry summer conditions. The diversions can be categorized as (a) low or negligible flow sites, (b) moderate flows with a steep gradient and (c) relatively high flows with a low gradient. The main concern is that the stream bed and associated wetlands are not affected by the short-term diversion more than what could be expected over the long term due to the emplacement of the new culverts. There is potential for erosion upstream and downstream of the temporary diversion due to increased flow rates and a change in the stream bed gradient beyond what is proposed and assessed for the proposed permanent culvert crossings.

3.0 Specialist Assessment – Previous Memo / Comments Overview

Summary of 25/06 Issues identified

- Provision of a methodology for the temporary culvert diversion construction was sought and subsequently provided.
- The existing culverts at 8 and 9 have a significant elevation difference upstream and downstream. This will require care and well thought out methodology to avoid adverse effects.
- Adherence to the methodology provided in a memo (Delmore – Methodology for Culvert Works within Stream, McKenzie & Co.) was sought to be included in conditions.
- A standard was sought to be included in conditions to ensure the design of the temporary diversion avoids adverse effects on the stream bed.

4.0 Specialist Assessment – Material Reviewed

Review of 07/07 Updates

- 49.6 Memo, Response to Council Ecology Comment – Culverts and Hydrological Suitability, McKenzie & Co
- 42.2 Memo, Delmore FT Application – Response to Auckland Council Terrestrial Ecology Queries
- 42.3 Memo, Delmore FT Application – Response to Auckland Council Freshwater Ecology Queries
- 42.4 Letter, Delmore Subdivision: Response to Councils Questions Regarding Wetland Hydrology
- 49.4 Memo, Delmore: Methodology for Culvert Works within stream, McKenzie & Co
- 49.5 Memo, DWG 3725-2903, Mckenzie & Co
- 49.8, Delmore Earthworks Report, McKenzie & Co
- 57.0 Proposed Conditions
- Vineways Delmore Fast Tracked AEE Track Change Version, Revision 2

I have reviewed the above reports and there is nothing material in these that changes my original opinion. However, I have also reviewed the earlier drawing 3750-0-4950, McKenzie & Co and now realise the proposed Culvert 8 is well downstream of the existing culvert (Ex CU 14) in a relatively low gradient position. I have no concerns now regarding Culvert 8 and any matters relating to the installation of the diversion at Culvert 8 are addressed by the 49.4 Memo.

5.0 Specialist Assessment – Addendum – Outstanding Issues / Information Gaps

I have identified that there are no outstanding issues or information gaps.

6.0 Proposed Conditions

I sought the inclusion of two conditions as outlined in Section 3 above. These have been included in the proposed condition set without any changes to the wording I offered in my initial memo. These are represented as conditions **191** and **196** in the draft condition set.

7.0 Recommendation

Key Headings

Based on the inclusion of the recommended conditions outlined above which were included in the proposed condition set provided on 7 July, I am in support of the application.