Comments on a Substantive Application under section 53 of the Fast-track Approvals Act 2024: Erosion and Sediment Control

Fast-track project name	**Mt Welcome, Pukerua Bay, Porirua**
Fast-track application number	FTAA-2603-1181
GW file number	FTA260348

Technical area	**Erosion and Sediment Control**
Date	25 June 2026
Author	Gregor McLean, SouthernSkies Environmental Limited
Statement of expertise	I am a Director of SouthernSkies Environmental Limited and have over 29 years' experience in environmental management focussed on erosion and sediment control, managing a variety of multi-disciplinary environmental projects on behalf of clients in both the private and public sectors. I hold a Bachelor of Arts (Planning/ Geography) from Massey University and a Post Graduate Diploma in Resource Studies from Lincoln University. I am a Certified Professional in Erosion and Sediment Control (7628) and a Registered Soil Practitioner: Erosion and Sediment Control.
Code of conduct	I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. This technical memorandum has been prepared in accordance with that Code. Unless I state otherwise, the opinions I express are within my area of expertise, and I have not omitted to consider material facts that might alter or detract from the opinions that I express.
Documents considered	• Fast Track Substantive Application; Mt Welcome, Pukerua Bay, Porirua; dated 16 March 2026, prepared by Incite. • Appendix 10. Draft Earthworks and Construction Management Plan – Mt Welcome, dated 14 November 2025, prepared by Envelope Engineering Limited. • Appendix 15, Mt Wellington Station Ecology, Ecological values, effects and effects management, dated 20 November 2025, prepared by BlueGreen Ecology Limited. • Appendix 19, Mount Welcome Water Quality Assessment, dated 17 November 2025, prepared by PDP Limited. • Appendix 26, Geotechnical Investigation – Mt Welcome • Development, 422 State Highway 59, Pukerua Bay, Porirua, dated 6 November 2025, prepared by Engeo Limited.

	• Appendix 30-16, Proposed Erosion and Sediment Control Layout Plans, dated 14 November 2025, prepared by Envelope Engineering Limited. • Appendix 30-17, Proposed Erosion and Sediment Control Stage 1, dated 14 November 2025, prepared by Envelope Engineering Limited.

Comments

Summary

The application proposes approximately 1.9M m^3 of cut and 1.8M m^3 of fill over an area of 81.5ha. The earthworks are proposed to be undertaken over 8 stages, with civil infrastructure following each stage of earthworks. Eleven new stream culverts (new or amended) are proposed to be installed.

The Draft Earthworks and Construction Management Plan (DECMP) seeks to provide the overarching principles for both the management of sediment and dust.

The DECMP proposes to manage the effects of earthworks, dust and streamworks by the implementation of Erosion and Sediment Control devices designed, constructed and maintained in accordance with Greater Wellington Regional Council's *"Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region"* (the **Guidelines**).

The DECMP proposes that management plans are prepared prior to construction commencing to address streamworks, chemical treatment and Erosion and Sediment Control for each stage of earthworks.

Monitoring through construction would be undertaken to ensure that the sites mitigation measures (erosion and sediment controls and dust control) are operating as designed and to ensure that the potential effects on the receiving environments are managed.

Agreement with the applicant

1. I agree with the applicant that all erosion and sediment controls should be designed, constructed and maintained in accordance with the Guidelines.

2. I agree with the applicant that staging of earthworks limits the area of exposed earth at any one time and reduces environmental risks.

3. I agree that dust can be managed through measure in the DECMP. I do however note that sensitive receivers have not been identified.

4. I agree that winter works can be appropriately managed through a winter works management plan (to be certified) and support the proposed maximum exposed area of 0.3ha during that period.

Matters in contention and suggested response

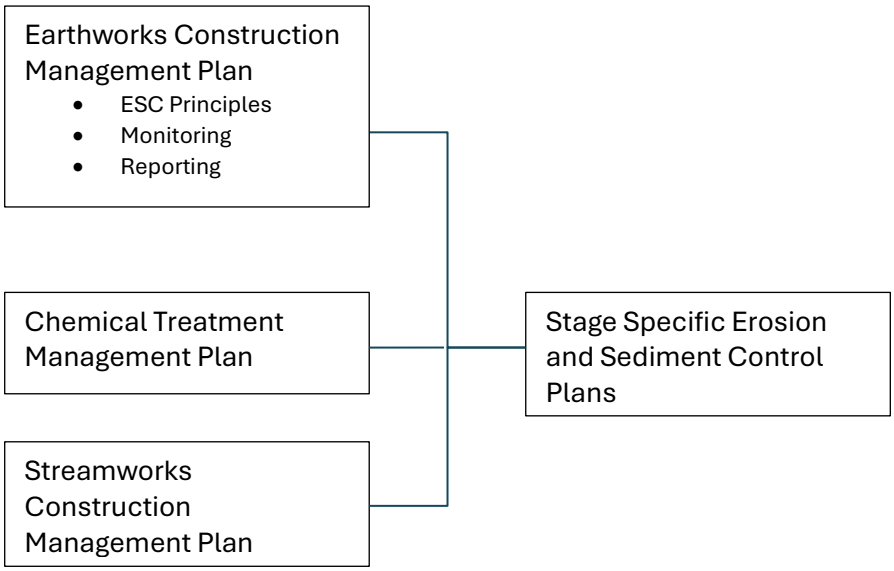
Management Plans

5. The DECMP proposes a number of management plans are prepared to manage the effects of earthworks:

- Detailed Erosion and Sediment Control Plan for each stage;
- Flocculation Management Plan
- Streamworks Construction Management Plan
- Stream Diversion Plan

6. The DECMP states that stage specific Earthworks Construction Management Plans (ECMP) and flocculation management plans will be developed.

7. I agree that management plans can be an effective mechanism to manage the potential effects of soil erosion and sediment discharges during the construction phase of large projects. I believe however there is some confusion in the proposed purpose and structure of the management plans. I consider that the management plan structure could be:



8. Appropriate consent conditions can be imposed which provide a clear purpose and structure for the management plans. The consent conditions could also ensure that each of the plans provide the appropriate level of detail.

Erosion and Sediment Control Plans

9. The draft Erosion and Sediment Control Plans (Appendix 30,17) do not comply with the Guidelines or provide adequate details.

10. As an example, the T-Bar decants, and primary spillways of the Sediment Retention Ponds (SRP) are located within the centre of the SRP's. This would likely result in adverse sediment related effects due to sediment laden water not having adequate time to settle prior to discharge.

11. Although the plans do not comply with the Guidelines or provide the level of detail required, in my opinion there does not appear to be any reason why compliant erosion and sediment controls could not be designed, installed and maintained in accordance with the Guidelines.

12. Consent conditions should be imposed which require Stage Specific Erosion and Sediment Control Plans (SSESCP's) be prepared in accordance with the Guidelines and be submitted to council for certification prior to earthworks commencing. The condition should also list the matters which need to be included in the SSESCP's.

Water Quality Monitoring

13. The proposed water quality monitoring of the sites sediment retention devices is based on measuring turbidity and pH at the inlet and outlet of the devices and at the reasonable mixing zone after rainfall triggers and assessing the monitoring against water quality triggers.

14. The water quality triggers are outlined in the DECMP as:

    (a) The turbidity (NTU) has increased by 30% after the zone of reasonable mixing (7 times the bed width)

    (b) For any chemically treated device - pH 5.5 – 8.5

    (c) a failure of an ESC[1]

15. Where a water quality trigger is exceeded than actions are implemented to investigate, make amendments and report.

16. I consider that the water quality monitoring should also include a discharge trigger from the sediment retention devices to ensure that a poor performing device can be appropriately

[1] Noted that this is not a water quality trigger but included for completeness

identified and managed. A condition of consent could be imposed with a trigger on the discharge of 170NTU.

17. The location of any downstream (or upstream) monitoring will need to be clearly identified on a plan and ensure that this is accessible onsite. These requirements could form part of the water quality monitoring conditions.

18. It is important to note that these water quality triggers are not performance limits, compliance standards or related to effects.

19. In terms of sediment related effects, the DECMP notes that continuous turbidity monitoring occurs at three downstream monitoring points[2] and this will confirm that the measures outlined in the DECMP are correctly implemented and are effectively minimising sediment runoff.

20. Neither the DECMP or the Water Quality Assessment provide a process to demonstrate how the downstream monitoring will inform site practices or confirm compliance with the conditions.

21. If continuous turbidity monitoring was to be of usefulness during construction than turbidity trigger levels would need to be established, and appropriate actions and reporting specified.

22. Turbidity triggers could simply form a component of the management plans and be included through a condition of consent.

Mitigation

23. The DECMP acknowledges the most significant water quality risk is sediment discharge during earthworks and states that this will be managed by the DECMP and:

    a) Establishing buffer zones around wetlands and streams.

    b) Minimising the extent of exposed earth at any one time.

    c) Installing sediment retention and diversion devices

    d) Locating sediment controls upstream of wetland areas to prevent sediment ingress.

24. I do not consider that the documents I have reviewed provide any clarity around how a) and d) are being specifically accounted for or are to be implemented. If they are important aspects,

[2] Appendix 19, Mount Welcome Water Quality Assessment, dated 17 November 2025, prepared by PDP Limited

in managing the effects then parameters need to be established that would be included in the DECMP and subsequent SSESCP's.

25. In relation to b), the DECMP states that the earthworks will be undertaken in 8 stages however notes that flexibility of staging is required given that the detailed construction methodology is not finalised.

26. Stage sizes identified in Table 1 range from 2.8 ha (Stage 5) through to 28.8 ha (Stage 2), although it appears that there is an error in the table. Table 1 indicates a total earthworks area of 81.46 ha; however, the sum of the individual earthworks areas is 96.2 ha. This discrepancy should be clarified.

27. Staging of earthworks is essentially a risk management approach whereby limiting the exposed area limits the potential for sediment generation, and therefore sediment yield and transport off-site. Staging reduces the risk of large scale, one-off erosion events causing significant detrimental effects. It is important that the earthworks are staged to reduce the potential sediment related effects. Consent conditions should be considered to limit the maximum exposed area to the proposed stage sizes.

28. Stabilisation is also a critical component to reduce effects. The DECMP provides a limited description of stabilisation techniques and notes that hay mulch should not be used due to high winds and that that stabilisation will occur as soon as reasonable upon completion of works.

29. It is critical that stabilisation occurs progressively throughout the project rather than when earthworks are completed. It is also critical that a range of stabilisation techniques are implemented that are suited to the time of the year, climatic conditions and soil types. In that regard no stabilisation techniques should be excluded.

30. Consent conditions should be considered requiring the progressive stabilisation of the site and ensure that the stabilisation techniques implemented are suitable for the soil types, time of year and climatic conditions.

31. I note that the Geotechnical Assessment contains specific recommendations in relation to stabilisation and surface water management of the site to reduce erosion. These recommendations should be included in the DECMP and subsequent SSESCP's.