Delmore Fast-Track

25/06/2025 – Auckland Council Response

Annexure 17:

Stormwater

Martin Meyer

1. Application Summary

Project Name	Delmore
Applicant	Vineway Limited
Site Address	88, 130, 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road, Ōrewa, 0992
Fast-track Reference Number	FTAA-2504-1055
Types of approvals sought	Earthworks, subdivision, stream works, groundwater diversion, stream diversion, air quality discharge, stormwater diversion and discharge, wastewater discharge
Council reference numbers	BUN60444768 LUC60444824 SUB60444825 LUS60444826 WAT60444827 WAT60444834 DIS60444829 DIS60444830 DIS60444832 DIS60444833 VCN70025252
Description of Proposal	To construct a comprehensively planned residential development at 88, 130, 132 Upper Orewa Road and 53A, 53B and 55 Russell Road, Orewa (the 'site'). The development will involve the construction of approximately 1,250 dwellings, one unserviced residential superlot, open space areas, areas of protected vegetation, roads including the NoR 6 road, supporting infrastructure and other associated works. Works will be undertaken in two primary stages. Once completed, the development is intended to be called Delmore.

2. Specialist Response Details

Author: Martin Meyer

Specialist Area: Stormwater Specialist, Specialist Unit, Planning & Resource Consents Department, Auckland Council

Date: 25/06/2025

3. Specialist Assessment

Overview

The scope of this assessment is from a regional discharge stormwater perspective. Of note this assessment sits alongside the stormwater assessment provided by Healthy Waters and AT in addition to comments from the Development Engineer. The regional perspective is to assess, mitigate and authorise discharges from private or jointly owned assets into the environment. As the future state of this development is aimed to vest to the council and authorise stormwater by Healthy Waters, the time

frame for the vestment is unknown and may be many years into the future. Extensive work has been undertaken by Healthy Waters to provide the applicant with the necessary requirements to gain authorisation through this network in the future. Prior to vestment, all discharges of stormwater are authorised under chapter E8(AUP-OP) and this assessment is in particular focused on the ownership and management of the stormwater assets while authorised under the regional stormwater discharge consent.

The general site is hilly with fine sediments and expected to be prone to erosion. A s128 or adaptive management plan may be appropriate if the geomorphological risks are identified to be high with high risk of channel incising, erosion and/or stream movement. I raise this as the key risk to the stormwater management of the site, while sitting outside of my expertise, please refer to other analysis provided on stream geomorphology (Healthy Waters have recommended a geomorphic risk assessment to be undertaken).

In general from a regional stormwater discharge perspective I support the development proposed where environmental effects are adequately addressed. The proposal has provided SMAF detention, however the significant impervious surfaces involved in the development and unknown effects on the streams especially for large events of or greater in magnitude than 1% AEP. In general the proposed design is aiming to mimic the natural discharge by providing detention and slow release into the streams onsite with treatment of contaminants prior to discharge (per section 105 RMA) for the SMAF sized discharges. Under section 106 RMA at this stage the natural hazards have not been adequately assessed (geomorphic risks, erosion and flooding aspects). If adequate assessment is shown to prevent erosion (eg from T-bar outlets) I can also confirm that section 107 RMA does not apply to the proposed discharges, however if erosion is found to be likely with the T-bar design then this discharge may contravene section 15/15a during periods of peak discharge being 107(1)(c) and/or 107(1)(d) where discharge may contain floatable or suspended materials, or impact in the conspicuous change in the colour or visual clarity of stream waters. Where future assessments or responses show significant environmental concerns moderation of the development should take place to adequately address these concerns. This may be through an adaptive management plan, or proposed alternative development to mitigate the effects (for example lots near the river are altered to allow a greater stream margin to accommodate erosion risks and stream migration if found within a geomorphic risk assessment to be of issue).

While at this stage still awaiting a hydrological report, in principle the E8 and E9 consent standards have been met. However there are particular uncertainties remaining for erosive effects, flooding impacts and overland flow path changes. Healthy Waters are currently undertaking assessment of the flood model, and a geomorphic assessment is requested to further clarify risks of erosion. The hydrological effects on the wetlands and implications under the NES: Freshwater is also of concern in this development due to the unknown impacts of this development on the wetlands with no specific hydrological assessment provided.

E8 Stormwater – Diversion & Discharge

The applicant proposes to create and discharge from new impervious areas proposed within the development, this will be authorised under the **discretionary activity** E8.4.1(A10).

The applicant proposes impervious coverage of 60% impervious in residential lots, and 62% for roading areas.

The proposed network will consist of a catchpit and pipe network, with some communal raingarden devices to provide treatment for both quantity and quality of JOALs and roads. Individual lots will connect to the piped network but also have SMAF stormwater tanks to provide retention and detention of the impervious areas. Lots adjacent to streams will discharge directly via a T-bar (post-SMAF tank) and these will remain under private discharge consent. AT/Healthy Waters are in discussions with the applicant around the arrangement of the management of these communal devices. Please refer to comments from these memos, which detail concerns around the T-bar outlet potential to destabilise stream embankments. If the T-bar outlets proposed are found to be erosive this is a failure to meet the permitted activity standard E8.6.1(2). T-bars allow discharges to discharge via sheet flow, with enough room and stable soil this is a generally approved discharge in many regional areas. However where steep banks and unstable soils exist they may represent a risk to bank stability. The sensitivity of the stream banks have not been assessed for this aspect, however noting the applicants discharge via a SMAF-tank and a throttling orifice may provide some protection. The geomorphic assessment requested may provide clearer details on the risk to the bank destabilisation by this design.

It is noted the SMAF hydrological mitigation area standard for any urban development discharging to a stream under E8.6.3.1(1). Technically this does not apply due to the current zoning, but as the fast-track will allow for an 'urban style' development this should be factored into the design of the stormwater management. Similarly as mentioned in the E10 SMAF comments.

The lots are situated within a 'future urban zone' and the proposed Stormwater Management Plan (SMP) has not yet been accepted by Healthy Waters. The discharge cannot be accepted under the Regional Network Discharge consent at this time due to the SMP status. However, Healthy Waters have worked with the applicant to facilitate a network that in principle in future where the SMP is accepted/plan change go ahead, may be vested to Auckland Council. At this stage this vested network will become authorised by the NDC and no longer be under the private discharge consent.

A proportion of the stormwater infrastructure will remain private such as the lots discharging directly to the streams via T-bars and private stormwater detention tanks, these will continue to be authorised under the aforementioned stormwater discharge consent.

To provide certainty of the discharge a 35 year consent for the discharge of the entire network is proposed. While the expectation that vestment will occur prior to the expiry of this consent, conditions that appropriately allow the operation and maintenance of the entire network as private need to occur to provide certainty for the approval of the discharge even if the network were never to be vested.

While this assessment does not include analysis of the overland flow paths, the effects of culverts (in particular needed for AT) or the potential flooding and changes to flood plains with or caused by the proposed development (which will be undertaken by Healthy Waters and Development Engineers). Of particular note concern has been raised by NZTA about a high risk of damage to a 2100mm diameter culvert designed for maximum probability discharges in the 1990s. Key gaps as mentioned are a geomorphic assessment to determine the stability of the streams in this area.

E9 High Contaminant Generating Carparks and High Use Roads

The development does not propose any contiguous carparks in excess of 30 car parks, however >5,000m^2 of high use road will be created. A Notice of Requirement 6 traverses the site providing a planned arterial link between Milldale and Grand Drive. The Integrated Transportation Assessment

Report expects the residences to create 8,125 daily trips and identifies current Grand Drive to the east of the proposed development near West Hoe Road generates over 12,000 daily trips.

This proposal includes raingardens and treatment inline with GD01 requirements for JOALs and roads proposed. The proposed high use road is expected to have water quality treatment to the standards required by E9.6.2.2 under the **controlled activity** E9.4.1(A7), and meets the requirements for this land-use consent based on the lodged documents provided.

E10 Stormwater Management Area – Flow 1

The control areas for SMAF only apply to residential areas and were never extended into future urban zones. Downstream of the proposed developed SMAF-Flow1 areas have been designated indicating the catchment is highly sensitive to additional volumes and velocities of discharge. While no trigger for E10 consent occurs, the applicant has provided detention and retention to a minimum of SMAF-Flow1 levels as per recommendations made by Healthy Waters. I agree with this approach, as in typical rezoning processes it is likely that if this area would likely have become a SMAF-Flow1 control area.

NES: Freshwater

Thirty four natural inland wetlands were identified within 100m of the proposed works by the Ecological Assessment. While the site in general proposes to minimise hydrological changes with allowing flows to discharge into the streams to maintain baseflow, and revegetation, one wetland occupies the NoR 6 space and will be therefore modified when this arterial route is built. Other wetlands within the proposed development are thought to have minor changes, however extensive hydrological reporting has not been undertaken to determine the hydrological functions of these or how the proposed development may affect their hydrological function other than the statements given within the Ecological Assessment (pg 34). Here it is my view that a hydrological change may occur by the revegetation and discharges mentioned, but the ecological report states hydrological function changes on the wetlands will not occur.

I agree with the **restricted discretionary** activity status identified under regulation 45C(5), however more information is needed on the hydrological function effects to the 34 natural inland wetlands identified to identify how extensive the effects will be on these wetlands.

Further hydrological information is expected to be provided for the site, which may clearly identify areas where hydrological change is expected. The effects of the development on the natural inland wetlands are not clearly understood at this stage.

4. Comment on Proposed Conditions

Conditions within Appendix 22

Supported proposed conditions

(1) through (9) general conditions.

(73), (74)

Stormwater Discharge Specific Conditions

(92) Minor Modification

(93),(94) Post Construction Conditions

Additional Conditions Proposed

The above 3 discharge conditions do not adequately cover the proposed stormwater discharge and infrastructure risks, the entire network will be under the ownership of either the consent holder or a future legal entity prior to vestment to council. It is unclear where the responsibility and cost of the maintenance and operation of the stormwater network will be with Vineway Ltd at this time or via a shared ownership model. The following conditions look to clearly specify the stormwater management devices, their catchments, their maintenance and operation requirements and ownership.

A clause may be needed to clearly identify which stormwater management devices will be vested, however it may be the applicant seeks a s127 at the point where vestment looks to occur removing all but the remaining private discharges, or otherwise a s138 to partial surrender the assets that will be vested or a s37 to transfer consent to individual lot owners and the council.

1. 'Stormwater Management Works'
   Note this is a description of the condition table recommended: Specify each treatment device, outfalls, raingardens propose should be included within the discharge consent, this should include the catchment area impervious proposed for each device, and the design requirements of these devices (eg GD01). It is recommended this table could also display the assets to remain private and those which aim to be vested.

2. 'Operation and Maintenance Plan'
   An Operation and Maintenance Plan must be provided to and certified by the council **5 working days** prior to the commencement of discharge authorised by this consent.

   The plan must include
   a. Details of who will hold responsibility for long-term maintenance of the stormwater management system and the organisational structure which will support this process;
   b. A programme for regular maintenance and inspection of the stormwater management system;
   c. A programme for the collection and disposal of debris and sediment collected by the stormwater management devices or practices;
   d. A programme for post-storm inspection and maintenance;
   e. A programme for inspection and maintenance for the outfalls
   f. General inspection checklists for all aspects of the stormwater management system, including visual checks;
   g. A programme for inspection and maintenance of vegetation associated with the stormwater management devices.
3. 'Operation and Maintenance Plan implementation'

   The stormwater management system must be managed in accordance with the final Operation and Maintenance Plan prepared in accordance with Condition 2.

4. 'Amendments to the Operation and Maintenance Plan'

Any amendments alterations to the Operation and Maintenance Plan must be submitted to the the council for confirmation, in writing prior to implementation.

The Operation and Maintenance Plan must be updated and submitted upon request to the council for confirmation.

5. 'Maintenance Record'

   Details of all Maintenance Records (including inspections, servicing and maintenance) for the stormwater management system must be retained by the consent holder for a minimum of the preceding three years.

   A maintenance record must be provided to the council on request.

6. 'Contents of maintenance record'

   a. Details of any maintenance undertaken; and
   b. Details of any inspections, servicing and maintenance completed

7. 'Maintenance Responsibility'

   At the time of issue of the Certificates of Title for the units, a Covenant or other legal instrument to the satisfaction of the Council shall be registered on the titles of the units requiring that the long-term operation and maintenance of the stormwater management devices will remain the joint responsibility of the owner of the units.

   Advice Note:
   If a Body Corporate or similar legal entity is formed with responsibility for the ongoing operation and maintenance of the stormwater management system, consent DIS60444830 for the diversion and discharge of stormwater should be transferred to this entity.

8. 'Maintenance Responsibility'

   At the time of issue of the Certificates of Title for Lots (to be specified), a Covenant or other legal instrument to the satisfaction of the Council shall be registered on the titles of Lots (to be specified), requiring that on-site stormwater management works shall be undertaken to comply with the following:

a) Rain tanks sized for roof runoff from each individual lot shall be designed and constructed to achieve hydrology mitigation in accordance with standard E8.6.3.1(1).

b) At the time of application for Building Consent, detailed design for the proposed stormwater tank shall be submitted to and approved by the Council.

c) The rain tanks shall be maintained to ensure the tanks continue to operate as a stormwater attenuation device. In particular, the owner shall not block or remove the part of the tank to be reserved for stormwater management.

d) The stormwater management devices on each of the individual lots, are to be maintained by the owners of the lots in accordance with the Operation and Maintenance Plan as outlined in Condition 2 **(final number to be inserted by lead planner)** above [to be attached, prepared in accordance with Auckland Council Consent DIS60444830].

The Council's Solicitor will prepare the Covenant or other legal instrument at the consent holder's expense.

9. 'Future Ownership'

   At the time of issue of a Body Corporate, Resident's Association, A Covenant, or other legal instrument to the satisfaction o the council, the following registration must be made requiring:

   a. The stormwater management systems are to be maintained in accordance with the Operation and Maintenance Plan as outlined in condition 2.

   The Consent Holder must notify the council in writing within 20 working days of the legal entity having been formed.