IN THE MATTER of the Fast-track Approvals Act 2024 ("**FTAA**")

AND

IN THE MATTER Project **FTAA-2512-1164** – Delmore ("**Delmore Application**")

MEMORANDUM OF PLANNING MATTERS FOR AUCKLAND COUNCIL

Dated: 4 May 2026

SECTION A: INTRODUCTION

1. This Planning Memorandum sets out Auckland Council's Statutory Planning Assessments of the substantive application for the Delmore project (**Application**) lodged by Vineway Limited (**Applicant**) under the Fast-track Approvals Act 2024 (**FTAA**), and a summary of assessment outcomes and proportionality conclusions.

2. The **Section B** Strategic Planning Assessment provides a summary of the Memos prepared by Ms Rosie Stoney, Auckland Council's Senior Advisor Growth and Spatial Strategy, and Mr Austin Fox, Senior Policy Planner.

3. The **Section C** sets out the Council's Statutory Planning Assessment.

4. The Summary of Assessment Outcomes and Proportionality Conclusions are set out in **Section D.**

5. For process clarity, this assessment is based on the Application materials and updates received from the Applicant up to 20 April 2026, as agreed between the parties to enable Council family comments to be provided by the 4 May 2026 deadline. Additional material provided by the Applicant after 20 April 2026 has not been assessed, given the volume and complexity of material involved and the limited time available for specialist review. It is noted that the Applicant and the Council are continually working towards resolving outstanding matters including various reviews such as to the Geomorphic Assessments and Dam Break Assessments.

REGIONAL / NATIONAL SIGNIFICANCE

6. The relevant provisions of the FTAA (including sections 81 and 85 and schedule 5 for RMA applications) require a Panel to give the greatest weight in evaluating relevant factors to the FTAA purpose in Section 3, namely to facilitate the delivery of infrastructure and development projects with significant regional or national benefits, and being able

to decline an application where the Panel is of the view that the adverse impacts are sufficiently significant to be out of proportion to those benefits. We note that simply being inconsistent with a relevant Plan provision would not be enough to decline an application (due to section 85(4)). In undertaking that assessment exercise, we acknowledge the Panel will have discretion as to what weight to place on the evidence/ information before it, including about the extent of the project's regional or national benefits and the significance of the adverse impacts.

7. As outlined within the accompanying Economic Assessment (**Annexure 2**), the Council's Chief Economist Unit has reviewed the Applicant's Economic Assessment and their memo notes that in the context of other regional developments, the significance of this proposal may be more modest. Council's Economist Mr Stewart has advised that: "*…overall, I am not convinced that the analysis in the report demonstrates that Delmore would result in a net benefit (benefits exceed costs), let alone whether it could be considered a regionally or nationally significant benefit*." Their conclusion is that the Applicant's Assessment requires extensive re-review and updates to determine if the proposal would result in a regionally significant economic benefit.

8. The Council believes that without this regional economic justification to support the development, the benefits have not been sufficiently demonstrated. In contrast, the Council's specialists have identified that there are a number of adverse effects associated with the scheme of a sufficient significance, scale and nature which either require additional information off the Applicant or agreed conditions to potentially resolve.

SECTION B.1 – STRATEGIC / FDS MATTERS

9. The discussion in **Section B.1** below provide a summary of the memo prepared by Ms Stoney dated 27 March 2026 (**Annexure 3**) outlining:

    - The Council, in its Future Development Strategy 2023-2053 (**FDS**), anticipates urbanisation of this area in the future. However, the Council does not anticipate development of the Upper Orewa Future Urban Area until 2050 and beyond.

    - The FDS identifies the following infrastructure prerequisites needed to enable development in the Upper Orewa Future Urban Area:

        - Wainui Road upgrade (NoR 10)
        - Milldale and Grand Drive connection (NoR 6)
        - North Shore Rapid Transit (extension to Milldale) (NoR 2)
        - Army Bay Wastewater Treatment Plant Upgrade.

    - Bringing the timing of the proposed development forward has wide ranging local and subregional implications, particularly in terms of infrastructure investment and costs.

10. Following further consideration of the strategic issues, we highlight the additional points below.

Consideration of strategic planning matters

11. Strategic planning matters, in this case the FDS, are a relevant consideration in Fast-track application decision-making under clause 17 of Schedule 5 to the FTAA, which 'imports' the decision-making provisions of the Resource Management Act 1991 (**RMA**), including section 104 of the RMA. The FDS was prepared using the special consultative procedure in section 83 of the Local Government Act, and is an important growth document required by the National Policy Statement on Urban Development (**NPS-UD**). It is a relevant planning document for the Panel to have regard to under section 104(1)(c) of the RMA.

12. Section 85(4) of the FTAA states that a Panel may not decline an approval solely because it is inconsistent or contrary to provisions in an Act or other document. This does not prohibit consideration of relevant planning documents. Along with other matters, such as actual adverse effects, inconsistency with planning documents may contribute to a decision to decline.

13. This was also reflected within the recent Environment Court's decision in *Arvida Limited v Auckland Council* [2026] NZEnvC 049, which notes that Infrastructure providers such as Watercare must be able to rely on the FDS as a meaningful strategy to reliably inform their growth planning and funding priorities (para [95]). and, as outlined in the decision, it was therefore entirely reasonable for Watercare take the position that it did not support development out of sequence with the FDS which might impact its ability to fund and deliver infrastructure that had been committed and prioritised (para [90]).

Integration of land use and infrastructure planning and decision-making

14. The FDS sets out Auckland Council's vision for how the region will grow and change over the next 30 years, and the infrastructure needed. The FDS communicates key strategic outcomes to better integrate land use planning with infrastructure planning and funding decisions.

15. In addition to, and aligned with the FDS, the Council's Auckland Growth Scenario 2023 (AGS23v1.1) provides a more detailed spatial distribution of growth (households, population and employment). In AGS, regional growth is distributed across 594 MSM zones, over the 30-year period of the FDS.

16. Development of the Future Urban Area is anticipated by the Council. The application proposes to bring the timing of the dwelling delivery forward from 2050, however it is not additional to the dwelling delivery anticipated in the FDS and AGS.

17. The Council, and its CCOs as infrastructure providers, use the strategic direction in the FDS, along with the more granular distribution in the AGS, to inform long-term investment planning and decisions.

18. Large scale, complex bulk infrastructure projects require long lead times. This means following a long-term plan is essential for delivery. Shifting priorities impact negatively on infrastructure providers' ability to deliver. If priorities shift to unplanned and out of

sequence development, there are opportunity costs, such as displacing planned investment (both capex and opex), for planned and sequenced infrastructure and service provision.

19. The recently published Auckland City Deal (April 2026) also reflects this, supporting the coordination of sustainable land development (and focusing on enabling quality urban growth) and economic growth. It notes the importance of delivering *'…sustainable greenfield expansion*' which is *'supported by sequencing, funding and infrastructure investmen*t'.

20. *The Arvida Limited v Auckland Council* [2026] NZEnvC 049 Environment Court decision also notes that infrastructure issues need to be addressed up front, and not left for a subsequent process. We note that the Applicant has sought to address the previous Panel's concerns in regards to wastewater and water servicing, though wider infrastructure concerns and the lack of clear demonstration of regional benefits means that the wider potential adverse effects noted above need fully resolved by the Applicant upfront.

Impacts of the Delmore application on the Council's planned infrastructure and service provision

21. Auckland Council, Auckland Transport and Watercare Services Limited have not planned to service the proposed Delmore development at this time. The Council does not anticipate the Upper Orewa Future Urban Area development until at least 2050. This timing reflects when the Council and its CCOs expect the required bulk infrastructure to be in place.

22. There is inadequate existing bulk infrastructure to support the application and there is no funding allocated within current planning horizons. The Council's priority is to deliver planned and sequenced infrastructure and service provision. The Council and its CCOs will not shift priorities to service the Delmore development as it will negatively impact already committed servicing in existing live zoned areas and sequenced growth.

23. The accompanying Memos from Watercare, Auckland Transport, the Council's Infrastructure Funding and Financing team and Chief Economist Unit explain the specific impact of the Delmore application on housing supply, planned infrastructure provision and funding and financing. Summaries of these memos, as they relate to strategic planning matters, are outlined below.

Watercare Services Limited memo dated 23 April 2026 (Annexure 18)

24. Watercare's planning to upgrade the water and wastewater network to service future areas is aligned with the timing and anticipated scale of growth set out in the FDS and AGS.

25. Watercare have assessed the capacity of the existing and planned networks and re-confirm the earliest connections could be provided would be as set out in the FDS (from 2050+). Watercare state that shifting priorities to accommodate the infrastructure

requirements for the Delmore application would negatively impacting Watercare's ability to deliver planned investment in existing live zoned areas and sequenced growth.

26. The Environment Court's decision in *Arvida Limited v Auckland Council* [2026] NZEnvC 049 accepted Watercare's argument that providing connections to out of sequence development from the FDS timing might jeopardise Watercare's ability to service the existing live zoned areas within Warkworth (para [89]) and this was inconsistent with the NPS-UD and FDS. In summary, the development proposes significant new growth which is not infrastructure ready and not identified in the FDS for live zoning until 2050.

Auckland Transport memo dated 29 April 2026 (Annexure 21)

27. Auckland Transport have planned the transport network according to the timing and anticipated scale of growth set out in the FDS and AGS.

28. Auckland Transport have assessed the impacts of development occurring ahead of supporting infrastructure and conclude that there remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site for Stage 1. The proposal does not involve the portion of Designation 14108/ NoR 6 linking the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development, and the interim design solution is not supported. Auckland Transport have noted that consent condition is necessary that ensures the link is delivered prior to titles being issued if the arterial road being delivered is to be the intended indicative designation design and not an interim alternative. This is necessary to provide access for Stage 1, noting that this is the only access for this Stage. Auckland Transport have noted that there is no Council funding for the delivery of the link to the site, PTM have advised that the proposal interim design of this link has a number of design deficiencies.

Funding and Financing memo dated 19 March 2026 (Annexure 1)

29. No funding is allocated within the current planning horizons as Auckland Council, Auckland Transport and Watercare have not planned for bulk infrastructure in the application area until at least 2050 onwards. Providing infrastructure for this development could displace planned investment in other areas of Auckland where funding is already in place.

30. Significant infrastructure funding and financing gaps exist for the Delmore application and no agreements are in place to confirm the scope of proposed infrastructure and ongoing opex. It is noted that there is on-going engagement between the Applicant and the Auckland Urban Development Office, however at this time there is no formal agreement or agreed funding mechanisms.

Conclusions on Strategic Planning Assessment

31. As recognised within the previous Panel's draft decision of the original Delmore Fast-track application, the Council's FDS is a relevant consideration under clause 17 of Schedule 5 to the FTAA. The proposed Delmore development is inconsistent with the

anticipated FDS timing for development of 2050 onwards. Bringing forward development in this area comes at the expense of the delivery of other developments and is not possible without displacing planned investment and infrastructure service provision in existing live zoned areas and sequenced areas.

SECTION B.2 – POLICY ASSESSMENT

32. **Section B.2** addresses the higher-order policy assessment provided by Mr Fox in a previous memo dated 24 March 2026. For context, brief reference is made first to the Applicant's assessment.

Applicant's Assessment

33. B&A have provided an assessment of the relevant planning frameworks including an assessment of objectives and policies of the AUP(OP). This assessment concludes that the proposal will not be inconsistent with the objectives and policies of the AUP(OP).

Council's Assessment

34. Council's Policy Planner, Austin Fox, has undertaken a review of the application and prepared a Policy Memo which focuses on the policy framework having specific regard to the National Policy Statement on Urban Development 2020 (**NPS-UD**), the Regional Policy Statement (**RPS**) and the Future Urban Zone (**FUZ**) (**Annexure 4**). This review identifies four key concerns with the proposal and concludes that the proposal is contrary to key objectives and policies of the RPS and the Future Urban Zone:

    a. *Development Ahead of Structure Planning and Plan Change Process*

        The Policy Memo identifies this as a key concern, noting that as the land is Future Urban Zoned, the application is effectively seeking rezoning by resource consent rather than following the required structure plan and plan change process mandated by the RPS and FUZ zone. Council considers that a comprehensive structure plan should have encompassed all FUZ land south to the Orewa River to enable proper integration, and should have addressed critical issues such as the provision of centres to serve residents, particularly those in western areas of the site who would have poor accessibility to existing facilities. The proper structure plan and plan change process would also enable wider public consultation and likely address many technical issues raised by Council specialists regarding parks, traffic congestion, and connectivity to adjoining areas.

    b. *Regional Significance Concerns*

        The Policy Memo questions the Applicant's claims of "regional significance" based on delivering part of the NOR 6 road connection. The memo concludes that these statements overstate the regional importance of the section of road being delivered, and Council queries whether delivering even the whole of NOR 6 would be regionally significant.

c. *Infrastructure Integration Concerns*

The Policy Memo notes that the application identifies three possible options for wastewater disposal, commenting that this should be determined definitively for a resource consent stage, and that there is therefore uncertainty about which option will be used which makes it difficult to determine if the proposal is consistent with various levels of policy regarding the integrated provision of infrastructure.

d. *Underlying Zoning Problems*

A further key concern highlighted in the Policy Memo is that granting resource consent for urban development while the underlying zoning remains Future Urban is problematic for ongoing development. Future activity will be subject the underlying zone rules and Auckland Wide rules that relate to the FUZ. The activities provided for in the FUZ are much more restrictive than for the residential zones that the resource consent seeks to apply. It was noted that the Applicant needs to address how this situation will operate and be managed.

Discussion of NPS-UD, RPS, FUZ and High Court precedent

35. By way of brief summary in relation to other matters addressed in the Policy Memo:

a. *NPS-UD*

The Policy Memo notes that while the application claims the proposal will result in a well-functioning urban environment as required by the NPS-UD, Council has reservations due to uncertainty about infrastructure integration (particularly wastewater), and inadequate provision of parks, centres, public transport access, and integration with adjoining future urban land.

b. *AUP – Regional Policy Statement*

The Policy Memo concludes the proposal is contrary to key RPS objectives and policies, particularly Policies 2.2.2(3) and 2.2.2(8) which require structure planning and plan change processes for Future Urban zoned land conversion. While the Applicant claims a "structure plan approach", Council considers this inadequate and not done comprehensively, with the proposal contradicting the established regional process for urban development conversion.

c. *AUP – Future Urban Zone*

The Policy Memo emphasises that the FUZ is a transitional zone requiring rural use until proper rezoning for urban purposes. The proposal is contrary to multiple FUZ objectives and policies as it represents urban development before rezoning, fails to retain rural activities, and directly contradicts Policy H18.3(6) which uses the strong directive to "avoid" the type of activities being proposed.

d. High Court Precedent

The Policy Memo references *Auckland Council v Matvin*, where the High Court established that the FUZ is a holding zone for rural activities until rezoning, stating "there are no provisions specifically allowing urban development" and that "it is not a question of weighing up various objectives and policies for and against urban development."

36. It is important to emphasise that the above concerns extend beyond policy inconsistency / contrariness to substantive deficiencies in the Application itself, which stem directly from the absence of a comprehensive structure planning / plan change approach, including the infrastructure integration issues identified in Council's technical assessments.

Conclusion in Policy Memo

37. The Policy Memo concludes that the proposal is contrary to key objectives and policies of the RPS and the FUZ in that a comprehensive structure plan and plan change process has not been followed.

38. Importantly, the *Auckland Council v Matvin* decision confirmed that the overall purpose of the FUZ is as a holding zone and to provide a transition from rural to urban use and development. Until rezoned urban, the primary set of activities that are to occur in the FUZ are rural and that *"urbanisation on sites zoned Future Urban Zone is avoided until the sites have been rezoned for urban purpose*s" (Objective H18.2(4)).

SECTION C: STATUTORY PLANNING ASSESSMENT

39. The following Council Memos have been received which inform the overall Statutory Planning Assessment:

- Earthworks – Matt Byrne (Annexure 5)
- Geotechnical – Frank Zhou (Annexure 6)
- Groundwater Diversion and Dewatering – Hester Hoogenboezem (Annexure 7)
- Temporary Surface Water Diversion – Nick Hazard (Annexure 8)
- Noise and Vibration – Duffy Visser (Annexure 9)
- Contamination – Duffy Visser (Annexure 10)
- Archaeology / Heritage – Mica Plowman (Annexure 11)
- Māori Heritage – Dr Alex Jorgensen (Annexure 12)
- Wastewater – Patrick O'Riordan (GWE Consultants) (Annexure 13)
- Hazardous Substances – Louis Boamponsem (Annexure 14)
- Air Quality – Louis Boamponsem (Annexure 15)
- Groundwater Use – Marija Jukic (Annexure 16)
- Water Treatment – Patrick O'Riordan (GWE Consultants) (Annexure 17)
- Watercare (Wastewater Capacity and Water Supply Capacity) – Helen Shaw / Amber Taylor (Annexure 18)
- Stormwater & Geomorphology – Martin Meyer & Danny Klimetz (Annexure 19)

- Healthy Waters – Hillary Johnston (Annexure 20)
- Auckland Transport – Nadine Perera (AT) (Annexure 21), attaching reports by:
  - Craig Richards and Rob Mason (Beca); and
  - Paul Schischka (PTM Consultants
- Transport (Auckland Council) – Philips Augustine (Annexure 22)
- Waste – Elizabeth Driver (Annexure 23)
- Terrestrial Ecology – Nick Goldwater, Wildlands (Annexure 24)
- Freshwater Ecology – Antoinette Bootsma (Annexure 25)
- Arboriculture – Rhys Caldwell (Annexure 26)
- Landscape – Helen Mellsop (Annexure 27)
- Urban Design – Mustafa Demiralp (Annexure 28)
- Parks – Cas Hannink (Annexure 29)

40. The Rodney Local Board comments (**Annexure 30)** are not discussed in this **Section C**.

Outstanding Material from Applicant, and Review Limitations

41. Following lodgement of the application, Council has provided initial feedback to the Applicant on the Application. This feedback has raised a range of issues, together with outstanding additional information that is considered necessary to be received by the Council's specialists to fully assess the application.

42. The Applicant has engaged with Council during the 20-working day period, with a number of meetings undertaken. The Applicant has advised that additional documents will be provided to the Panel on the 11 May 2026 in response to the matters raised by Council. These will include the following additional information and assessments:

    a. Vehicle tracking diagrams/ curves
    b. Acoustic Insulation Memo in respect to road traffic noise from NoR to adjacent residential dwellings
    c. Updated Landscape Plans and Ecological Management Plans
    d. Dam Break Assessment
    e. Additional Geomorphology Assessment
    f. Water Treatment Response
    g. Full updated draft set of proposed conditions;
    h. Response to EPA Panel comments; and
    i. Updated set of plans that will incorporate all responses.

43. To the extent that the process may allow for it (e.g. through the Panel's use of its section 67 power), a supplementary review of this material is considered necessary following the 4 May 2026 deadline to ensure all relevant matters have been properly considered in the Council's assessment of the Application.

44. It is highlighted that the updated draft proposed conditions have not been reviewed or commented on by Council, and a review will be undertaken following receipt of the full updated draft consent set. Notwithstanding this, where relevant, comments on the

proposed conditions as lodged and where relevant updated have been provided within the Memos by each Council Specialist. These include identification of where proposed conditions are deficient, where additional consent conditions are required, and changes are required to proposed conditions.

45. This memo is therefore based on the Application material as lodged, together with the further information that has been provided post lodgement.

SECTION C: STATUTORY PLANNING ASSESSMENT

SECTION C.1.1 CONSTRUCTION EFFECTS

Earthwork (sediment and erosion)

Applicant's Assessment

46. McKenzie & Co (on behalf of the Applicant) has provided a description of the proposed erosion and sediment control measures for the bulk earthworks in the Earthworks Report with further details in the submitted Erosion and Sediment Control Plans (**ESCP**).

47. The application has agreed to Adaptive Management Plan (**AMP**) conditions, noting that a specific review condition is required and the wording of this will be prepared in conjunction with input/ agreement with the Applicant.

Council's Assessment

48. The adverse effects (sedimentation) associated with the earthworks have been reviewed by Council's Regional Earthworks Specialist (**Annexure 5**) who has confirmed that the indicative ESCP are generally appropriate and that the preparation of final ESCP for certification by Council is acceptable.

49. Given the extent and duration of the earthworks activity within the receiving environment containing streams, Council's Regional Earthworks Specialist considers that an AMP is necessary.

50. The Council's Regional Earthworks Specialist as part of their initial review and Memo had recommended a number of changes/ additional consent conditions which include but are not limited to changes to the AMP and details of the ESCP, which have been accepted by the Applicant.

Conclusions on Sedimentation Effects

51. There are no significant Earthwork (sediment and erosion) impacts that require proportionality assessment.

52. The application has agreed to Adaptive Management Plan (AMP) conditions, noting that a specific review condition is required and the wording of this will be prepared in

conjunction with input/ agreement with the Applicant.

Geotechnical and Land Stability

Applicant's Assessment

53. A Geotechnical Investigation prepared by Riley has been lodged with the Application. This includes a range of recommendations including the earthworks, retaining wall and foundation design for future dwellings. These recommendations form part of the Application.

Council's Assessment

54. Council's Geotechnical Specialist has reviewed the proposed earthworks in respect to the geotechnical matters, including land stability (**Annexure 6**). There is broad agreement with the assessments undertaken and conclusions reached.

55. There are some information gaps as they relate to assessment of geomorphic risks, which will require geotechnical review and assessment. There are on-going communications and meetings with the Applicant in respect to geomorphic and associated geotechnical matters to resolve outstanding issues/ address key information gaps.

56. Some minor changes to consent conditions are recommended to ensure that adverse geotechnical and land stability-related effects are avoided and mitigated.

Conclusions on Geotechnical and Land Stability Effects

57. Some minor changes consent conditions are recommended to ensure that adverse geotechnical and land stability related effects are avoided and mitigated, and we await confirmation off the Applicant if the requested changes have been accepted.

58. There are no significant Geotechnical and Land Stability impacts that require proportionality assessment.

Groundwater Effects

Applicant's Assessment

59. The Applicant is seeking consent to take groundwater for diversion purposes during earthworks at the subject site for the proposed Delmore Development.

Council's Assessment

60. Council's Groundwater Specialist has reviewed the Application (**Annexure 7**), and has confirmed subject to the proposed consent conditions, and additional recommended conditions, that groundwater effects (groundwater drawdown, dewatering and diversion) can be appropriately managed/ mitigated to extent that adverse effects would be no

more than minor (i.e. not significant).

61. It is highlighted that the effects of proposed dewatering and groundwater diversion are potentially adverse on the identified wetlands. The Applicant's assessments (Riley Consultants and Viridis) have confirmed that the size of the water catchment is not proposed to be altered, and groundwater is proposed to be discharged into the wetlands at discrete locations via appropriate designed energy dissipation devices ensuring less than minor change to the existing catchment.

Conclusions on Groundwater Effects

62. There is broad agreement between the Applicant and Council in respect to groundwater-related effects, including adverse effects on wetlands.

63. A specific review condition is recommended to ensure that adverse groundwater-related effects are mitigated, and we await confirmation off the Applicant that this is acceptable.

64. There are no significant residual groundwater impacts that require a proportionality assessment.

<u>Surface Water Effects</u>

Applicant's Assessment

65. The specific methodology for the temporary surface water diversion activity is set out in the Earthworks Report prepared by McKenzie & Co. This includes a methodology for the construction of temporary diversions for the construction of permanent culverts.

66. It is noted that the Applicant is currently preparing additional Dam Break Assessments, and which will need sufficient time to be allocated to enable Council Specialists to review.

Council's Assessment

67. Council's Surface Water Specialist (**Annexure 8**) has confirmed that the proposal will not result in adverse surface water related effects.

68. Changes to conditions (condition 168) are required to specifically reference the "Delmore – Methodology for Culvert Works within Stream", Appendix D, Earthworks Report, McKensie & Co dated 15 December 2025.

Conclusions on Surface Water Effects

69. There are no significant residual surface water impacts that require a proportionality assessment.

Construction Noise and Vibration

Applicant's Assessment

70. SLR has undertaken an assessment of the construction noise and vibration effects in the Noise Assessment Report provided with the Application. The proposal will exceed the permitted construction noise standards (E25.6.27) for the property located to the south at 59 Russell Road.

71. The Noise Assessment Report has stated that construction vibration can be managed to comply with construction vibration limits and has recommended vibration monitoring and careful compaction methods at locations close to 59 Russell Road and 90 Upper Ōrewa Road.

72. The Applicant has proposed that construction noise and vibration effects will primarily be mitigated/ managed through the preparation and implementation of a Construction and Vibration Management Plan (CNVMP), together with the installation of acoustic barriers/ screens.

73. The Noise Assessment Report has stated that the WWTP can be designed to comply with the operational noise limits.

Council's Assessment

74. The construction noise and vibration effects including on neighbouring properties have been reviewed by Council's Acoustic Specialist (**Annexure 9**) who has confirmed these effects have been appropriately addressed by SLR, and they are broad agreement with the mitigation measures proposed, with some minor condition amendments required.

Conclusions on Construction Noise and Vibration

75. Adverse construction noise effects can be managed to comply with the vibration and noise limits, and has recommended installation of temporary noise barriers.

76. Council's Acoustic Specialist has recommended some minor changes to the Applicant's consent conditions.

77. There are no significant residual construction noise and vibration impacts that require proportionality assessment.

Contamination

Applicant's Assessment

78. Williamson Water and Land Advisory have undertaken a Preliminary Site Investigation which has confirmed, based on previous historic land uses, that the site is not subject to any land contamination.

Council's Assessment

79. The contamination matters have been reviewed by Council's Contamination Specialist (**Annexure 10**) who agreed with the Preliminary Site Investigation \.

80. Council's Contamination Specialist has confirmed that the proposed land disturbance/ earthworks would be a permitted activity under both the AUP(OP) and National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES:CS). Notwithstanding this, they have advised given the age/ construction period of the existing buildings on the site and potential for asbestos that a specific condition is required to ensure this demolition material containing asbestos is disposed of at an appropriate landfill.

Conclusions on Contamination

81. The proposed land disturbance/ earthworks would be a permitted activity under both the AUP(OP) and National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES:CS). Council's Contamination Specialist has recommended a specific consent conditions relating to asbestos removal and disposal.

82. There are no significant residual contamination impacts that require a proportionality assessment.

SECTION C1.2 ARCHAEOLOGICAL HERITAGE AND MĀORI VALUES

Applicant's Assessment

83. Clough and Associates have prepared an Archaeological Assessment. This has confirmed that there are two recorded archaeological features (shell middens) within the property. Both of the recorded middens are located outside of the project's primary earthworks extent.

84. To manage effects on recorded and unrecorded archaeological sites, an Archaeological Management Plan has been included with the Application that outlines specific operational procedures and requirements.

85. To mitigate the risk of discovery of unrecorded subsurface archaeological within the project area, Clough and Associates advise that a general precautionary Archaeological Authority from Heritage New Zealand Pouhere Taonga (2014) be obtained prior to the commencement of earthworks.

Council's Assessment

86. The effects on Heritage values have been reviewed by Council's Heritage Specialist (**Annexure 11**) and Māori Heritage Specialist (**Annexure 12**) who are in agreement with the assessment undertaken by Clough and Associates.

Conclusions on Heritage Values

87. The proposed works areas including earthworks are located outside the two recorded archaeological features. It is considered that adverse effects on heritage values included both recorded and unrecorded archaeological features can be appropriately managed through the implementation of the Archaeological Management Plan that has been lodged with the application.

88. No additional consent conditions or changes to conditions are necessary.

89. There are no significant residual impacts on archaeological heritage values that require proportionality assessment.

SECTION C1.3 WASTEWATER TREATMENT PLANT (WWTP)

90. The Application proposes an interim WWTP which it anticipates would only be required until the early 2030s. It is noted that Watercare have advised the WWTP would be required to be in place to 2050+ and on a permanent basis (**Annexure 13**).

Applicant's Assessment

91. The Applicant's wastewater servicing strategy includes three design options. Option 1 involves a private low-pressure sewer (LPS) system that conveys wastewater to an onsite private wastewater treatment and disposal scheme. This would provide for the initial 475 dwellings (equivalent of Stage 1 of the development), and then could be scaled up to accommodate Stage 2. A portion of treated wastewater is not able to be disposed of on-site during the summer months, and therefore, this will be trucked off-site to be disposed of at an appropriate facility.

92. A wastewater disposal field is proposed for Stage 1, with a consent condition offered for the Stage 2 off-site wastewater disposal.

93. The on-site WWTP is described in the Wastewater Design Report prepared by Apex. The WWTP would be in place until such time that the Army Bay wastewater treatment plant has been upgraded. The Applicant proposes the WWTP would be in place on an "interim" basis only until the public bulk wastewater network has sufficient available capacity to service the development, after which the private WWTP would be decommissioned and the Site would connect to the public wastewater network.

Council's Assessment

94. Watercare have provided an assessment of the WWTP as it relates to adverse wastewater infrastructure related effects. Please refer to **Section C1.4** Infrastructure Effects. Watercare have advised that: "*Watercare fundamentally does not support the establishment of permanent long-term private water or wastewater treatment facilities for servicing of FUZ land*."

95. The WWTP has been reviewed by Council's Wastewater Engineer (**Annexure 13**). As

part of their initial review various information gaps were identified. Council's Wastewater Engineer has confirmed that with the exception of one matter that these have now been satisfactorily addressed. The principal outstanding matter is the proposed review / trigger condition relating to off-site disposal for Stage 2, noting that the Applicant has indicated acceptance in principle of this condition, however no formal final wording or a complete response has been provided and this is awaited off the Applicant.

96. Council's Wastewater Engineer has advised that final conditions are not able to be prepared until a Memo is provided upfront by the Applicant, confirming handling of reject water from the wastewater treatment plant. Notwithstanding this, they have recommended a suite of additional condition conditions relating to the WWTP including but not limited to the wastewater quality and irrigation fields.

97. As addressed further below in **Section C.4**, Watercare has advised that **(Annexure 18):**

    a. Public wastewater connections will not be available until 2050+ (not the early 2030s as proposed).

    b. The complexity of connecting 1,250 individually owned dwellings to the public network some 25 years in the future, including vesting of private assets that have been operational outside of Watercare's control, means future connections may not be feasible and cannot be committed to now.

    c. Any interim private servicing scheme relying on future connection to the public network is not supported given the complexity, unknown future costs, and risks.

    d. Watercare does not support any tankering of wastewater to its network for treated wastewater that cannot be discharged on site (**Annexure 18**).

Conclusions on WWTP Effects

98. Whilst Watercare does not support private WWTP for servicing FUZ land, it is considered given the site/ development cannot connect to the public reticulated wastewater system that a permanent private WWTP is the only viable option for the Delmore Project (noting that a temporary solution is proposed).

99. It is considered that adverse effects associated with the WWTP including the overall management of this can be appropriately mitigated through a suite of consent conditions, noting that further review conditions are required. In addition, it is understood that the Applicant is currently reviewing/ preparing changes to the conditions in respect to the Residents Society and how the WWTP will be operated/ managed. Council has not yet reviewed these updated conditions.

100. Watercare has recommended that if the Application is granted, it should include conditions requiring a permanent private water supply and wastewater servicing solution, with current conditions relating to future public servicing connections removed.

Hazardous Substance Effects

Applicant's Assessment

101. A Hazardous Substances Assessment report (**HSITA**) has been prepared by Williamson Water & Land Advisory which provides an assessment of effects on people, property and the environment arising from the use hazardous substances within the proposed WWTP. The HSITA includes a number of control and operational measures, including secondary containment, and a site-specific environmental management plan (to be conditioned). The HSITA concluded that with the implementation of the proposed measures that the release of hazardous substances will be unlikely.

Council's Assessment

102. The HSITA has been reviewed by Council's Hazardous Substances Specialist who is in broad agreement with the assessments undertaken and the conclusions reached. They have confirmed that the implementation of the proposed conditions will ensure hazardous substances will avoid or adequately mitigate any adverse effects, including risks to people, property and the environment.

103. The consent conditions as they relate to Hazard Substances are considered appropriate.

Conclusions on Hazardous Substance Effects

104. There is agreement between the Applicant and Council in respect to adverse effects of hazardous substances and the implementation of the proposed conditions will ensure that the use of hazardous substances can be managed to avoid or adequately mitigate any adverse effects, including risks to people, property and the environment.

105. There are no significant residual impacts as they relate to Hazardous Substances that require a proportionality assessment.

Air Discharge Effects

Applicant's Assessment

106. The Air Quality Report (**AQR**) prepared by Air Matters provides an assessment of the air discharge and resultant effects associated with the proposed WWTP. This includes an assessment of likely discharge of odours and has assessed that adverse odour effects can be mitigated through the design the of the WWTP, preparation and implementation of the Air Quality Management Plan and Wastewater Treatment Plant Management Plan and the compliance with consent conditions.

Council's Assessment

107. The AQR has been reviewed by Council's Air Quality Specialist (**Annexure 15**) who is in broad agreement with the assessments undertaken and the conclusions reached. They have confirmed that air discharges are not likely to cause significant adverse

effects at any location beyond the site boundaries

108. The consent conditions as they relate to air discharges are considered appropriate, noting that some minor changes are proposed to ensure the Wastewater Treatment Plan is certified by Council.

Conclusions on Air Quality Effects

109. There is agreement between the Applicant and Council in respect to air quality effects including odour related effects and the implementation of the proposed conditions will ensure air quality effects are avoided or appropriately mitigate.

110. There are no significant residual air quality impacts that require a proportionality assessment.

SECTION C1.4 INFRASTRUCTURE EFFECTS

Water Supply Effects

Applicant's Assessment

111. The Site is not currently serviced by the public water supply network.

112. The water servicing strategy for Delmore is included in the Infrastructure Report prepared by McKenzie and Co and includes both short-term and long-term solutions for water supply.

113. The water servicing strategy includes two options:

(a) Option 1 is an on-site, private potable water supply system including four groundwater bores, a water treatment plan (WTP) and on-site reservoirs.

(b) Option 2 is a two-phase approach connecting to the existing public watermains adjacent to the site. Phase 1 is a connection to an existing main east of the site located on Grand Drive. Phase 2 is an additional connection to the south that is required at ~550 lots.

Council Assessment

Option 1

114. The Applicant has obtained consents for groundwater take and use consent WAT60456696 to take 1,385m3/d and 195,707m3/yr for domestic supply for up to 1,217 dwellings from the underlying Orewa Waitemata Aquifer – these were applied for and approved after the draft decline of the original Delmore Fast-track application. The Council's assessment of the groundwater take consent application concluded that the proposed bores on site are likely capable of producing the daily and annual abstraction

limits based on yields from neighbouring bores in the area. Additionally, two land use consents LUC60456721 and LUC60456730 to drill the two proposed groundwater production bores within proposed Stage 1 of the Delmore development have been granted. The implementation of either one of the two water servicing options developed by the Applicant will secure an adequate water supply for both stages of the proposed Delmore development.

115. The application has been reviewed by Watercare who have advised in respect to Option 1 that the proposed private water system is incompatible with Watercare's network servicing plan for the wider area which may preclude future connection to the public network. In addition, Watercare have noted that the Application does not set out whether the proposed private WTP, headworks and bores would be decommissioned prior to future connection to the public system. Watercare's preference, if the system is to connect to the wider public network in the future, is for the WTP, headworks and bores to be decommissioned prior to connection.

116. Watercare have advised that there are likely to be higher operational and water safety risks associated with connecting a private serviced area to the public network at a future time. These risks, including significant water quality risks to connected customers, may mean the system needs to remain independent from the wider public network which may mean it becomes permanently private. Watercare have stated that:

> *"Watercare fundamentally does not support the establishment of permanent long-term private water or wastewater treatment facilities for servicing of FUZ land. This is due to the lack of efficiency and long-term sustainability of private infrastructure including the different legislative obligations of private bodies corporate versus public bodies, the impact on funding of planned public infrastructure to support planned growth, and the risk of sub-standard process units being installed, incurring costs to homeowners or the public sector later if the infrastructure is proposed to be vested to Watercare (assuming Watercare were to decide to accept vesting of such infrastructure)."*

117. Council's Water Engineer (**Annexure 17)** has advised that the principal issue for assessment is whether the proposed water supply, treatment process, storage and private reticulation arrangements have been sufficiently demonstrated to provide a reliable and resilient potable and firefighting supply.

118. There are some key information gaps in the application material to ascertain whether the proposed private water supply and treatment is acceptable and that this provides a long-term solution. These are information gaps are identified as:

    a. No water quality data for design of the treatment plant.
    b. The application does not provide a water balance sufficient to demonstrate how the water shall be supplied reliably to the development during increased use periods, which will typically coincide with drought conditions.
    c. A "Hydroloop" system is also referred to, however the figure of 30-40% water re-use is not tested, nor detailed as to how this would be integrated into the

overall water supply for the development.

d. There is likely to be a waste stream from the water treatment plant, while this is likely to be small when compared to the wastewater from the balance of the development. This is required to be qualified and the management of/ this confirmed.
e. The application material indicates that the proposed reticulation network and treatment plant are to remain in private ownership of a private infrastructure company that will seek network operator status. However, the application does not clearly identify the proposed legal entity that will own the water and wastewater assets, nor does it explain whether ownership and governance will sit with a network utility operator, body corporate, incorporated society, or another structure.
f. The application also does not clearly allocate long-term responsibility for operation, maintenance, renewal, compliance, auditing, customer interface, charging/revenue collection, emergency response, and asset replacement across the proposed private water and wastewater systems. The supporting material refers variously to a private infrastructure company, a utility company, Apex as operator, and the owner of the plants carrying out audits, but without a single clear governance and responsibility framework.

Option 2

119. The application has been reviewed by Watercare who have advised in respect to Option 2 that the existing bulk water supply network is limited in this area and does not have sufficient capacity to support the anticipated growth in the existing live zoned areas in addition to the Delmore Project. Furthermore, Watercare have advised of the potential programme risk associated with the future planned upgrades of the wider water supply network which may extend beyond 2035+.

120. Option 2 is not supported given the likely timeframes for the upgrades to the wider water supply network.

Conclusions on Water Supply Effects

121. The Applicant has demonstrated that Option 1 is potentially feasible solution to enable water supply for the Delmore project, noting that this is likely to be a long-term solution and that Watercare may not enable future water supply connections.

122. However, there are some key information gaps in the application material to ascertain whether the proposed private water supply and treatment is acceptable and that this provides a long-term solution.

123. There are significant residual water supply related impacts that require proportionality assessment.

Wastewater Effects

Applicant's Assessment

124. The Site is not currently serviced by the public wastewater network.

125. The Applicant's wastewater servicing strategy includes three options:

a. Option 1 involves a private low-pressure sewer (LPS) system that conveys wastewater to an onsite private wastewater treatment and disposal scheme.

b. Option 2 utilises a LPS system which will connect to Watercare's network.

c. Option 3 uses a LPS system to collect untreated wastewater and store it in a holding tank prior to tanker trucks collecting the raw sewage and trucking it to an off-site disposal facility.

Council Assessment

Option 1

126. Watercare has advised that they do not support the decommissioning of the private WWTP and disposal area once connection to Watercare's network is available. The proposed wastewater servicing is required to be treated as a permanent private solution and designed, consented, and operated on that basis, without reliance on a future connection to the public network.

127. Watercare have noted that the provision of permanent private water/wastewater systems in the FUZ will affect Watercare's planning, and that this may result in a down-size and/or loss of efficiency and economic feasibility of planned networks for the area, ultimately increasing the price of servicing for others in the area.

128. Watercare has confirmed that any treated (or untreated) wastewater would not be accepted at an existing Watercare Wastewater Treatment Plant.

Option 2

129. Watercare has confirmed that Option 2 (connection to the public wastewater network) is not supported and not feasible. Planned upgrades to the Army Bay WWTP are intended to service forecast growth and committed developments in accordance with the Auckland Growth Strategy, and cannot be relied upon to accommodate out-of-sequence developments such as Delmore without adversely affecting the wider catchment, including existing live zones.

130. The existing bulk wastewater network does not have sufficient capacity to support the existing live zoned areas and the Delmore Project. and connections would not be available until 2050+.

Option 3

131. Watercare has confirmed that Option 3 where untreated wastewater is stored and then trucked to a Watercare Wastewater Treatment Plant is not supported.

Conclusions on Wastewater Effects

132. The site is not able to be connected to the public wastewater network until 2050+. Watercare does not support wastewater connections to the Future Urban Zone where providing those connections would jeopardise Watercare's ability to provide connections for development of existing live zoned land and sequenced growth. Therefore, permanent private wastewater solution such as permanent WWTP is required.

133. Regardless of the above, Watercare have provided a suite of changes to consent conditions in respect to future wastewater connections to ensure these do not result in effects to the public wastewater network.

Stormwater Effects including Natural Hazards (Flooding and Overland Flowpaths)

Applicant's Assessment

134. A draft Stormwater Management Plan has been developed/ prepared in conjunction with Healthy Waters, noting this has not been approved/ accepted.

135. The Applicant has provided detention and retention to a minimum of SMAF-Flow1 levels as per recommendations made by Healthy Waters.

136. A Rapid Geomorphic Erosion Assessment prepared by Morphum has been lodged with the application.

137. Council have circulated the feedback from Council's Geomorphological Specialist to the Applicant. This includes details on various fundamental information gaps. A number of meetings and communications have been undertaken with the Applicant and it is understood that the Applicant is currently preparing a Geomorphic Response to the matters raised. This has not been reviewed by Council, and as such the Geomorphological Specialist Memo (**Appendix A to Annexure 19**) has been prepared based on the lodged application documentation.

Council's Assessment

138. Council's Stormwater Specialist (**Annexure 19**) has undertaken a review of the proposal from a regional discharge stormwater perspective. This assessment sits alongside the stormwater assessments undertaken by Healthy Waters and Auckland Transport. The regional perspective is to specifically assess, mitigate and authorise discharges from private or jointly owned assets into the environment.

139. In respect to the Stormwater Discharge and Diversion, 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 (NDC) 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.

140. Council's Geomorphological Specialist has advised that there are fundamental information gaps, which are required to be addressed by the Applicant. A number of meetings and communications have been undertaken with the Applicant and it is understood that the Applicant is currently preparing a Geomorphic Response to address the matters raised. This has not been reviewed by Council. Furthermore, given the information gaps relate to flood hazard risks, these matters cannot be addressed by consent conditions, and this information is required to be provided in order for Council to undertake an assessment of the extent and degree of adverse effects, and to inform consent conditions should consent be granted.

141. The Applicant has identified that 6 of the 12 proposed culverts will be inadvertent dams and it is understood that the Applicant is currently preparing further assessments to investigate the risk of dam failure to demonstrate what hazardous conditions people may be exposed to. Auckland Transport's Stormwater Engineer (**Annexure 21**) has stated that the culverts cannot be conditioned, and full assessments of the culverts demonstrating compliance with the Stormwater Code of Practice, and therefore compliance with the Building Act 2004 and Building (Dam Safety) Regulations 2022 is required upfront. This information is required to be provided so that flood hazards effects on people can be assessed. It is understood that the Applicant will be providing this information in their 11 May 2026 responses.

142. Additional stormwater conditions have been recommended by Council's Stormwater Specialist to ensure that stormwater is appropriately mitigated and managed, including Operation and Maintenance Plans for stormwater management and treatment devices – we are awaiting confirmation off the Applicant that these conditions are acceptable.

143. Healthy Waters has reviewed the application (**Annexure 20**), and have assessed the stormwater effects from a wider catchment perspective. They have identified the following key assessment issues and findings:

1. **Operation and Maintenance – Legal Access**
   Acceptable ground slopes within Lieu of Reserve – for Drainage Purposes land have not been presented. For example, the updated plans 3725-1-4300 and 375-2-4300 now show retaining walls and 1 in 1 batter slopes located within Lieu of Reserve – for Drainage Purposes areas, some of which are supporting the proposed public stormwater management devices. Similarly, the ability to safely track maintenance vehicles remains unclear as no access gradients are shown on plans, and it appears that limited space has been provided to accommodate turning of maintenance vehicles notably for RG03 but also for RG02, RG06 and RG25.

   Should the Panel grant the consent, HWFR would not accept the transfer of land

*to public ownership and would not accept vesting of the stormwater management devices, and the connecting upstream stormwater network as public infrastructure, where the Council stormwater infrastructure and land requirements cannot be addressed at Engineering Plan approval stag***e.**

2. **Land in Lieu of Reserve – for Drainage Purposes**
   HWFR appreciates the overall reduction in area, however there are still disproportionate areas proposed to be transferred to public ownership which are not acceptable. These include:

   - *Land (including riparian margins) which is not required to support the device and its function, or accommodate its ancillary elements (including maintenance access, spillways and outfalls).*
   - *Structures (including walls and earth reinforced batters) which are supporting surrounding private land and public roads.*

   HWFR notes that resource consents cannot obligate the Council to accept or vest land for stormwater management, even at no capital cost, due to the associated financial implications of ongoing maintenance cost in perpetuity. Delegated approval from HWFR must be obtained before land can be transferred or vested. This is consistent with the Manaaki Tāmaki Makaurau: Auckland Open Space, Sport and Recreation Strategy.

3. **Flood Risk Assessment – Habitable Floors**
   The updated model scenarios have shown that under the NZTA culvert blockage scenario the proposed public roads will be inundated up to approximately 2.5m. This means that several proposed lots cannot safely evacuate under such scenario.

   As the proposed development internal culverts are much larger than the existing NZTA motorway culvert this blockage scenario is considered likely and would result in culvert inundation of over 15m. Unblocking the culvert following such event is expected to be challenging, which means that the subject lots may be affected for a prolonged period.

   To ensure safe egress is accommodated for the proposed development, HWFR requests for a new condition to be included in the consent that requires the provision of a relief inlet riser or alternative mitigation measures to minimise the risk of NZTA culvert blockages. This condition is proposed in addition to the Culvert Management and Monitoring Conditions 23-25.

Conclusions on Stormwater Effects

144. While Council's Stormwater Specialist is in broad in-principle agreement with the proposed stormwater management approach, significant technical uncertainties and unresolved issues remain that prevent full assessment and acceptance of the proposal at this time including in respect to Geomorphic related effects.

145. The Healthy Waters assessment identifies material concerns requiring immediate resolution (which cannot be conditioned), including:

    1. Operation and Maintenance – Legal Access
    2. Land in Lieu of Reserve – for Drainage Purposes
    3. Flood Risk Assessment – Habitable Floors

146. Council's Geomorphological Specialist identified fundamental information gaps that are required to be addressed upfront, in order to ascertain the extent and degree of adverse hazard/ flooding related effects.

147. The Applicant has identified that 6 of the 12 proposed culverts will be inadvertent dams and it is understood that the Applicant is currently preparing further assessments to investigate the risk of dam failure to demonstrate what hazardous conditions people may be exposed to. This information is required to be provided upfront by the Applicant and sufficient time provided for the Council and other specialists so that flood hazards effects on people can be fully assessed.

148. The stormwater effects can potentially be appropriately managed through the proposed approach, subject to resolution of the outstanding technical matters and implementation of comprehensive consent conditions. However, the current level of technical uncertainty means that acceptance of the stormwater management strategy is conditional upon satisfactory completion of the additional assessments and design refinements identified by Healthy Waters, Council's Geomorphological Specialist and Auckland Transport Stormwater Specialist.

149. There are fundamental information gaps in the Applicant's assessment for the Council to be able to confirm if the proposal would satisfy s106 of the RMA as it relates to natural hazards.

150. The proposal may result in significant adverse stormwater effects, and the extent and degree of these effects are not able to be fully assessed given the fundamental information gaps. There are significant stormwater impacts that require proportionality assessment. This is reviewed further within Section D below.

SECTION C1.5 TRANSPORT EFFECTS

Applicant's Assessment

151. The proposal includes the construction of roading and transport infrastructure, including a significant portion of the arterial road known as the AT Designation 14108/ NoR6 (New connection between Milldale and Grand Drive); together with new collector and local roads, and a series of new shared driveways/ JOALs and vehicle crossings.

152. An Integrated Transportation Assessment Report prepared by Commute has assessed the transport related effects in respect to the road network, public transport, safety, trip generation, modelling, parking, servicing, access and construction. This has stated the proposal provides good pedestrian, cyclist and potentially public transport connectivity;

and the proposed road network integrates effectively with the existing network without producing adverse safety effects. Intersection modelling demonstrates that proposed roundabouts will be able to accommodate the anticipated generated trips. The internal road and JOAL layout, crossing locations, widths and gradients, and on-site parking and access are safe and appropriate.

Council's Assessment

153. The application, including the Integrated Transportation Assessment Report and the various Applicant responses submitted to Council post lodgement, have been reviewed by Auckland Transport (**Annexure 21**). The application has also been reviewed by PTM Consultants and Beca in respect to road safety / traffic engineering and the NoR6 matters respectively.

154. The application has also been reviewed by Council's Traffic Engineer (**Annexure 22**), who has assessed other traffic matters as they relate to shared driveway/JOAL's, vehicle crossings together with a broader review of the transport/ traffic matters. There are various overlaps between the reviews undertaken by Council's traffic specialists.

155. Council's Traffic Engineer has confirmed that there are various outstanding information matters that were not provided in the various Applicant responses provide post lodgement. These include additional traffic related assessments/ details/ plans, lighting plans and vehicle tracking. These matters remain outstanding and a full assessment of the broader traffic/ transport effects has not been able to be undertaken.

156. Auckland Transport have advised that the proposal will deliver several transport network upgrades including the partial delivery of AT Designation 14108/ NoR 6 (New connection between Milldale and Grand Drive) that bisects the site as an arterial, a further collector route from Grand Drive through to Upper Ōrewa Road, and various upgrades to surrounding transport infrastructure.

157. Auckland Transport have stated that:

> *However, there remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site. The Project does not involve the portion of Designation 14108 linking the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development. This part of the designation comprises legally vested road together with a portion in private ownership with the constructed portion terminating prior to the project site boundary. Without the delivery of the arterial connector link to Grand Drive (the link) which forms part of designation 14108 there is no practical or physical access to the site from Grand Drive. The applicants Integrated Traffic Assessment (ITA) (refer applicant lodged Appendix 4) notes this deficiency and suggests that an interim road could provide the connection to Grand Drive. The interim road is not consistent with the indicative design for designation 14108 or the portion of the designation within the site that is being delivered by the Project. In any case given that the interim road is*

not part of the Project, additional resource consents will need to be obtained by the applicant.

158. Auckland Transport have confirmed that they would only be supportive of a consent condition that ensures the link is delivered prior to titles being issued if the arterial road is designed/delivered in accordance with the intended indicative designation design and not an interim alternative. This is necessary to provide access for Stage 1, noting that this is the only access for this Stage, and is deemed to be a critical condition and requires acceptance from the Applicant.

159. Auckland Transport have noted that there is no Council funding for the delivery of the link to the site.

160. PTM have also advised that the proposed interim design of this link has several design deficiencies that are summarised in the Auckland Transport Memo as:

- *It is not clear how the temporary road can be rebuilt with the permanent designation layout at a later date without closing it for a protracted period.*
- *Front and back berms have been removed. Potential effects; loss of amenity – discourages active modes as a travel choice. Absence of buffer between carriageway and cycleways/footpaths increases crash risk for pedestrians somewhat. Absence of buffer between the shared path and handrail on top of the retaining wall on the north side means that there is less usable space for cyclists resulting in a risk of handle bars or peddles getting caught on the barrier. Streetlight poles (and potentially other service poles or cabinets) will need to go in the footpath / shared path rather than the berm.*
- *3m wide shared path replaces two-way separate offroad cycle path and separate footpath on the north side. Potential effects; increased risk of collision between cyclist and pedestrian. Some pedestrians may be less willing to use this path due to perceived risk of a collision with a cyclist. Note that a 3m wide shared path would need a departure from standards as it does not conform to the Auckland Transport's Transport Design Manual.*
- *Flush median removed. Potential effects; reduced separation between opposing traffic lanes means increased risk of head-on type crashes. Vehicles turning right into the vehicle crossing on the north side must wait in the westbound lane blocking it, resulting increased delays and increased rear-end crash risk.*
- *The drawings show a retaining wall on the north side which would become an Auckland Transport asset to maintain. A barrier able to restrain both errant vehicles (road safety barrier) as well as being able to prevent falling from heights Memorandum for pedestrians and cyclists will be needed but is not indicated on the drawing provided by the applicant.*
- *On the south side a batter slope is shown next to the footpath with*

gradients ranging from 1 in 3 to 1 in 1 (reinforced earth). This will need a similar barrier to the north side. It is not clear if the applicant has included space for the barrier.

- *The drawings show a vehicle crossing which clashes with a proposed retaining wall for the temporary layout.*

161. Auckland Transport have identified in Section 6.5 of their Memo key information gaps and further details that are required to be provided upfront and prior to the determination of this Fast-Track application. These relate to the following matters:
    - Stormwater Management and Culvert Design (please also refer to Section Stormwater Effects under **Section C1.4**)
    - Transport Infrastructure including active mode provision
    - Bus-stops
    - Staging and Paper Roads / Road Stopping
    - Integration of the Projects partial delivery of designation 14108 and future designation works
    - Integration of the site with the remaining Paper Road and Ara Hills Development.
    - Consent conditions.

162. Notwithstanding the initial assessments provided by Auckland Transport, PTM and Beca, a number of changes to conditions and new conditions are also required to address transport related effects. These are set out/ summarised in Section 9 of the Auckland Transport Memo.

163. PTM Consultants have undertaken a safety audit/ traffic engineering review that has assessed vehicle tracking issues, sight distance assessment, visibility splays, gradients, speed calming, turning heads and Approach Sight Distance (ASD). In their assessment PTM Consultants have raised a number of concerns in regard to the current road designs including interactions. A suite of additional consent conditions has been recommended which have been included in the Auckland Transport and PTM Memos. It is noted that requested updated Vehicle Tracking Curves from the Applicant have not yet been reviewed by PTM who had flagged that in some instances vehicle tracking would extend over kerblines and that this would likely require some reconfiguration of the roading alignment and consequential changes to the subdivision design and layout.

164. It is specifically noted that PTM have recommended in para, 53 and 54 of their Memo that Road 1 is designed as cycle routes and cycle infrastructure in the form of off-road cycle paths, separate from the footpath, are provided on each side. This is necessary to assist with mitigating the adverse effects of a car dependant development. This will require additional space within the road reserve, and this is not able to be addressed via consent conditions. PTM have recommended that further design work is required to be undertaken to addressed various transport related matters that include but are not limited to bust stop design/ location incld9ing pedestrian facilities, turning heads, future bridge design in relation to the NOR6 and Upper Orewa Road intersection.

165. Beca has identified that some interim upgrades may be necessary to support safe

access by all modes.

166. Auckland Transport has also raised concerns regarding a range of stormwater matters including Dam Break Assessment as it relates to hazards effects on people.

167. Auckland Transport have stated that there remains fundamental information missing from the application, and that adverse transport effects have not been appropriately mitigated. Notwithstanding, this Auckland Transport have included in their Memo a number of additional consent conditions and changes to consent conditions that would be necessary regardless of these information gaps. Additional consent conditions have also been recommended by Council's Traffic Engineer, noting that further additional conditions may be required pending review of the additional information from the Applicant.

Conclusions on Transport Effects

168. There are various outstanding information gaps as they relate to transport matters that have not been provided by the Applicant and have not been assessed by Council. Notwithstanding, this Auckland Transport have included in their Memo a number of additional consent conditions and changes to consent conditions that would be necessary. Additional consent conditions have also been recommended by Council's Traffic Engineer, noting that further additional conditions may be required pending review of the additional information from the Applicant.

169. There also (as noted as an issue with the original Delmore Fast-Track application) remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site for Stage 1. The proposal does not involve the portion of Designation 14108/ NoR 6 linking the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development, and the interim design solution is not supported.

170. Auckland Transport have noted that they would only be supportive of a consent condition that ensures the link is delivered prior to titles being issued if the arterial road being delivered is to be the intended indicative designation design and not an interim alternative. This is fundamental and deemed necessary to provide access for Stage 1, noting that this is the only access for this Stage. Auckland Transport have noted that there is no Council funding for the delivery of the link to the site, PTM have advised that the proposal interim design of this link has a number of design deficiencies

171. The proposal will result in significant adverse transport effects. There are significant residual transport impacts that require proportionality assessment. See **Section D** below.

Waste Management

Applicant's Assessment

172. The proposal waste management includes Council kerbside collection and the majority of JOALS/ shared driveways will be by private collection. All dwellings directly accessed from the proposed vested roads will use public collection. JOALs/ Shared Driveways will be a combination of public and private waste collection. Where public, residents will wheel their bins to the (public) road, and where private they will be placed within the JOAL.

173. The landscape plans prepared by Greenwood Associates include bin storage details.

Council's Assessment

174. The proposed waste management including both public and private collection has been reviewed by Council's Waste Solutions Specialist who has confirmed the proposal is acceptable**.**

175. It is noted that the vehicle tracking provided with the Application identify that there is insufficient space for vehicles to pass a rubbish truck. This has been addressed in the assessment undertaken by PTM with consent conditions recommended to address this. This is proposed to be addressed by a consent condition as agreed by the Applicant.

Conclusions on Waste Management Effects

176. There is agreement between the Applicant and Council in respect to waste management and the consent conditions proposed are appropriate.

177. There are no significant residual waste management impacts that require a proportionality assessment.

SECTION B1.5 ECOLOGY EFFECTS

178. This section includes:

- Terrestrial Ecology
- Freshwater Ecology (Streams and Wetlands)
- Arboricultural

Applicant's Assessment

179. An Ecological Impact Assessment prepared by Viridis has assessed the adverse effects on ecology values. This has included assessments of both freshwater (wetlands and streams) and terrestrial ecology.

Terrestrial Ecology

180. The Application includes a range of mitigation measures associated with terrestrial ecology including proposed protection and enhancement of the SEA-T and other NPS-IB priority restoration areas, riparian and natural inland wetland buffer planting, and the natural inland wetland recreation.

181. The Ecological Impact Assessment had stated the proposed revegetation planting would achieve a net gain in riparian and wetland vegetation and habitat and a net gain in vegetation associated with SEA-Ts.

Freshwater Ecology

182. The Ecological Impact Assessment has included an assessment as they relate to stream works/ construction of culverts and wetlands including works within the wetland extent and modification/ loss of existing wetlands.

183. To mitigate the effects of the works within wetlands, the Applicant proposes that new wetlands are created at a 3:1 ratio.

Arboricultural

184. An Arboricultural Assessment prepared by Peers Brown Miller has assessed the adverse effects of tree removal and where trees that are proposed to be retained and are located within proximity to the proposed works.

Council's Assessment

Terrestrial Ecology Effects

185. The Terrestrial Ecology matters have been reviewed by Council's Ecologist (**Annexure 24**), who is in broad agreement with the Applicants Ecological Impact Assessment and the additional information and clarification in respect to Terrestrial Ecology matters that have been provided in the Applicant's post lodgement documentation.

186. However, Council's Terrestrial Ecologist has raised concerns in respect to the potential effects of terrestrial and freshwater receiving environments should the WWTP suffer a serious failure. Whilst this has not been addressed by the Applicant as part of their post lodgement responses, Council's Terrestrial Ecologist has recommended an additional consent condition to address this which would provide a proportionate safeguard. This is set out in Section 4 of their Memo and would require a proposed offset area (equivalent to the covenanted area within the irrigation field) to be provided prior to commencement of wastewater discharge. In addition, changes to conditions are required to address enforceable cat and pest animal prohibition, noting that changes/ additional conditions proposed by the applicant are broadly accepted.

187. The updated documentation provided by the Applicant post lodgement has not included updated Ecological Management Plans. It is understood that these plans will be issued

as part of the Applicants 11 May 2026 response, including separate landscape plan and ecological management plan sets. This information is outstanding and an assessment of these matters has not been fully undertaken by Council, including in relation to the terrestrial ecology assessment.

Fresh Water Ecology

188. The freshwater/ aquatic ecology matters have been reviewed by Council's Freshwater Ecologist (**Annexure 25**) who has advised that the application satisfactorily addresses the potential loss of stream and wetland value.

189. It is noted that matters in respect to geomorphic effects and dam related effects have not been fully assessed as there are fundamental information gaps as previously identified and discussed. These details as they relate to culverts and fish passage may require further assessment.

Arboricultural Effects

190. In respect to arboricultural related effects, the Arboricultural Assessment prepared by Peers Brown Miller and relevant application documentation has been reviewed by Council's Arborist (**Annexure 26**). They have advised that the removal/ loss of trees from the site including those protected trees which are located within close proximity to streams and are protected by a consent notice, can be appropriately mitigated from an arboricultural perspective through the implementation of the replacement planting (as proposed in the landscape plans), and through tree protection measures as proposed in the application, and set out a suite of conditions proposed by the Applicant.

Conclusions on Ecology

191. Potential adverse terrestrial effects have been identified should the WWTP suffer a serious failure. An additional consent condition is required to address this, which would provide a proportionate safeguard. In addition, changes to conditions are required to address enforceable cat and pest animal prohibition, noting that changes/ additional conditions proposed by the Applicant are broadly accepted.

192. The adverse impacts ecology effects are not considered significant and do not require a proportionality assessment to be undertaken.

SECTION C.7 LANDSCAPE AND VISUAL EFFECTS

Applicant's Assessment

193. A Landscape Assessment prepared by Greenwood Associates has assessed the landscape and visual effects of the proposal. This has concluded that the landscape effects would be low (i.e. less than minor), and that visual effects on wider views would be very low to low-moderate; and on close proximity views would be low.

194. The landscape and visual effects has been summarised in the AEE prepared by B&A

who have considered landscape character effects and visual amenity effects are less than minor and these have been appropriately mitigated.

195. It is understood that the Applicant is currently updating the landscape plans which include details of the implementation of the proposed landscape planting and ecological planting. These updated plans have not been reviewed by Council and sufficient review time is requested to ensure these are able to be fully assessed.

Council's Assessment

196. The Application, including a landscape assessment and landscape plans prepared by Greenwood and Associates, have been reviewed by Council's Landscape Architect (**Annexure 27**). This has identified the following adverse effects, noting as part of their assessment they have also reviewed other broader landscape related matters, including connectivity within the site and to the surrounds:

- The visual and rural amenities of adjoining properties directly south of the proposal would be significantly compromised by the proposal, particularly during the construction period.
- The proposal would result in moderate-high (more than minor) adverse effects on landscape character and values during construction, and moderate (more than minor) adverse effects on completion (scheduled timeframe for completion 10+ years), reducing to low-moderate (minor) over time as street tree and revegetation planting matures.
- Detailed soft and hard landscape design plans would be required for communally owned bush and riparian areas, the Significant Ecological Area, walkways and any other community facilities.
- The draft specifications for landscape implementation and maintenance do not currently cover all required aspects.
- The proposed conditions of consent do not currently provide sufficient certainty that the existing SEA and proposed walkways and any other community facilities on communally owned land would be consistently maintained and protected in perpetuity.

197. The updated documentation provided by the Applicant post lodgement has not included the full updated landscape plans or details in respect to landscape implementation and maintenance. It is understood that these plans will be issued as part of the Applicants 11 May 2026 response, including separate landscape plan and ecological planting plan sets. This information is outstanding and an assessment of these matters has not been fully undertaken by Council, including in relation to the landscape assessment.

198. In respect to pedestrian connectivity matters raised, these are appropriately addressed and assessed in the Urban Design Memo (**Annexure 28)** and more generally in the Auckland Transport Memo (**Annexure 21**). The proposal provides an appropriate level of pedestrian connectivity through the site and to the wider surrounding area. This is achieved through the street and park network noting that the block lengths are acceptable and provide permeability having regard to the site and topographical

constraints.

Conclusions on Landscape and Visual Effects

199. The visual and rural amenities of adjoining properties directly south of the proposal would be significantly compromised by the proposal, particularly during the construction period. The proposal would result in moderate-high (more than minor) adverse effects on landscape character and values during construction and moderate (more than minor) adverse effects on completion (scheduled timeframe for completion 10+ years), reducing to low-moderate (minor) over time as street tree and revegetation planting matures.

200. The adverse impacts related to landscape and visual effects are not considered significant.

SECTION C.8 URBAN FORM AND NEIGHBOURHOOD CHARACTER

Applicant's Assessment

201. An urban design assessment prepared by Barker & Associates sets out the design response and assessment against key urban design principles. The Applicant's assessment states that the proposal will provide for a high-quality urban environment, with a good level of amenity and positive urban design outcomes. Whilst the proposal is on Future Urban Zone land the Applicant's design approach has sought to apply the standards/ outcomes for the Residential: Mixed Housing Suburban zone.

202. It is noted following lodgement that the Application has been updated to address/ respond to a number of urban design related concerns raised by Council.

Council's Assessment

203. The Application including the Urban Design Assessment and updated information has been reviewed by Council's Urban Designer (**Annexure 28**).

204. Council's Urban Designer broadly supports the proposal and confirms that this provides an improved and positive design outcome. However, the shared driveway access/ JOAL design remains a key outstanding design issue, particularly in respect to JOAL's that function as primary access streets serving a significant number of dwellings, and where grade separation and pedestrian priority are not clearly demonstrated. More specifically the following further design changes/ updates are necessary to ensure an appropriate design outcome and pedestrian environment:

    a. There remain several JOALs that function as primary access streets serving a significant number of dwellings, where grade separation and pedestrian priority are not clearly demonstrated. Examples include JOAL 1 (serving approximately 20 units) and JOAL 4A (serving approximately 23 units).

    b. Whilst some JOAL profiles/ cross sections introduce landscape strips of approximately 0.5m to 1m in width, this is not consistent across all JOALs. For example, JOAL 40 (serving approximately 25 units) does not appear to provide

additional landscape amenity space.

c. JOAL environments will benefit from adjoining lot landscaping. However, front yard spaces are fenced directly along the boundary, which limits the extent to which private planting contributes positively to the JOAL environment.

d. Landscape plans indicate that waste bins are to be located within pedestrian paths on collection days, which has the potential to obstruct pedestrian movement and reduce safety, particularly in JOALs that operate as primary access routes.

e. The application does not clearly demonstrate how the JOAL design as a whole aligns with the intent of PC79 transport provisions, particularly in relation to pedestrian priority and the quality of the shared environment.

f. Given the number of dwellings reliant on these JOALs, a higher level of amenity, spatial definition, and pedestrian prioritisation is expected. On this basis, the concerns previously raised regarding the design and functionality of JOAL environments remain relevant.

Conclusions on Urban Form and Neighbourhood Character Effects

205. The proposal provides a broadly acceptable urban form and design response, and will not result in more than minor adverse effects on the neighbourhood character. However further design work is required in respect to the JOAL/ shared driveways to ensure that these provide a level of pedestrian amenity and safety that is commensurate with the outcomes sought for a residential development of the scale and nature proposed.

206. The adverse impacts related to urban form and neighbourhood character, are broadly acceptable and these do not require a proportionality assessment to be undertaken.

SECTION C1.7 PARKS AND RESERVES

Applicant's Assessment

207. The Applicant has proposed one Neighbourhood Park (Lot 1800 - circa 3,044m² area) located within the Stage 1 area, and one Neighbourhood Park (Lot 5020 - circa 3,075m² area) located within the Stage 2 area.

208. In addition, various drainage reserves have been proposed, noting that these have been previously assessed within the Stormwater section.

Council's Assessment

209. Councils Parks Planning Specialist (**Annexure 29)** has identified the following three fundamental/ significant matters which are described in the further detail in their memo:

    a. Landscaping, encumbered street tree locations and species selection;
    b. Interfaces, boundary treatments and gradients for reserves; and
    c. Neighbourhood parks and metrics and future acquisition.

210. The Applicant has applied residential society conditions to Lot 5020, but not to Lot 1800. As a result, if Council acquisition does not proceed, the open space outcome is only secured for Lot 5020 and not for Lot 1800.

211. The location of proposed street trees conflicts with the location of infrastructure within the street berms, noting the overall landscape strategy places significant weight on the success of street trees. It is considered that the location of street trees and infrastructure can be addressed at by consent conditions and through detail design at the Engineering Approval Stage.

212. As noted in Section C1.4 Infrastructure Effects, Healthy Waters have advised in respect to the Land in Lieu of Drainage Reserves that there are disproportionate areas proposed to be transferred to public ownership which Healthy Waters consider are not acceptable. These include:
    a. Land (including riparian margins) which is not required to support the device and its function, or accommodate its ancillary elements (including maintenance access, spillways and outfalls).
    b. Structures (including walls and earth reinforced batters) which are supporting surrounding private land and public roads

Conclusions on Parks Effects

213. The adverse impacts related to parks, particularly as they relate to the absence of, residential society conditions for Lot 1800 are significant and these require a proportionality assessment to be undertaken. In addition, there are disproportionate areas proposed to be transferred to public ownership which Healthy Waters consider are not acceptable. See **Section D** below.

SECTION D: SUMMARY OF ASSESSMENT OUTCOMES AND PROPORTIONALITY CONCLUSIONS

Overview

214. This concluding section provides a brief overview of the outcome of the overall Council assessment of the application, based on an objective assessment of the application material.

215. The section is structured as follows:

- **Section 85 adverse impacts / proportionality assessment**: Analysis under section 85(3) of the Fast Track Approvals Act, examining whether adverse impacts are sufficiently significant to be out of proportion to the project's regional or national benefits.

- **Key information gaps**: Identification of residual information deficiencies and their implications for decision-making by the Panel.

- **Key findings**: Again, as at the date of providing these comments (04 May 2026), with Council's recommendation to the Panel.

Section 85 adverse impacts / proportionality assessment

216. Under section 85(3) of the FTAA, the Panel ***may*** decline an approval where adverse impacts are sufficiently significant to be out of proportion to the project's regional or national benefits.

217. This assessment requires consideration of:

- The nature and significance of adverse impacts identified through the section 81(2) process;
- The project's regional or national benefits as assessed under section 81(4);
- Whether proposed conditions or Applicant modifications could adequately address adverse impacts;
- Whether the proportionality threshold is met even after accounting for mitigation measures, compensation etc.

218. For the avoidance of doubt, the Council's assessment has not identified any reasons why the application ***must*** be declined in terms of section 85(1) of the FTAA.

<u>Headline issues identified</u>

219. Based on the detailed analysis in **Section C** above, the following adverse impacts have been identified, individually and collectively, as potentially meeting the section 85(3) threshold:

Issue 1: Geomorphic related effects - There are a number of key information gaps in the application. These information gaps result in adverse impacts as they relate to geomorphological related effects not able to be fully assessed; and whether the proposed measures proposed by the Applicant are appropriate to mitigate or avoid these effects. The riparian setbacks may result in insufficient space for the intended building platforms on residential lots; and the degree and extent of adverse effects on infrastructure, stormwater management and other related effects are not able to be assessed with certainty.

Issue 2: Dam Break Assessment - There are a number of key information gaps in the application. These information gaps result in adverse effects as they relate to stormwater related effects not able to be fully assessed; and whether the proposed measures proposed by the Applicant are appropriate to mitigate or avoid these effects.

Issue 3: Traffic/ Transport related effects - There remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site for Stage 1. The proposal does not involve the portion of Designation 14108/ NoR 6 linking

the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development, and the interim design solution is not supported. Auckland Transport have noted that they would only be supportive of a consent condition that ensures the link is delivered prior to titles being issued if the arterial road being delivered is to be the intended indicative designation design and not an interim alternative. This is necessary to provide access for Stage 1, noting that this is the only access for this Stage. Auckland Transport have noted that there is no Council funding for the delivery of the link to the site. PTM have advised that the proposal interim design of this link has a number of design deficiencies. In addition, there are various key outstanding information gaps as they relate to transport matters that have not been provided by the Applicant. These matters need resolved prior to the review of conditions stage.

Issue 4: Water Treatment - There are a number of key information gaps in the application. These details are required to ensure the water treatment plant provides the necessary and safe water infrastructure for the proposal; and to ensure there are appropriate legal mechanism, for future ownership, maintenance and management. There is potentially significant risk associated with the provision of private water infrastructure.

Issue 5: Parks Related Effects - The applicant has applied residential society conditions to Lot 5020, but not to Lot 1800. As a result, if Council acquisition does not proceed, the open space outcome is only secured for Lot 5020 and not for Lot 1800 which is considered significant. In addition, Healthy Waters (**Annexure 20**) consider in respect to Land in Lieu of Drainage Reserves that there are disproportionate areas proposed to be transferred to public ownership which Healthy Waters consider are not acceptable.

Issue 6: Impact on planned investment and infrastructure provision - Bringing forward the timing of the proposed development comes at the expense of the delivery of other developments and is not possible without displacing planned investment and infrastructure service provision in existing live zoned areas and sequenced areas. There are significant infrastructure funding and financing gaps for the application and no agreements are in place to confirm the scope of proposed infrastructure and ongoing opex. It is noted that there is on-going engagement between the Applicant and the Auckland Urban Development Office, however at this time there is no formal agreement or funding mechanisms.

220. Having identified the above headline issues, it is important that we signal that there is the potential for other material issues to arise as a result of further assessment. For example, see the comments in **Section C** above concerning Geomorphic effects and Dam Break Assessments

Project benefits summary

221. The Applicant contends that the project will deliver regional benefits through housing supply (approximately 1,250 dwellings), partial delivery of roading infrastructure (namely part of the NoR 6 corridor), ecological enhancement, and associated economic activity.

222. However, the Council's assessment is that these alleged regional benefits are overstated, should be treated with caution, and do not appear to meet the threshold of regional benefits under the FTAA.

223. No national benefits have been claimed by the Applicant.

224. The assessment of claimed regional benefits has been considered holistically across all adverse impact assessments, and informs the tabular proportionality assessment below.

225. This assessment draws on:

- The Applicant's Assessment of Environmental Effects and supporting technical reports, including the Applicant's economic assessment;
- The Council's economics review by Mr Stewart (**Annexure 2**);
- Auckland Transport's Memo (**Annexure 21**);

226. In summary, our assessment is that:

a. Mr Stewart in his Economic Review (**Annexure 2**) has significant reservations in the Applicant's Economic analysis that he considers undermines the results and the conclusions reached. The "Major Issues" identified by Mr Stewart are:

i. Counterfactual not properly defined or applied.
ii. Cost-benefit framework unclear and inconsistently applied.
iii. Inappropriate and repeated use of multiplier analysis.
iv. Assumption of additionality is not demonstrated
v. Calculation errors in "Method A" – magnitude and direction
vi. Lower marginal cost producer claim not evidenced in "Method B"
vii. Elasticity-based price suppression mis-specified and implausible
viii. Construction activity is treated as a benefit rather than a cost – partly a function of relying on multiplier analysis
ix. Opportunity costs not properly assessed

b. The Applicant's Economic Assessment requires updates to demonstrate that the proposal would result in a regionally significant economic benefit. Mr Stewart has advised that: "*Overall, I am not convinced that the analysis in the report demonstrates that Delmore would result in a net benefit (benefits exceed costs) let alone whether it could be considered a regionally or nationally significant benefit*."

c. In addition, there remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site for Stage 1 (and this remains an issue which was flagged within the original Fast-track application). The proposal does not involve the portion of Designation 14108/ NoR 6 linking the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development, and the interim design solution is not supported. Auckland Transport have noted that a

consent condition is necessary that ensures the link is delivered prior to titles being issued if the arterial road being delivered is to be the intended indicative designation design and not an interim alternative. This is necessary to provide access for Stage 1, noting that this is the only access for this Stage. Auckland Transport have noted that there is no Council funding for the delivery of the link to the site, PTM have advised that the proposal interim design of this link has a number of design deficiencies

d. It is acknowledged that the proposal will deliver net ecological and biodiversity benefits that include revegetation planting which would achieve a net gain in riparian and wetland vegetation and habitat and a net gain in vegetation associated with SEA-Ts. This will also include new wetlands are created at a 3:1 ratio.

227. Having noted the above matters, even if the Panel were to accept the Applicant's assessment of regional benefits, the Council's assessment is that there remain a number of adverse impacts that are sufficiently significant to be out of proportion to those potential benefits.

Assessment

228. A detailed assessment is provided below in tabular form.

Adverse impacts	**Section 85 assessment**
1. Geomorphic related effects	**Significance Assessment:** As noted in the Council Stormwater Specialist memo (**Appendix A of Annexure 19)** and as set out in further detail within the next Key Information Gap table, there are a number of outstanding gaps in the application. These information gaps result in adverse effects as they relate to geomorphological related effects not able to be fully assessed; and whether the proposed measures proposed by the Applicant are appropriate to mitigate or avoid these effects. The riparian setbacks may result in insufficient space for the intended building platforms on residential lots; and the degree and extent of adverse effects on infrastructure, stormwater management and other related effects are not able to be assessed with certainty. **Regional/National Benefits Considered:** See Project Benefits Summary above. **Proposed Conditions/Mitigation/Compensation:** The details of proposed conditions and adequacy of mitigation measures are not able to be currently ascertained given the significant gaps in the Applicant's Geomorphology assessments to inform these. **Proportionality Conclusion:** Adverse stormwater impacts may potentially be significant and are unable to be fully assessed until this information is provided. The riparian setbacks may result in insufficient space for the intended building platforms on residential lots; and the degree and extent of adverse effects on infrastructure, stormwater management and other related effects are not able to be assessed with certainty.
2. Dam Break Assessments	**Significance Assessment:** As noted in the Auckland Transport memo (**Annexure 21**) and as set out in further detail within the Key Information Gap table, there are a number of key information gaps in the application. These information gaps result in the adverse effects as they relate to stormwater related effects not able to be fully assessed; and

	whether the proposed measures proposed by the Applicant are appropriate to mitigate or avoid these effects. **Regional/National Benefits Considered:** See Project Benefits Summary above. **Proposed Conditions/Mitigation/Compensation:** The details of proposed conditions and adequacy of mitigation measures are not able to be currently ascertained given the significant gaps in the Applicant's culvert/ dam assessments to inform these. **Proportionality Conclusion:** Adverse stormwater impacts including flood hazard effects on people and infrastructure may potentially be significant and are unable to fully assessed until this information is provided.
3. Traffic/ Transport related effects	**Significance Assessment:** As noted in the Auckland Transport and PTM memos (**Annexure 21**) there remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site for Stage 1. The proposal does not involve the portion of Designation 14108/ NoR 6 linking the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development, and the interim design solution is not supported. Auckland Transport have noted that they would only be supportive of a consent condition that ensures the link is delivered prior to titles being issued if the arterial road being delivered is to be the intended indicative designation design and not an interim alternative. This is necessary to provide access for Stage 1, noting that this is the only access for this Stage. Auckland Transport have noted that there is no Council funding for the delivery of the link to the site. PTM have advised that the proposal interim design of this link has a number of design deficiencies. In addition, there are various key outstanding information gaps as they relate to transport matters that have not been provided by the Applicant. **Regional/National Benefits Considered:** See Project Benefits Summary above. **Proposed Conditions/Mitigation/Compensation:** Additional consent conditions and changes to consent conditions that would be necessary. Additional consent conditions have also been recommended by Council's Traffic Engineer, noting that further additional conditions may be required pending review of the additional information from the Applicant. **Proportionality Conclusion:** Adverse impacts remain significantly out of proportion to benefits. The adverse impacts related to the design of interim and collector roads and public transport opportunities are significant.
4. Water Supply	**Significance Assessment:** As noted in Water Treatment memo (**Annexure 17**), there are a number of key information gaps in the application. These details are required to ensure the water treatment plant provides the necessary and safe water infrastructure for the proposal; and to ensure there are appropriate legal mechanism, for future ownership, maintenance and management. Potentially significant adverse impacts associated with the provision of private water infrastructure **Regional/National Benefits Considered:** See Project Benefits Summary above. **Proposed Conditions/Mitigation/Compensation:** Additional consent conditions and changes to consent conditions that would be necessary. **Proportionality Conclusion:** Adverse impact remains potentially out of proportion to benefits. The adverse impacts related to private water infrastructure are potentially significant.
5. Parks related effects	**Significance Assessment:** As noted in Parks memo (**Annexure 29**), the applicant has applied residential society conditions to Lot 5020, but not to Lot 1800. As a result, if Council

	acquisition does not proceed, the open space outcome is only secured for Lot 5020 and not for Lot 1800 which is considered significant. In addition, Healthy Waters (**Annexure 20**) consider in respect to Land in Lieu of Drainage Reserves that there are disproportionate areas proposed to be transferred to public ownership which Healthy Waters consider are not acceptable. **Regional/National Benefits Considered:** See Project Benefits Summary above. **Proposed Conditions/Mitigation/Compensation:** Conditions of consent are required to ensure the residential society conditions are applied to Lot 1800 should Council acquisition not proceed. In respect to the Land in Lieu of Drainage Reserves. There are still disproportionate areas proposed to be transferred to public ownership which are not acceptable**.** **Proportionality Conclusion:** Adverse impact remains significantly out of proportion to benefits. The adverse impacts related to parks are significant.
6. Impact on planned investment and infrastructure provision	**Significance Assessment:** Bringing forward the timing of the proposed development comes at the expense of the delivery of other developments and is not possible without displacing planned investment and infrastructure service provision in existing live zoned areas and sequenced areas. There are significant infrastructure funding and financing gaps for the application and no agreements are in place to confirm the scope of proposed infrastructure and ongoing opex. The funding and financing memo of Ms Duffield addresses these matters further (**Annexure 1**). It is noted that there is on-going engagement between the Applicant and the Auckland Urban Design Office, however at this time there is no formal agreement or funding mechanisms. **Regional/National Benefits Considered:** See Project Benefits Summary above. **Proposed Conditions/Mitigation/Compensation:** If the Application is granted, conditions should be imposed requiring certainty of infrastructure financing and funding before the Development proceeds. These conditions should ensure that the Development demonstrates how infrastructure will be paid for and confirms that required infrastructure provision will not displace planned investment in other areas of Auckland. Consideration could be given to conditions or covenants such as requiring private funding and private operational responsibility for infrastructure, and / or deferring development stages until infrastructure is funded and delivered. Agreements such as 'Infrastructure Agreements' may increase funding & financing certainty as well as timing certainty for infrastructure to be delivered. **Proportionality Conclusion:** The impact of displaced development, planned investment and infrastructure service provision in existing live zoned and sequenced area are considered to be significant.

Key information gaps

229. The following table identifies residual information gaps that remain having reviewed the current application material provided, including the application documents, and explains their significance for decision-making. Council considers that this information is necessary prior to determination and the Panel should request these are provided by the Applicant and sufficient time is provided for the Council and other specialists to review these:

Information gap	Nature of deficiency	Decision-making impact	Risk / uncertainty created
1. **Economic Assessment**	The Economic Assessment is required to be updated as follows: i. Counterfactual not properly defined or applied. ii. Cost-benefit framework unclear and inconsistently applied. iii. Inappropriate and repeated use of multiplier analysis. iv. Assumption of additionality is not demonstrated v. Calculation errors in "Method A" – magnitude and direction vi. Lower marginal cost producer claim not evidenced in "Method B" vii. Elasticity-based price suppression mis-specified and implausible viii. Construction activity is treated as a benefit rather than a cost – partly a function of relying on multiplier analysis ix. Opportunity costs not properly assessed.	The Economic Assessment needs to be detailed and set out in manner whereby the benefits of the proposal are appropriately quantified and whether these benefits are regionally significant.	The Economic Assessment to assess and understand the benefits of the proposal and whether these are regionally significant.
2. **Updated Conditions including review conditions**	There are a range of consent conditions that are required to be updated to address matters that are flagged in the Council Specialist Memos. It is understood that the Applicant will be providing a further updated condition set in their 11 May 2026 response. It is noted that the Residents Society Conditions are being updated by the Applicant, however these have not been reviewed by Council.	Consent conditions are required to ensure that these appropriately mitigate and manage a range of adverse effects.	Uncertainty that the consent conditions are appropriate, robust and enforceable.
3. **Plans**	The applicant has confirmed that the full updated plans have not been provided in their previous post lodgement responses. It is understood that this will be provided as part of the Applicants 11 May 2026 response. These have not been reviewed by Council Specialists.	Plans are required to be updated to reflect the various changes/ updates to the proposal.	Plans are required to be updated to reflect the various changes and updated assessments.
4. **Geomorphic Assessment Scope and Methodology**	Additional Geomorphic Assessment is required to address the following: • Scope and Methodology • Setback Adequacy and Riparian Margins	Cannot accurately assess the necessary riparian setbacks for dwellings/ buildings. Furthermore, the degree	The riparian setbacks may result in insufficient space for the intended building platforms on residential lots; and

	• Post-Development Hydrology and Geomorphic Response • Stormwater Management, Culverts, and Geomorphic Interaction • Geotechnical Structures: Design, Ownership, and Liability • Wetland Channelisation Risk • Property Documentation and LIM Notations Please refer to full details set out in Appendix A of the Stormwater Specialist Memo (**Annexure 19**)	and extent of adverse effects on infrastructure, stormwater management and other related effects are not able to be assessed with certainty.	the degree and extent of adverse effects on infrastructure, stormwater management and other related effects are not able to be assessed with certainty.
5. **Dam Break Assessments**	The Applicant has identified that 6 of the 12 proposed culverts will be inadvertent dams. Further assessments are required to investigate the risk of dam failure to demonstrate what hazardous conditions people may be exposed to. Full assessments of the culverts demonstrating compliance with the Stormwater Code of Practice, and therefore compliance with the Building Act 2004 and Building (Dam Safety) Regulations 2022 is required. It is understood that the Applicant will be providing this information in their responses. Please refer to full details set out in Appendix A of the Auckland Transport Stormwater Specialist Memo (**Annexure 21**).	This information is required so that flood hazards effects on people can be assessed. These assessments are required and cannot be conditioned.	Potentially significant adverse hazard effects on persons and infrastructure.
6. **Operation and Maintenance – Legal Access**	To resolve concerns regarding legal access to stormwater management devices for operation and maintenance purposes, revised scheme plans are required that locate the devices and all its ancillary elements, including the maintenance access, to be located within the Lieu of Reserve – for Drainage Purposes.	In the absence of these changes HW may not be able to support acceptance of the stormwater assets for vesting in public ownership. HW would not accept the transfer of land to public ownership and would not accept vesting of the stormwater management devices, and the connecting upstream stormwater network as public infrastructure, where the Council stormwater infrastructure and land	Uncertainty for legal access for operation and maintenance of stormwater assets.

			requirements cannot be addressed at Engineering Plan approval stage	
7.	**Vesting of Land in Lieu of Reserve – for Drainage Purposes**	Revised scheme plans are required to clearly delineate the extent of land proposed to be vested for drainage purposes, demonstrating that the land is limited to that reasonably necessary to accommodate the public stormwater devices and associated access, and excludes disproportionate areas of adjacent stream corridors and riparian batters. In addition, where land is proposed to be vested or transferred to Council, conditions have been recommended that require the Applicant to enter into a sale and purchase agreement with Council for the relevant land no later than the time of application for approval of the survey plans under Section 223 of the RMA. This is necessary to confirm Council's agreement in principle to the acquisition and to ensure that vesting outcomes are resolved prior to subdivision approval.	There are still disproportionate areas proposed to be transferred to public ownership which are not acceptable. Cannot ascertain the extent of land for drainage purposes. Required to ensure accurate information is identified on the scheme plans.	Uncertainty around the extent of vesting of land.
8.	**Flood Risk Assessment – Habitable Floors**	The flood model and the Flood Risk Assessment are required to be updated to ensure that the assessments are based on the peak flood levels under the existing NZTA culvert full blockage scenario. In addition, the Flood Risk assessment must reflect the consented landform and finished levels of the Ara Hills development.	This is necessary to confirm that flood hazard risk is not increased to the existing consented built environment under the assessed blockage scenario, and to determine whether any additional mitigation measures are required to achieve this outcome, including, but not limited to, the provision of a secondary relief inlet to the existing NZTA culvert.	Potential flood hazard risk to existing NZTA culvert and other infrastructure**.**
9.	**Confirmation of Attenuation**	Clarification of whether 1% AEP attenuation is proposed for this application. In case attenuation is proposed, then the Applicant must provide updated conditions of consent that will ensure the outcomes are achieved in perpetuity, including any necessary corresponding specific design requirements and legal mechanisms.	This is required to inform consent conditions, and that these are appropriate and robust.	Potential risk that consent conditions are not "fit for purpose"**.**
10.	**Open Space outcome for Lot 1800 is not protected**	The residential society mechanism applied to Lot 5020 has not been extended to Lot 5020.	Unclear long-term ownership, management, and public access arrangement.	Loss of intended open space outcome.

11.	**Maintenance period requirements for native species**	No confirmation of extended (3-year) maintenance period for slow-establishing natives. A 3-year maintenance period is now considered the standard Parks Planning practice for street trees as per the COP Chapter 7 Landscape.	Uncertain establishment success and long-term canopy development	Can be addressed by consent condition requiring 3-year maintenance period.
12.	**No gradient confirmations in drainage reserves including a 1:1 slope in Lot 1800 (park)**	No confirmation that gradients meet safe use and maintenance requirements. - 1:5 maximum gradient for grass - 1:3 maximum gradient for planting A small eastern portion of Lot 1800 adjacent to the covenanted vegetation maintains a 1:1 slope.	Uncertain compliance with vesting and safety standards.	Slips, erosion, unsafe public access and maintenance risk
13.	**Access to drainage reserves for maintenance**	Lack of clarity on whether maintenance access meets required standards given access through private lots for the below lots: - Lot 1624 provides a right of way for maintenance access over private lots	Uncertain compliance with vesting and safety standards. Slips, erosion, unsafe public access and maintenance risks. Healthy Waters may reject the proposed drainage assets	Potential non-compliant or unsafe access and future.
14.	**Flooding of Lot 1800 during culvert blockages**	Insufficient hydraulic modelling and supporting technical information**.**	Uncertain compliance with vesting and safety standards.	Potential for unmitigated flood risk to public land and users under blockage conditions.
15.	**Canopy coverage optimization and calculation.**	No clear strategy to maximise canopy in berms with available space or canopy coverage calculations.	Uncertain delivery of long-term canopy coverage outcomes	Can be addressed at detailed design but limits the ability to assess whether the design will support mature canopy tree growth as intended.
16.	**Confirmation of available soil volumes and rooting space**	Documentation does not clearly demonstrate how recommended soil volumes will be achieved within the constrained corridor between planting areas and vehicle crossings.	Uncertain delivery of long-term canopy coverage outcomes.	Can be addressed at detailed design but limits the ability to assess whether the design will support mature canopy tree growth as intended.
17.	**Species selection not supported**	Species selection required to be updated on landscape plans. B. tarairi proposed despite known high failure rates after ~10 years. Raupō and Carex secta proposed despite long-term maintenance and performance issues (Stormwater pond edge species selection).	Reduces confidence in species resilience and suitability**.**	Can be addressed at EPA for detailed design changes.

18.	**Fencing adjacent to drainage reserves**	The landscape plans indicate 1.8m solid fencing adjacent to specific drainage reserve locations (Lots 1623 & 1605). Other locations appear to provide 1.8m open security fencing (50% permeable). Plan depictions do not match Applicants' commentary.	Constrains the ability to confirm that passive surveillance and CPTED outcomes are appropriately achieved across adjoining informal recreation drainage reserves.	Risk of reduced passive surveillance, poor safety outcomes, and creation of inactive edges along reserves, potentially leading to CPTED concerns and reduced safety.
19.	**Root management or engineering solutions near vehicle crossings**	No clear information is provided on whether design responses (e.g. structural soils, soil cells, or connected trench systems) will be used to expand rooting space beneath hard surfaces	Uncertain delivery of long-term canopy coverage outcomes.	Can be addressed at detailed design but limits the ability to assess whether the design will support mature canopy tree growth as intended.
20.	**Stormwater line location measurement depth not demonstrated**	The depth appears to exceed 1m at a minimum of 1.7m in depth at a high-level measurement. Drawing Number 3725-1-3610 on Appendix 26 Stage 1 and SW line depth measurements under front berm for collector road and N/O.R 6). Original lodgement documentation depicted a measured 1.7m separation distance. Street tree locations and updated plans do not confirm a measured vertical distance.	Unclear whether required soil volumes and root zones can be achieved above services	Potential redesign at EPA stage and a risk of tree failure or service conflicts
21.	**Appendix 9.1 Retaining walls do not include an assessment on retaining walls adjacent to lots to vest for reserve areas**	Appendix 9.1 does not include assessment of retaining walls adjoining reserve boundaries. Plan depictions do not match Applicants' commentary. No further detailed retaining wall indications or plans have been provided for the landscape plans	Uncertain whether reserve gradients, maintenance access, and CPTED outcomes can be achieved.	Over-steep batters, inaccessible reserves, long-term maintenance burden.
22.	**Interface with new commercial lot requires clarification for Lot 5020.**	No detail is provided on how level changes between park and commercial lot will be managed. One retaining wall under 1m is depicted. Plan depictions do not match Applicants' commentary. No further detailed retaining wall indications or plans have been provided for the landscape plans	Uncertain accessibility and CPTED outcomes with possible opportunity of positive reserve and commercial interaction lost.	Potential for a poor Park interface, reduced passive surveillance and accessibility issues.

23.	**Delineation of park boundary with residential lots is unclear for Lot 5020.**	Private/public boundaries are not accurately demonstrated with fencing or post locations in relation to Lot 5020. Plan depictions do not match Applicants' commentary.	Unclear responsibility for maintenance and public access	Risk of Council maintenance responsibility for a private function. Removal of private pathways required.
24.	**Vehicle Tracking Plans**	Vehicle tracking plans are required to demonstrate tracking for all vehicles including heavy vehicles.	Vehicle tracking (heavy vehicles) overlaps with kerb built out at some intersections and this creates potential traffic safety and maintenance issues.	Potential traffic safety and maintenance issues.
25.	**Lighting Plan condition**	Further condition details required to ensure appropriate lighting design outcomes. Details are missing regarding which proposed areas lighting plans would relate to.	Pedestrian amenity and safety outcomes.	Uncertainty of outcomes which potentially create pedestrian safety risk/ effects**.**
26.	**Safe Intersection Site Distance information**	Information is required for some Lots (e.g. Lots 183-186 and similar) including dimensions of affected areas which will inform required mitigation such as planting and fencing heights,	Potential vehicle and pedestrian safety issues.	Potential for traffic and pedestrian safety effects.
27.	**One-way routes (two vehicle crossing) or with turning heads (D-area).**	Further details are required as the updated design of stage 1- JOAL 34 and 5A doesn't provide a turnable head.	Required to ensure safe vehicle manoeuvring/ tracking.	Potential for traffic functionality and safety effects.
28.	**Plan details for garage widths.**	Plan information required to ensure minimum design dimensions for single and double garages	Required to ensure functional parking garage spaces.	Can be addressed by consent conditions.
29.	**Transport Infrastructure including active mode provision**	Road 1 is required to be designed with cycle routes and cycle infrastructure in the form of off-road cycle paths, separate from the footpath on each side.	This will require additional space within the road reserve, and this is not able to be addressed via a consent conditions.	Uncertainty regarding lot boundaries and whether changes are required to the subdivision scheme plans.
30.	**Bus-stops details and Assessment**	Bus-stop requirements and indicative locations detailed on the application drawings require further details and	Required to ensure appropriate provision of bus stops and associated	Ensure safe and functional public transport facilities.

		changes. These include details of barriers and further assessment of road safety effects of not providing a pedestrian facility near the stops.	facilities.	
31.	**Staging and Paper Roads / Road Stopping**	The timetabling/staging of road vesting should ensure that alternate access along a vested or paper road is provided where portions of paper road are to be stopped and that adequate paper road widths are available for linkage of proposed road to remaining paper road corridors	Whilst the road stopping approval occurs outside the resource consenting process, this issue is required to be considered to ensure future changes to any approved consent, additional or new consents are not needed	Risk associated with ensuring all consent required have been applied and that no changes are required to existing consents.
32.	**Integration of the Projects partial delivery of designation 14108 and future designation works**	The proposed interim design solution has various design deficiencies that are required to be addressed through updated design documents. The interim road is not consistent with the indicative design for designation 14108 or the portion of the designation within the site that is being delivered by the Project.	Interim solution provides a design solution that creates significant adverse transport related effects and is not supported by Auckland Transport.	Significant Traffic safety effects and does not provide a solution that is consistent with the designation/ NoR6.
33.	**Integration of the site with the remaining Paper Road and Ara Hills Development.**	This is required to include frontage upgrades to the paper road, including provision of an active mode path and potentially vehicular access.	Required to be addressed to ensure connectivity to adjacent land.	Uncertainty in respect to active modes and connections.
34.	**Active Modes to Future School**	Details required to include active modes to access the intended school on Upper Ōrewa Road.	There is no provision within the application material for active modes to enable future residents to access the intended school on Upper Ōrewa Road. This school is likely to encompass both a primary and secondary school and although the land is not yet designated planning is well advanced.	Uncertainty regarding long term connectivity to future educational activities.
35.	**Transport related consent conditions**	A suite of consent conditions including changes to the Applicant's consent conditions and additional conditions are required to address various traffic/ transport related adverse effects, and were appropriate to address additional required design outcomes/ assessment	Transport related conditions are required to ensure that transport effects are mitigated/ avoided, and to ensure appropriate design outcomes.	Required to ensure transport effects are mitigated/ avoided, and to ensure appropriate design outcomes.

		Please refer to Section 9 of Auckland Transport Memo (**Annexure 21**).		
36.	**Turning head design; and Future bridge design in relation to the NOR6 and Upper Orewa Road intersection.**	Temporary turning heads are required to be included on application drawings. Design work required to ensure that adjacent residential super Lots 606 and 609 which are located close to the future bridge and it is not clear how development of these lots can be undertake while integrating with the adjacent bridge abutments and future road levels.	Required to ensure feasibility of future development on superlots, and to delivery of transport infrastructure.	Uncertainty regarding future development and transport infrastructure.
37.	**Final updated landscape plans, an updated planting and maintenance plan,**	Final landscape plans and updated planting and maintenance plans required to ensure the intended landscape outcomes are achieved.	Final landscape plans and updated planting and maintenance plans required to ensure the intended landscape outcomes are achieved.	
38.	**JOAL Design**	Further design details (and changes) are required to be JOAL design. Please refer to previous Urban Design assessment (**Annexure 28**).	Required to ensure appropriate pedestrian amenity and safety outcomes.	These are important to ensure a safe and functional development.
39.	**Additional consent condition in respect to WWTP.**	An additional consent condition is necessary should the WWTP suffer a serious failure. This would require a proposed offset area (equivalent to the covenanted area within the irrigation field) to be provided prior to commencement of wastewater discharge.	Additional condition required to ensure potential terrestrial effects are mitigated.	Potential risk in the event of WTTP failure**.**
40.	**Updated Ecological Management Plans**	Updated/ separate Ecological Management Plans are required to ensure appropriate ecological outcomes including implementation and maintenance.	Required to address ecological revegetation areas and associated ecological outcomes.	Potential risk in terms of implementation and maintenance, and securing the ecological outcomes.
41.	**Condition relating to trucking of wastewater off site**	The proposed review / trigger condition relating to off-site disposal for Stage 2 is necessary to enable Council to review the trucking / off-site disposal conditions if truck movements materially exceed those anticipated, complaints are received, a receiving facility changes its acceptance criteria, or monitoring indicates that off-site disposal is being used more extensively than assessed.	Required to ensure appropriate review consent conditions are included in any decision.	Required to ensure appropriate review consent conditions are included in any decision
42.	**Additional details**	1. The Water take consent has been granted, however there is no water	These details are required to ensure the water	Potentially significant risk associated with

required for the Water treatment.	quality data for design of the treatment plant. The sample used is from 2016, from a bore located outside of the property. 2. The application does not provide a water balance sufficient to demonstrate how the water shall be supplied reliably to the development during increased use periods, which will typically coincide with drought conditions. Water harvesting is mentioned but not detailed. 3. A "Hydroloop" system is also referred to, however the figure of 30-40% water re-use is not tested, nor detailed as to how this would be integrated into the overall water supply for the development. Is this going to be a condition for developing dwellings on the site? 4. There is likely to be a waste stream from the water treatment plant, while this is likely to be small when compared to the wastewater from the balance of the development, can this please be quantified and its management confirmed? 5. The application material indicates that the proposed reticulation network and treatment plant are to remain in private ownership of a private infrastructure company that will seek network operator status. However, the application does not clearly identify the proposed legal entity that will own the water and wastewater assets, nor does it explain whether ownership and governance will sit with a network utility operator, body corporate, incorporated society, or another structure. 6. The application also does not clearly allocate long-term responsibility for operation, maintenance, renewal, compliance, auditing, customer interface, charging/revenue collection, emergency response, and asset replacement across the proposed private water and wastewater systems. The supporting material refers variously to a private infrastructure company, a utility company, Apex as operator, and the owner of the	treatment plant provides the necessary and safe water infrastructure for the proposal; and to ensure there are appropriate legal mechanism, for future ownership, maintenance and management.	the provision of private water infrastructure.

	plants carrying out audits, but without a single clear governance and responsibility framework.		

Key Findings – Potential Adverse Effects

230. The Council acknowledges that the application has made a significant number of positive updates from the original application which was lodged and recommended for draft decline, notably in addressing water and wastewater supply matters and ecological effects. However, the identified information gaps (detailed above) create uncertainty in the assessment of adverse impacts, and the Council is not able to fully assess the extent and degree of the potential adverse impacts, and specifically whether the Application meets the section 85(3) threshold.

231. A number of potential (based on the Application materials) adverse impacts have been identified in the Council's reporting, and without the key information being provided, the Council are not able to confirm whether the documentation is at a requisite standard and that these can be addressed adequately through conditions of consent, or whether these outweigh the project's benefits. This includes but is not limited to the Geomorphic related effects, Dam Break Assessments, Traffic/ Transport related effects, Private Water Supply Infrastructure, Parks related effects and Impact on planned investment and infrastructure provision. The Council are of the view that, as with the original Delmore Fast-Track, whilst a number of the adverse effects may potentially be addressed by way of conditions (which would need to be fully agreed to by the Applicant), a number cannot and these effects could be fundamental. On this basis, and until the required information is provided by the Applicant, the Council are unable to support the approval of the application.

232. Aligned with this, we note there is a fundamental disagreement with the economic matters and the regional significance arguments from the Applicant and Council specialists. As a result, there may be a need for an independent economic specialist to be appointed to undertake a peer review – we respectfully request that the Panel considers this request by the Council.

<u>Section 85(4) consideration</u>

233. Council's assessment has considered that the adverse impacts cannot be found to meet the section 85(3)(b) threshold solely because they are inconsistent with provisions of specified Acts or other documents. The proportionality assessment is based on the substantive significance of impacts relative to benefits.

<u>Relevance of information gaps to assessment</u>

234. The identified information gaps (detailed above) create additional uncertainty in the assessment. However, the adverse impacts identified above meet the section 85(3) threshold even accounting for this uncertainty, as the core constraints are sufficiently clear and significant.

Recommendation and Conclusion

235. Based on our assessment, Council have identified potential (based on the Application materials received to date) adverse impacts, though without the key information / a sufficient response being provided by the Applicant, are not able to confirm whether these can be addressed adequately through conditions of consent, and also whether these outweigh the project's benefits. This includes, but is not limited to, the Geomorphic related effects, Dam Break Assessments Traffic/ Transport related effects, Private Water Supply Infrastructure, Parks related effects and impacts on planned investment and infrastructure provision. Of particular relevance, we also note that the Council consider further economic assessment and analysis is required to understand whether the project will deliver the claimed regionally significant benefits.

236. Without this information, the Council considers that a decision under the relevant provisions of the FTAA (including sections 81 and 85 and schedule 5 for RMA applications) cannot be undertaken and the Panel are unable to fully evaluate or weigh up whether the delivery of this development project can demonstrate significant regional or national benefits and if the adverse impacts are of a sufficient significance, scale and nature to be out of proportion to those benefits.

237. As a result, and on the basis that all outstanding information is fully provided by the Applicant on 11 May, we request that sufficient time is allocated to enable the Council and specialists to undertake a thorough assessment upon receipt, with potential requirement for Conferencing to review any matters.

DATED the 4th day of May 2026

Dylan Pope
Planning Consultant for Auckland Council

Delmore Fast-Track

04/05/2026– Auckland Council Response

Annexure 1:

Funding & Financing

1.0 Technical Specialist Memo - Funding and Financing

From:	Brigid Duffield - Chief Advisor Growth Infrastructure Funding and Financing
Qualifications & Relevant Experience:	I am employed as Chief Advisor Growth Infrastructure Funding and Finance within the Policy, Planning & Governance directorate at Council. I have been working in this role for 5 years. I support Council group with expertise in funding and financing aspects for the alignment of significant infrastructure programmes. This is achieved through working with Crown and Crown entities, and other significant stakeholder groups to align strategic infrastructure investment for growth in the Auckland region. Prior to my current position, I have held senior global commercial and consulting roles including Commercial Manager for Tāmaki Regeneration focusing on development and its financing and funding (2015 to 2019). I have a Masters in Land Economy from Cambridge University (1991) and have held executive roles focusing on the commercial implications of choices and decisions (1999 to 2004). I have been a Strategic Consultant and Director at PwC (and independently) and have worked with many businesses to achieve successful commercial planning (1994 to 1999, 2004 to 2015). These roles have been predominantly private sector based but have more recently moved into the public sector in both local and central government.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	Brigid Duffield
Date:	19 March 2026

2.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Fast Track Approval Application, AEE

3.0 Specialist Assessment

1. The Delmore fast-track Application represents out-of-sequence growth that would bring forward development by approximately 30 years from existing planned timelines. Auckland Council, Auckland Transport, and Watercare Services Limited have not planned for infrastructure in this area to support the Development proposed by the Application and have not allocated any funding within their current planning horizons.
2. The Development requires significant infrastructure both within the Delmore area and to connect it to the wider urban network. Various elements of this infrastructure are proposed to be provided by the Applicant. Some of this infrastructure is proposed to be built by the Applicant and then vested in Council. Other parts of this infrastructure is proposed to be operated by the Applicant – either for a temporary period or permanently. Other elements of the infrastructure will require Council capital and/or operating funding. Within limited Council resources, supporting new development is typically a matter of prioritisation of resources.
3. Without a confirmed funding solution, there is a risk that the Development could proceed without the full suite of supporting infrastructure, which may result in adverse impacts, or could face material delays to implementation. Additionally, there is a substantial risk that providing infrastructure for this development could displace planned investment in other areas of Auckland where funding is already in place. This would undermine the strategic and phased approach to infrastructure provision through which Auckland Council, Auckland Transport, and Watercare Services Limited seek to maximise the return on investment of scarce infrastructure funding resources.

4.0 Recommendation

The recommendations of this memorandum centre around ensuring funding certainty and protecting Auckland's infrastructure program to enable growth in a strategic manner throughout the region.

<u>Ensuring Funding Certainty</u>

- An infrastructure financing and funding solution must be fully developed and committed to ensure the area can deliver the envisaged growth with required infrastructure. Without the ability to pay for infrastructure, there is significant risk that the Development will occur ahead of necessary infrastructure or that the Development will stall, resulting in poor urban outcomes. The infrastructure required, including both direct and cumulative effects, needs to be fully scoped and understood across all asset categories. An infrastructure financing and funding solution must be fully developed and committed to ensure the area can deliver the envisaged growth with required infrastructure.
- Given the out-of-sequence nature of this Application and the absence of financing and funding in current plans, greater certainty is required. To provide funding certainty, the developer could enter into legally binding arrangements confirming responsibility for infrastructure delivery and associated operational costs. This commitment should cover construction of new and upgraded infrastructure, with clear agreements about which assets will vest to Council and which will remain private. For vested infrastructure, the Applicant should pay ongoing operating costs,

maintenance and depreciation. For privately held infrastructure, agreements must ensure long-term provision with appropriate structures for operation and maintenance, preventing Council from inheriting failing assets by default.

Protecting Auckland's Infrastructure Programme

- Infrastructure funding is a scarce resource that Council, Auckland Transport and Watercare carefully manage through stringent processes. These processes plan and allocate funding based on where growth is expected to occur. As this Application represents out-of-sequence development, it must not impact Council's debt profile or other funding commitments, nor result in diversion or delay of planned infrastructure investment elsewhere in Auckland.

5.0 Proposed Conditions

If the Application is granted, conditions should be imposed requiring certainty of infrastructure financing and funding before the Development proceeds. These conditions should ensure that the Development demonstrates how infrastructure will be paid for and confirms that required infrastructure provision will not displace planned investment in other areas of Auckland. Consideration could be given to conditions or covenants such as requiring private funding and private operational responsibility with stringent long term provisions such as appropriate management structures and ongoing opex and maintenance, for infrastructure, and / or deferring development stages until infrastructure is funded and delivered.

Delmore Fast-Track

04/05/2026– Auckland Council Response

Annexure 2:

Economics

1.0 Technical Specialist Memo - Economics

From:	James Stewart – Economist, Chief Economist Unit, Auckland Council
Qualifications & Relevant Experience:	I hold the qualification(s) of: **Bachelor of Commerce (Honours) in Economics**, and have **eight** years of experience in economics of land use, transport and public policy I am a qualified independent hearings panel commissioner. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, and fast-track applications, and have appeared as an expert witness before consent authorities on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	27/03/2026

2.0 Executive Summary / Principal Issues

The major issues I have identified that undermine the credibility of the results presented and therefore conclusions borne from them are:

1. Counterfactual not properly defined or applied.
2. Cost-benefit framework unclear and inconsistently applied.
3. Inappropriate and repeated use of multiplier analysis.
4. Assumption of additionality is not demonstrated
5. Calculation errors in "Method A" – magnitude and direction
6. Lower marginal cost producer claim not evidenced in "Method B"
7. Elasticity-based price suppression mis-specified and implausible
8. Construction activity is treated as a benefit rather than a cost – partly a function of relying on multiplier analysis
9. Opportunity costs not properly assessed

There are other minor issues with the analysis which are identified in the body of this review. Individually these minor issues may not be material to the results but cumulatively undermine the credibility of the results and therefore the conclusions borne from them. I have not repeated them here for sake of brevity.

3.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Kaye-Blake, W. (2025). Economic impacts of the Delmore development: A report for Vineway Limited. New Zealand Institute of Economic Research.

4.0 Specialist Assessment

Background and structure of this review

1. The Chief Economist Unit was asked to review an economic report "Economic impacts of the Delmore development" (the report) by Dr Kaye-Blake (NZIER) which is in support of a substantive application for a Fast-track Approvals Act application named "Delmore".
2. The Proposed Delmore development is a c. 1,200 dwelling unit peri-urban residential subdivision in Orewa West. The site is in Future Urban Zone land earmarked for release in the Future Development Strategy beyond 2050. If the application is successful, the land would be urbanised ahead of the planned timing and enable the development of the land.
3. I agree with the general approach that the applicant's economic expert has chosen, a cost-benefit analysis framework, in an attempt to demonstrate the economic trade-offs that arise from the Proposed Development. However, I have significant reservations on elements of the analysis that I believe undermine the results and therefore conclusions presented in the report.

4. I have structured this review by first addressing "Major Issues" - those that are most likely to impact the results and conclusion of the report based on the magnitudes of the purported benefits and costs identified in Table 4 and Table 5 (at page 27-28). I have identified several "Minor Issues" that are less likely to impact the overall result of the analysis, but cumulative undermine the credibility and robustness of the report's results and conclusions based on those results.
5. Overall, I am not convinced that the analysis in the report demonstrates that Delmore would result in a net benefit (benefits exceed costs) let alone whether it could be considered a regionally or nationally significant benefit.

Major Issues

6. The report does not fully articulate what counterfactual any incremental resource trade-offs (benefits and costs) are being measured against. A counterfactual is stated in section 2.1 (at page 2) but this appears to not be strictly adhered to (I address this further at my para 11, below). It would be useful if this could be clarified so we could understand the purported resource trade-offs with greater clarity.
7. Although the report discusses the need for a cost–benefit framework, it does not clearly articulate what this framework is. A clear framework identifying the relevant resource trade-offs relative to the counterfactual would clarify whether the Proposed Development is genuinely welfare-enhancing.
8. Section 4.5 (at page 8-9): the report is claims to adopt a CBA framework and appears to acknowledge the limitations and use of multiplier analysis, it relies on the results despite Treasury guidance[1] on CBA suggesting not to. I agree with the Treasury guidance on the issue. While I acknowledge that the report attempts to correct for some limitations, I do not consider these corrections adequately fix the structural issues with multiplier analyses.
9. I summarise the main issues with analysis for the purpose of an assessment of welfare effects arising from the Proposed development:
    a. No counterfactual scenario is defined so it is unclear what changes are being measured against.
    b. The result is strictly measure of activity, not economic benefit.
    c. The measure is gross in that it adds benefits, costs and transfers together.
    d. Resources are assumed to infinite (no opportunity costs) and prices unresponsive to changes in demand.
    e. Assumes the relationship between industries is constant / fixed with no pressure from substitutes, innovations or changing preferences
    f. Multiplier analysis adds costs and benefits together rather than subtracting costs from benefits to arrive at a net position.
10. Multiplier analysis is adopted several times throughout the analysis which has the general effect of overstating the benefits and costs where it is applied. The repeated use of multiplier analysis materially undermines the credibility of the resulting values and any conclusions drawn from them.
11. Section 5.1 (at page 10): "…housing is good and that more housing is better" requires the qualifier that all else remains equal i.e., that we do not consider trade-offs. The baseline that is established in section 2.3 (at page 2) is that the Proposed Development accelerates development of land, i.e., the report assumes the relevant benefit is acceleration but does not demonstrate that the

[1]The Treasury. Guide to Social Cost Benefit Analysis (July 2015). New Zealand Government, 2015. http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/guide/ (at pages 19 & 54)

acceleration is net of displacement effects. In my view, the assumption of additionality is a bold assumption and is critical because underpins much of the analysis on the benefits of housing in all the identified methods (A-C) below.

12. Section 5.1.1 (at page 10): The report calls this "Method A". I question whether 120 additional houses in Orewa West in any given year (relative to c. 24,315 annual house sales) could realistically be expected to generate an Auckland-wide price effect of around -1.4%, particularly given normal volatility in annual sales volumes. The analysis is effectively treating all housing in Auckland as part of the same market, by way of example, the 120 new houses in Delmore each would cause the price of a Mount Eden villa to fall by 1.4%.
13. The consumer surplus change, $6.95million (at page 27), is too low due to only calculating only part of it. The producer surplus change should be a large negative value, not positive $2.8billion. In total, the result is that the sum of changes in consumer and producer surplus (i.e., the net figure) is substantially smaller than indicated.
14. Analysis undertaken by Dr Richard Meade demonstrates this calculation error. I have relied on this analysis in this review and provided it the original analysis in the supporting documents section of this review.
15. Additionally, if the market for dwellings in Delmore is, as alluded to above, smaller than the Auckland regional market, this has the effect of reducing consumer surplus benefit so the net surplus would be smaller still.
16. I have relied on figures provided Dr Richard Meade, summarised below in Table 1 (annualised figures) and Table 2 (present value figures), below. The table shows, once correcting for the identified calculation errors, the net present value of the consumer surplus less producer surplus is equivalent to c. $37 million annually or $249.1 million in present value terms – even when using the reports assumption that Delmore's market is 100% of Auckland's housing which, again in my view, is unlikely. This is a significantly smaller than the effect than represented in the report of $2.8 billion. I have provided the original analysis by Dr Richard Meade in the supporting documents section of this review.

Table 1: Corrected* surplus figures and sensitivity testing (figures presented in annual changes)

Delmore as % of Auckland Market	Consumer surplus ($m)	Producer surplus ($m)	Total (net) surplus ($m)
100%	$ 418.6	-$ 381.5	$ 37.1
20%	$ 422.8	-$ 389.7	$ 33.0
10%	$ 427.9	-$ 400.0	$ 27.9
5%	$ 438.2	-$ 420.7	$ 17.6
2%	$ 469.1	-$ 482.5	-$ 13.4
1%	$ 520.6	-$ 585.5	-$ 64.9

Source: Dr Richard Meade (Cognitus Economic Insight); table formatted (incl. rounding) by author (Mr James Stewart).

*Negative results partially an artifact of applying instantaneous elasticity changes to large (proportionate) quantity changes. Interpret results as indicative.

Table 2: Corrected* surplus figures and sensitivity testing (figures presented in present value terms)

Delmore as % of Auckland Market	PV Consumer surplus ($m)	PV Producer surplus ($m)	PV Total (net) surplus ($m)
100%	$ 2,809.0	-$ 2,559.9	$ 249.1
20%	$ 2,836.7	-$ 2,615.2	$ 221.5
10%	$ 2,871.3	-$ 2,684.4	$ 186.9
5%	$ 2,940.4	-$ 2,822.7	$ 117.8
2%	$ 3,147.9	-$ 3,237.5	-$ 89.7
1%	$ 3,493.6	-$ 3,929.0	-$ 435.4

Source: Dr Richard Meade (Cognitus Economic Insight); table formatted (incl. rounding) by author (Mr James Stewart).

*Negative results partially an artifact of applying instantaneous elasticity changes to large (proportionate) quantity changes. Interpret results as indicative.

17. Section 5.1.2 (at page 12): The report calls this "Method B". I take this method as illustrative that if marginal costs are lower, surpluses are mechanically larger. This assumes that marginal costs will be lower for this developer, which is asserted but not evidenced. Additionally, this is contingent on the developer for Delmore being the marginal supplier for the relevant market. Given the importance of these assumptions, I consider further supporting evidence is required.
18. Section 5.1.3 (at page 13): The report calls this "Method C", this is the report's preferred method (at page 14) to valuing the benefit of "more housing". I have three concerns with this method:
    a. This method does not consider any potential for transfers and assumes all economic benefits will be net additional. i.e., it assumes Buyer savings=△P×Q and ignores Seller losses=△P×Q. This assumes buyer savings are pure welfare gains which does not align with best practice.
    b. The formula applied for the calculation method is $\Delta P = \frac{\Delta Q}{|\varepsilon_d|}$ which is a simplification. which should include the elasticity of supply (ε_s) also, a term which acknowledges how the system responds – how easily developers are able to respond to demand signals. The formula should look more like, $\Delta P \propto \frac{\Delta Q}{\varepsilon_s - \varepsilon_d}$. The result of the misspecification may mean materially overstated price effects ΔP and therefore overstated benefits; it does not account for the extent to which developers can build more houses to respond to increases in demand.
    c. As stated in my critique of "Method A" above, it is implausible that 120 additional house sales would have a region wide housing market price effect of the magnitude estimate here. Comparing the sizes of the purported benefits, the report is estimating that the regional housing benefit is 30 times larger than the purported "consumer surplus" benefit and over ten times larger than the purported "affordability" benefit. In my view, a 1,203-dwelling development is unlikely to create a persistent, region-wide price suppression in the Auckland housing market.
19. Section 5.2 (at page 14-15): I note that multiplier analysis is used here. I have significant reservations on its use which are detailed above (in my para 8-10) and apply here.
20. Section 5.3.1 (at page 15-17): It is unclear on whether the stated OPEX costs for wastewater and fresh water are accurate and these may be better interrogated by other experts at Council,

Watercare and / or other expert submitters. However, I note that the CAPEX costs of the wastewater and water infrastructure appear to be omitted from the analysis and it is not clear why this is the case and could use clarification. It is possible, but I do not know, that the report treats these CAPEX costs as part of construction and therefore as a benefit which is not correct. Additionally, in my experience, CAPEX costs tend to be highly relevant to the commercial feasibility and economic viability of projects.

21. Section 6.4 (at page 22-23): The report makes two points regarding multiplier analysis for construction when assessing project opportunity costs:
    a. The possibility that there will be transfers from less productive industries to more productive industries, and
    b. Whether there will be an increase in overall employment.
22. Responding to both points it is plausible that there will be shifts from less productive (or even more productive) industries to construction and it is plausible that more employment (additionality) could be supported. However, in my view, it is not best practice to speculate on the size or direction of these effects unless it can be corroborated with evidence which is in line with Treasury guidance[2] on CBAs to ignore multiplier effects.
23. At face value it would seem implausible that the Proposed Development would be able to attract Construction labour from workers in other industries e.g., hospitality or healthcare, but rather from other construction or construction adjacent industries – bidding up the price of labour in those industries. This goes against a necessary and unrealistic key assumption of multiplier analysis: that there is an unlimited source of skilled labour and no reaction in prices.
24. Even if the multiplier analysis was found to be acceptable, the output per construction worker may be lower than the mean for Auckland[3] – which implies both the direction and magnitude of the effect is incorrect i.e., it should be a negative value.
25. In my view, all construction costs ought to be treated as costs and therefore subtracted from the purported benefits of housing.

More Minor Issues

26. Section 5.3.1 (at page 15-17): Regarding potential offsite connections to the existing reticulated networks. The discussion risks conflating transfers (charges) with welfare benefits; the report indicates it is excluded from the CBA, but the framing remains problematic.
27. Figure 5 (at page 16) shows the estimated capacity and usage of wastewater systems relevant to the area. While I am not an expert, I understand that water systems are not necessarily governed by average use but by peak use, so they do not fail under real world loads. Additionally, it is not clear why wastewater capacity is assumed to be absorbed evenly over the 20-year period. If demand for the catchment is higher than this average growth path, it implies that the capacity constraint will bite sooner, potentially displacing other development.
28. Section 5.3.2 (at page 17): I interpret this analysis as treating rates payments as a proxy for benefits that rates fund (e.g., Council services)[4]. These benefits would be received by the dwellings

[2] The Treasury. Guide to Social Cost Benefit Analysis (July 2015). New Zealand Government, 2015. http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/guide/ (at pages 19 & 54)
[3] Huang, T., & Wilson, R. (2020). Auckland's construction sector: Industry snapshot and trends to 2019 (Auckland Council technical report TR2020/002, p. ii). Auckland Council.
[4] There is a risk of misinterpretation by including rates as a benefit. In a welfare CBA these are transfers and should be treated separately (fiscal impacts). Though I acknowledge and trust this is not what was intended.

within the Proposed Development but there is no adjustment for dwellings that are displaced by the Proposed Development i.e., those dwellings that are not built. The analysis also does not consider that that Council costs may be higher with the Proposed Development to finance the gap between funds from Development Contribution charges and accelerated infrastructure spending. This would appear as an increase in general rates but no additional benefit to ratepayers which may undermine this part of the analysis.

29. Section 5.3.3 (at page 17-18): I agree with the report that the cost of building a road is not the same as the benefit of the road itself. While the largest costs associated with roads is known with some precision, the benefits can be a little more difficult to quantify. A common valuation method is to calculate the travel-time savings expected from the road existing, relative to the road not existing. Given that very few people would use the road, outside those at the Proposed Development, it is unlikely that these roads would be particularly effective at generating travel time savings. The analysis treats these as if the benefits match the costs. In my view, this is a bold assumption, and it is entirely plausible that the proposed road costs exceed the benefits as only a few people will use them. The report likely overstates the value of the roads by treating the benefits equal to the costs.
30. It is also not clear if the OPEX costs were included in the costs for building the road. In my view these are relevant costs for a CBA on the urbanisation of land.
31. Section 5.4 (at page 18-19): Development Contribution charges represent a transfer from one party to another; not a change in resources from a societal perspective for a CBA. The cost of urbanising land should be included in the CBA (e.g., roads, three waters, parks, community facilities, planning / accelerating, etc.) but these costs differ from the cost recovery mechanism of Development Contribution charges. There is a risk of double counting the costs or, if only considering Development Contribution charges as a proxy for the cost, of undervaluing costs of urbanising land.
32. Section 5.5.1 (at page 19): I agree that wetlands have a resource value and the Treasury CBAx value seems to be a fair proxy for that. However, it is not clear if the opportunity cost of the land containing the Proposed new wetlands has been included in the cost-benefit analysis. In my view it should be included as wetlands effectively constrain the lands alternative uses.
33. It is not clear why the removal of wetlands on the Delmore site occurs at the end of the Proposed Development. Presumably this wetland would be removed before the development could occur and, if not removed, its value would presumably be compromised during development. By pushing the loss to the end of the period, the analysis is artificially discounting a cost and undervaluing it. This could use clarification.
34. Section 5.5.2 (at page 19-20): Implies there are marginal health gains from households choosing the Proposed Developments dwellings over other dwellings. In my view, any private health-related benefits are already internalised in household choices. People choose the housing they prefer, including any value they place on perceived healthier or higher-quality homes subject to their own budget constraints. Unless the development creates external health benefits, this does not increase societal resources.
35. Section 6.2 (at page 21): If the proposed resident fees represent a stream of cost to homeowners to lower the initial sales price they should be included in the analysis. Additionally, the remaining liability should be included as a terminal value – it is not clear if this has be done and would be useful to get clarity. It is also not clear if this relates to the lower marginal costs identified in Section 5.1.2.

36. It is possible that this stream represents ongoing OPEX costs for repairs and maintenance of roading and water solutions, it is not clear if that is the case and, for the avoidance of double counting costs, it would be useful to clarify.
37. Section 6.4 (at page 22-23): The report makes two points regarding multiplier analysis for construction when assessing project opportunity costs. I have already conveyed my view of these types of analysis for CBAs above (see my para 7) but address the two points made here, specifically:
    a. The possibility that there will be transfers from less productive industries to more productive industries, and
    b. Whether there will be an increase in overall employment.
38. Responding to both points it is plausible that there will be shifts from less productive (or even more productive) industries to construction and it is plausible that more employment (additionality) could be supported. However, in my view, it is not best practice to speculate on the size or direction of these effects unless it can be corroborated with evidence which is in line with Treasury guidance[5] on CBAs to ignore multiplier effects.
39. Section 6.5 (including subsections) & section 6.6 (at page 23-26): These sections are largely a repeat of section 5.3 - 5.5 (addressed above in my para 15-25), but framing costs as costs instead of as benefits. My view is that infrastructure costs should be treated as costs not as benefits. The CBA appears to assume that the benefit of infrastructure is at least equal to the cost of providing it, implicitly that all infrastructure spending will have neutral or positive Total Economic Value. This is a bold assumption.

Other comments on the analysis

40. I acknowledge the presence of Appendix E (pages 53-56) which sensitivity tests the valuation method of more housing value. In my view it is best practice to sensitivity test a broad range of values, particularly when the assumptions underlying values are strict. The report suggests that, (at section 7.4, page 29) "further analysis and sensitivity testing could be conducted and reported." This would be preferable to understand how sensitive the results are to underlying assumptions.
41. Related to this point, the report's CBA results table (Table 5, at page 28) shows point estimate values of the quantified benefits, costs and primary decision statistics (e.g., net benefit / cost value and benefit-cost ratios). It would be more useful to show these values as plausible ranges which express the uncertainty of the estimation. This would avoid the report giving a false impression of the level of precision of the estimates.

Conclusion

42. In my view, I cannot be confident that the Proposed Development represents a net benefit (benefits exceed costs) from a welfare perspective.
43. Additionally, in my view, the report does not demonstrate the Proposed Development is regionally or nationally significant.

[5] The Treasury. Guide to Social Cost Benefit Analysis (July 2015). New Zealand Government, 2015. http://www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/guide/ (at pages 19 & 54)

5.0 Section 67 Information Gap

At the time of writing this Memo I have identified the information gaps which I have detailed in my assessment of the economic report above. The major issues I have identified, in my view, undermine the robustness of the results and therefore the conclusions that are borne from them. In summary, these are:

10. Counterfactual not properly defined or applied.
11. Cost-benefit framework unclear and inconsistently applied.
12. Inappropriate and repeated use of multiplier analysis.
13. Assumption of additionality is not demonstrated
14. Calculation errors in "Method A" – magnitude and direction
15. Lower marginal cost producer claim not evidenced in "Method B"
16. Elasticity-based price suppression mis-specified and implausible
17. Construction activity is treated as a benefit rather than a cost – partly a function of relying on multiplier analysis
18. Opportunity costs not properly assessed

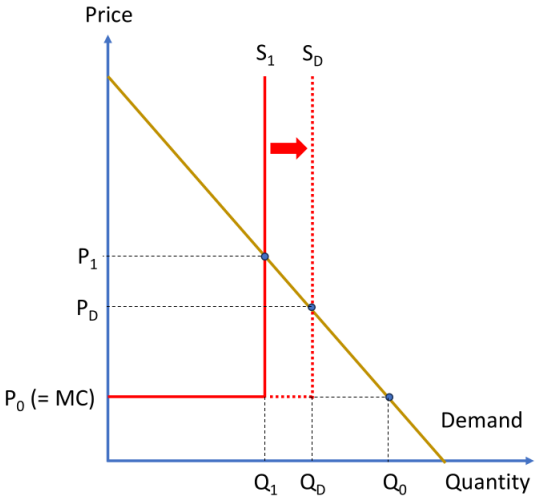
Additionally, I have identified several more minor issues in the assessment which, individually may not be material to the results, cumulatively could undermine the credibility of the results and therefore the conclusions borne from them. I do not reiterate these more minor issues here for sake of brevity but refer the reader to my above assessment.

6.0 Supporting Documents

Economic reasoning for corrected results by Dr Richard Meade (Cognitus Economic Insight)

Dr Richard Meade (Cognitus Economic Insight) provided these supporting materials solely to assist Auckland Council in formulating its response. He and Cognitus make no warranty or indemnity regarding the accuracy or completeness of these materials to any party other than Auckland Council.

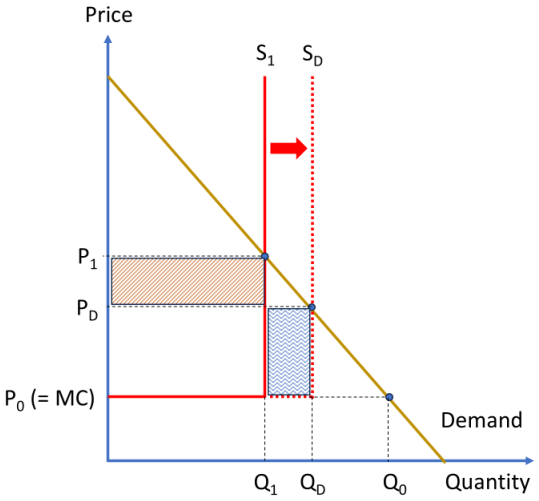
NZIER Method A - Modifying Denne (2025, pp 11-12) Model



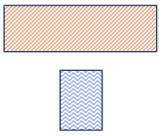
- Demand is as shown (for relevant market segment – NZIER assumes entire Auckland property market).
- With constant marginal cost and unconstrained supply, equilibrium is (P_0, Q_0) → notional only, since dealing with assumed supply constraints.
- Without Delmore, and assuming constrained supply, supply is S_1, producing equilibrium (P_1, Q_1) → as in Denne (2025).
- With Delmore, and assuming constrained supply and same marginal costs*, supply is S_D, producing equilibrium (P_D, Q_D).

* For convenience.

NZIER Method A - Modifying Denne (2025, pp 11-12) Model – Change in Producer Surplus from Adding Delmore



- Without Delmore, producer surplus is $Q_1 \times (P_1 - P_0)$.
- With Delmore, producer surplus is $Q_D \times (P_D - P_0)$.
- Change in producer surplus with Delmore is therefore: $Q_D \times (P_D - P_0) - Q_1 \times (P_1 - P_0)$.
- This change in producer surplus has two regions as illustrated and detailed below – a loss of PS due to lower price, but also an increase in PS due to greater quantity.
- Whether PS increases or decreases with Delmore depends on which of these regions is largest → since Delmore adds only 120 extra homes per year, the former region is likely largest.

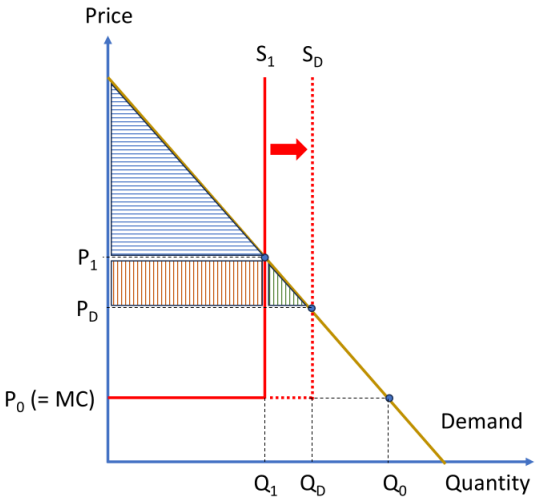


= Loss in producer surplus with Delmore (due to lower price)

= Gain in producer surplus with Delmore (due to greater quantity)

(Using current notation, NZIER p. 39 calculates change in PS as $Q_1 \times (P_D - P_1)$, and fails to account for this change being negative, both of which are incorrect. No assumptions regarding P_0 (= MC) are provided, hence $P_0 = 0$ is implicitly assumed (also incorrect). Denne p. 11 argues PS is competed to zero, though implausibly requires absence of supply constraints and perfect competition.)

NZIER Method A - Modifying Denne (2025, pp 11-12) Model – Change in Consumer Surplus from Adding Delmore



- Change in consumer surplus is as illustrated at left, and detailed below.



= Consumer surplus without Delmore



= Extra consumer surplus with Delmore

= $Q_1 \times (P_1 - P_D) + \{ 0.5 \times (P_1 - P_D) \times (Q_D - Q_1) \}$

(Using current notation, NZIER p. 39 calculates change in CS as { . } only, which is incorrect. Since Delmore adds only 120 extra homes per year (i.e. { . } is small compared with $Q_1 \times (P_1 - P_D)$), omission of the latter will significantly understate actual CS change – though Denne pp 7-8 argues using AMM reasoning that CS change ≈ 0.)

Corrected calculation sheet of surplus values by Dr Richard Meade (Cognitus Economic Insight)

Delmore FTAA - Calculating Changes in Consumer Surplus and Producer Surplus (Assuming NZIER Method A is Valid) - DRAFT

Richard Meade, Cognitus Economic Insight, richard.meade@cognitus.co.nz

Version : 26 March 2026, 9h50

Assumptions

Discount rate (real)	8%	
Delmore market as % of Auckland market	100%	<<< Sensitivity variable: NZIER assumes 100%, but Denne pp 8 and 10 argues large for Orewa, small for Auckland
Annual Auckland market sales (No.)	24,315	<<< Q_1 in Meade notation
Annual Delmore houses constructed (No.)	120	<<< Q_D - Q_1 in Meade notation
Implied sales with Delmore	24,435	<<< Q_D in Meade notation
Demore sales / Auckland sales	0.49%	
Price elasticity of demand	-0.35	
Average Auckland sale price ($)	1,218,000	<<< P_1 in Meade notation
Implied sale price change with Delmore	-17,175	<<< P_D - P_1 in Meade notation
Implied market price with Delmore	1,200,825	<<< P_D in Meade notation
Average developer margin on costs	25%	<<< midpoint as per: https://mhq.co.nz/tips-tools-strategies/property-development-nz-how-it-works-and-profits/
Delmore average selling price	985,000	<<< NZIER p. 4
Average cost advantage per Delmore house ($)	100,000	<<< NZIER p. 13 (treat as illustrative)
Illustrative MC of construction ($)	900,000	<<< P_0 (= MC) in Meade notation (= 985k / 1.25 + 100k, rounded to nearest 100k)

Year	1	2	3	4	5	6	7	8	9	10
Discount factor	0.9259	0.8573	0.7938	0.7350	0.6806	0.6302	0.5835	0.5403	0.5002	0.4632

Change in Consumer Surplus ($/Year, Years 1-10)

	Annual	*Present Value*	
$Q_1 \times (P_1 - P_D) + \{ 0.5 \times (P_1 - P_D) \times (Q_D - Q_1) \}$	418,630,475	2,809,044,563	<<< contrast NZIER p. 53 $6.9m PV

Change in Producer Surplus ($/Year, Years 1-10)

	Annual	*Present Value*	
$Q_D \times (P_D - P_0) - Q_1 \times (P_1 - P_0)$	-381,500,950	-2,559,902,428	<<< contrast NZIER p. 54 +$2.8 billion PV

Change in Total Susplus ($/Year, Years 1-10)

	Annual	*Present Value*
Change in CS + Change in PS	37,129,525	249,142,135

Sensitivity Analysis - Allowing Delmore to be Larger Share of Smaller Market

Note: Denne pp 7-8 argues using AMM reasoning that CS change ≈ 0, in which case only PS change (in supply-constrained and imperfectly competitive market) would apply.

Caveat: negative results partially an artifact of applying instantaneous elasticity changes to large (proportionate) quantity changes - treat as indicative/illustrative ony.

Delmore as % of Auckland Market	*Annual Changes*			*Present Value Changes*		
	CS	*PS*	*TS*	*CS*	*PS*	*TS*
	418,630,475	-381,500,950	37,129,525	2,809,044,563	-2,559,902,428	249,142,135
100%	418,630,475	-381,500,950	37,129,525	2,809,044,563	-2,559,902,428	249,142,135
20%	422,752,375	-389,744,750	33,007,625	2,836,702,848	-2,615,218,998	221,483,850
10%	427,904,750	-400,049,500	27,855,250	2,871,275,705	-2,684,364,711	186,910,994
5%	438,209,500	-420,659,001	17,550,500	2,940,421,417	-2,822,656,135	117,765,282
2%	469,123,751	-482,487,502	-13,363,751	3,147,858,554	-3,237,530,409	-89,671,855
1%	520,647,502	-585,535,003	-64,887,502	3,493,587,116	-3,928,987,533	-435,400,417

Delmore Fast-Track

04/05/2026– Auckland Council Response

Annexure 3:

Strategic Planning

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Strategic Planning

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Rosie Stoney, Senior Advisor Growth and Spatial Strategy
Qualifications & Relevant Experience:	I hold the qualification(s) of: Master of Urban Planning (Professional) from the University of Auckland. I have 12 years' experience in strategic land use planning. I am an intermediate member of New Zealand Planning Institute. I have prepared supporting commentary for use in evidence and technical assessments for plan changes for Auckland Council.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	26/03/2026

3.0 Executive Summary / Principal Issues

Strategic planning matters related to this application are covered in the attached memorandum.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore Assessment of Environmental Effects Report
- Appendix 3 - Schedule Application
- Appendix 14 – Concept Structure Plan
- Appendix 15 - Economics Assessment- NZIER. 2025. Economic impacts of the Delmore development. A report for Vineway Limited.

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

See attached memo

7.0 Section 67 Information Gap

N/A

8.0 Recommendation

In my opinion, the proposal is contract to the sequencing and timing outlined in FDS and does not align with the FDS principles for growth. Bringing this development forward has wide-ranging local and subregional implications in terms of infrastructure investment and costs

The development proposal and the supporting infrastructure do not suggest that this development is of regional significance, rather it is more locally significant within the Upper Ōrewa future urban area.

Several deficiencies remain which would be best addressed through a structure planning and plan change process.

9.0 Proposed Conditions

N/A

10.0 Supporting Documents

N/A

Memo

27/03/2026

To: Carly Hinde, Principal Project Lead, Resource Consents

From: Rosie Stoney, Senior Advisor Growth and Spatial Strategy

cc: Claire Gray, Manager Growth and Spatial Strategy, David Hawkey, Head of Transport, Growth & Infrastructure Strategy

Subject: Strategic Planning comments – Delmore Fast-track Approval Application

Proposal

1. The Delmore fast-track application proposes development of 109Ha of Future Urban Zoned (FUZ) land into a residential community in Ōrewa, including approximately 1,250 dwellings, one super lot, supporting infrastructure, and associated works. The land is currently zoned Future Urban in the Auckland Unitary Plan 2016 (Operative in Part) and is sequenced from 2050+ in the Future Development Strategy (FDS).

2. This application has been lodged under the Fast-track Approvals Act 2024 ('FTAA'). The purpose of the FTAA is to *'facilitate the delivery of infrastructure and development projects with significant regional or national benefits'* (s3 FTAA 2024).

3. The comments in this memo build on the strategic planning comments on the initial Delmore Fast Track Application. These comments relate to strategic alignment, consistency with the FDS and out-of-sequence development.

Strategic alignment

4. The proposed development is located within the Upper Ōrewa future urban area and the FDS timing for this area is 2050+. The applicant proposes development in this area would commence 24 years before, and be completed 16 years before, the sequencing identified in the FDS.

5. The applicant comments on the discretion to which decision makers must have regard to the FDS under Section 104(1)(c) of the RMA as "any other matter...relevant and reasonably necessary to determine the application". The NPS-UD makes clear that the purpose of an FDS is to assist the integration of RMA planning decisions with infrastructure planning and funding. The FDS is also one of the documents local authorities must have regard to when preparing or changing RMA planning instruments. Clause 3.17 of the NPS-UD clarifies that RMA planning documents must have regard to the FDS, and local authorities are strongly encouraged to use the FDS to inform other plans and strategies. In addition, the decision of the Expert Panel dated 17 September 2025 states that the FDS is a relevant consideration under Schedule 5, clause 17 FTAA. It is therefore an appropriate document to have regard to in this process.

6. The FDS states that future urban capacity must be used well, and, as such, that comprehensive and integrated planning should be applied and ad-hoc planning based on ownership boundaries avoided. Significant development capacity is currently available across the region and significant future urban capacity is sequenced between 2026 and 2050+. The proposal to bring development in this area forward by two decades means that the required bulk infrastructure is not prioritised, funded or designed at a detailed level at this time.

7. Appendix C of the FDS Monitoring Report for 2024/25[1], identifies updated infrastructure requirements for each future urban area. As noted in the Infrastructure Funding and Financing commentary, significant infrastructure within the proposed development site and the wider area is required to support development.

8. While the applicant is correct in that the timing in the FDS is indicative, it is the basis upon which Watercare, Auckland Transport and other infrastructure providers plan their investment programmes. The indicative nature of the timing does not mean that development can occur significantly ahead of the delivery of bulk infrastructure required to support development in the area.

Infrastructure

9. While the applicant has outlined infrastructure they intend to deliver, this does not factor in the costs borne by the Auckland Council group. Out of sequence development increases costs, undermines the strategic and phased approach to planning and creates inefficiencies in infrastructure delivery by diverting funding from live zoned and priority areas.

10. As noted in the Infrastructure Funding and Financing commentary, there is a substantial risk that providing infrastructure for this development would displace planned investment in other areas of Auckland.

11. As noted in Watercare's comments, wastewater infrastructure to support development is scheduled for 2038+ and 2050+ for bulk water. Commentary by Watercare details their concerns around the applicant's proposals to provide solutions in the absence of this bulk infrastructure delivery and the subsequent vestment back to the council.

12. In addition, enabling bulk transport infrastructure has not been prioritised for funding for delivery by AT in the RLTP 2024-2034 or the LTP 2024-2034. The timing for delivery of these projects in the detailed business case for route protection is late 2040. While some of the transport infrastructure is proposed to be provided by the applicant, Auckland Transport's commentary details their concerns around the lack of funding available to provide remaining infrastructure to support development of this area.

13. The site remains poorly connected to the strategic transport network and is not served by public transport. The applicant's assessment focuses primarily on internal connectivity and therefore overlooks the wider network effects. Public transport and active mode connections are not funded and are required to connect the proposed development area with surrounding areas. As a result, there is a risk that the development will remain inherently car-dependent, which is inconsistent with FDS principle 1 and well-functioning urban environment requirements. Auckland Transport's commentary has further discussion of constraints on public transport and active modes.

14. Bringing development forward ahead of further development of the Silverdale business and industrial land will also increase emissions and car-dependency as people travel further to work. These patterns are likely to be reinforced and difficult to change even once more employment capacity is delivered across the catchment. This is further supported by the applicant's comments about connections between Albany and the city centre.

[1] Future Development Strategy 2023-2053 Monitoring Report 2024/2025

Quality compact growth and well-functioning urban environment

15. Auckland's long-standing spatial strategy is based on a quality compact approach to growth. The FDS reiterates this, noting that growth should be prioritised within existing urban areas and that greenfield expansion should be limited and carefully sequenced to avoid inefficient, car dependent patterns of development.

16. As noted in the council's economics commentary, the applicant's argument that more housing is better does not consider the trade-offs of enabling development in this area ahead of bulk infrastructure delivery. Enabling development here not only leads to poor outcomes for new and existing communities due to inconsistent timing with supporting infrastructure provision, it also has the potential to draw growth away from other catchments which better align with existing infrastructure (FDS principle 5).

17. Some consideration is given to how aspects of the development will relate to the neighbouring Ara Hills development, however there is little consideration in the plans about how the proposed development can or will integrate with other areas of FUZ to the south and southeast of the site. Collecitvely, these raise concerns around urban form density and scale and that future rezoning options may be compromised or 'locked in' by the current development proposals.

18. In the substantive application, the applicant's statement that the FDS anticipates "280 dwellings per annum in the north" is not accurate. The FDS does not allocate annual dwelling targets to sub-regions. The applicant argues that more development capacity is required for the Hibiscus coast area and points to capacity constraints within the Hibiscus Coast catchment. It is my view that this is a localised issue based on a narrow catchment definition and does not represent a regionally significant development proposal.

Development in the Future Urban Zone:

19. The FUZ is a holding zone that applies only until structure planning and bulk infrastructure planning have been completed. As noted in the council's policy commentary, while the applicant has provided a structure plan (Application Appendix 14), it neither meets the guidance in Appendix 1 of the AUP, nor does it apply the catchment wide, integrated approach outlined in the FDS.

20. Permitting development to occur without a structure plan and a plan change process is problematic. Development in the FUZ without a plan change bypasses processes set out in the RPS and principles of the FDS to ensure coordinated, efficient, and sustainable urban growth. As such, a plan change process is the more appropriate mechanism for enabling development in this area.

Conclusion

21. This development proposal is out of sequence with timings outlined in FDS and does not align with the FDS principles for growth and its requirements for a well-functioning urban environment. Bringing this development forward has wide-ranging local and subregional implications in terms of infrastructure investment and costs

22. The development proposal and the supporting infrastructure do not suggest that this development is of regional significance, rather it is more locally significant within the Upper Ōrewa future urban area.

23. My view therefore is that this proposal should not be approved. Several deficiencies remain which would be best addressed through a structure planning and plan change process.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 4:

Policy

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo - Policy

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Austin Fox – Senior Policy Planner
Qualifications & Relevant Experience:	I hold the qualifications of a Bachelor of Arts in Town Planning and a Diploma in Town Planning and have 23 years of experience in planning. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, and notices of requirement for designation, and have appeared as an expert witness before consent authorities on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	24/03/2026

3.0 Executive Summary / Principal Issues

Planning Policy issues are covered in the attached Policy Memo, that being an updated version of the Policy Memo on the original Delmore Fast Track application.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore Assessment of Environmental Effects Report
- Appendix 14 – Concept Structure Plan
- Appendix 27 – Water, Wastewater and Utilities Report
- Appendix 42 – Rules Assessment
- Appendix 43 – Objectives and Policies Assessment

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

See attached memo.

7.0 Section 67 Information Gap

Except for a lack of certainty about a wastewater treatment and disposal option, I do not consider that there are policy related section 67 information gaps.

8.0 Recommendation

In my opinion, the proposal is contrary to key objectives and policies of the RPS and the Future Urban Zone as a comprehensive structure plan, in line with the guidance in AUP Appendix 1, and plan change process has not been followed.

9.0 Proposed Conditions

N/A

10.0 Supporting Documents

N/A

Memorandum

From: Austin Fox
Senior Policy Planner
Regional, North, West, and Islands
Planning, Policy and Governance
Auckland Council

Date: 24 March 2026

Fast Track Application **Delmore | 88, 130, 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road**
Policy Comments

Proposal

1. The application, as stated by the applicant, is for the development of 109.18 hectares of Future Urban Zoned (FUZ) land into a comprehensively planned development, including up to 1,213 dwellings, one residential super lot, a commercial area, two neighbourhood parks, supporting infrastructure, as well as associated works.

2. The land is zoned Future Urban in the Auckland Unitary Plan 2016 (Operative in Part).

3. The application has been lodged under the Fast-track Approvals Act 2024 ('FTAA'). The purpose of the FTAA is (Section 3 of the FTAA):

   The purpose of this Act is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits.

4. The FTAA in Schedule 5 s5(1)(h) requires an applicant to include an assessment of the activity against any relevant provisions in any of the documents listed in subclause (2). The documents in subclause (2) include a national policy statement, a regional policy statement and a plan. Subclause (3) states:

   (3) *An assessment under subclause (1)(h) must include an assessment of the activity against—*

   (a) any relevant objectives, policies, or rules in a document listed in subclause (2);…

5. My comments relate to the assessment under these provisions of the FTA.

Comments

6. The comments in this memo build on the planning policy comments given on the initial Delmore Fast Track Application, and have been updated accordingly. The comments relate primarily to strategic and land use policy issues. Comments on other detailed aspects, such as traffic, economic, landscaping, wastewater disposal etc, are provided by the relevant experts.

7. There are four key themes that I raise concerns about. I outline these first and then comment in more detail about the application in relation to the relevant policy documents.

Development ahead of structure planning and a plan change

8. As the land is FUZ, the application is effectively rezoning by resource consent. This approach is contrary to the objectives and policies of the RPS and the FUZ zone which require that a structure plan and plan change process be followed to rezone and develop FUZ land. The matter of developing FUZ land is addressed in more detail below.

9. A structure plan is required to be prepared in accordance with the guidelines set out in Appendix 1 of the AUP. The detailed structure plan and plan change process has not been followed for the applicant's site. The structure plan that has been prepared (Application Appendix 14) does not appear to follow the guidance set out in Appendix 1 of the AUP. This includes in relation to the preparation of a structure plan being a precursor to a plan change (AUP Appendix 1 1.2), the external documents that should be taken into account (AUP Appendix 1 1.3), feedback from stakeholders (AUP Appendix 1 1.4.8), and the specialist documents to support the structure plan (AUP Appendix 1 1.5).

10. The structure plan and plan change process as outlined in AUP Appendix 1 would also enable wider public consultation, including, eg environmental groups, other interest groups and the wider community than just the immediate neighbours.

11. In my view, a structure plan that aligns with AUP Appendix 1 followed by a plan change is required by the regional policy statement and is a more appropriate approach to enable development of the land.

Regional Significance

12. As noted above, the purpose of the FTAA is to facilitate proposals of "regional significance".

13. The applicant has made much of the "regional significance" of providing infrastructure, particularly the section of NOR 6 the road extension from Milldale to Grand Drive. I query whether the delivery of a section of NOR 6 is "regionally significant". I doubt that delivering the whole of NOR 6 is even "regionally" significant. I agree that the route is locally significant ultimately providing a connection northward between Milldale and the Grand Drive interchange and Orewa and southward from Ara Hills and the applicants site to Milldale.

14. The applicant is delivering approximately 850m of a road that is approx. 2.2km long (see Figure 2 below). The leg to the south is not being provided so it doesn't connect to Milldale.

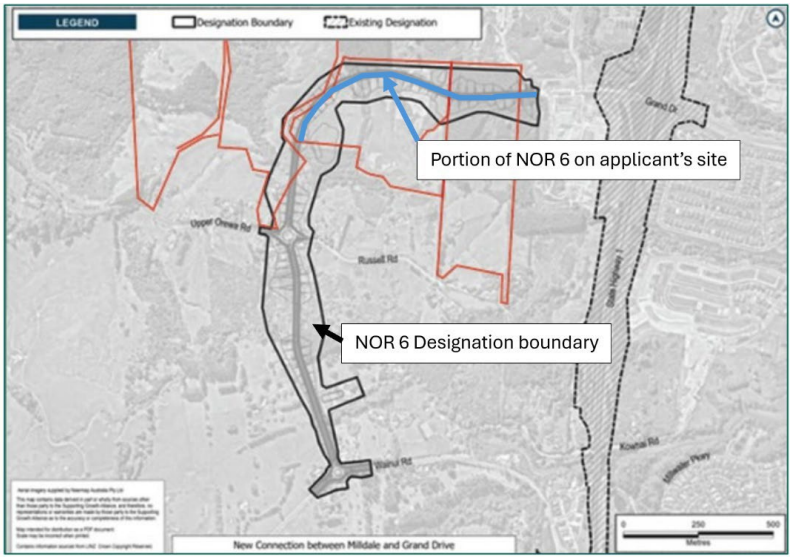


Figure 2 NOR 6 and the section proposed by the applicant

Infrastructure

15. The application identifies three possible options for wastewater disposal. However, this should be determined definitively for a resource consent stage. There is therefore uncertainty about which option will be used which makes it difficult to determine if the proposal is consistent with various levels of policy regarding the integrated provision of infrastructure.

Underlying zoning

16. Granting resource consent for urban development while the underlying zoning remains Future Urban is problematic for ongoing development. Future activity will be subject the underlying zone rules and Auckland Wide rules that relate to the Future Urban Zone. The activities provided for in the Future Urban Zone are much more restrictive than for the residential zones that the resource consent seeks to apply.

National Policy Statement on Urban Development 2020

17. The National Policy Statement on Urban Development, through various objectives and policies, requires that planning decisions contribute to well-functioning urban environments. The application considers that the proposal will result in a well-functioning urban environment.

18. I have reservations that this is the case as it is unclear whether the proposal integrates the provision of the necessary infrastructure, particularly the uncertainty about the method of wastewater treatment and disposal as noted above. The provision of infrastructure is discussed in more detail by Council's other specialists.

19. Issues around the provision of parks and centres, access to PT and access to adjoining facilities eg schools, are all relevant to whether the application is contributing to a well-functioning urban environment. These issues are addressed in more detail by Council's other specialists.

Future Development Strategy 2023

20. The Council's Future Development Strategy 2023 (FDS) identifies the area as "Upper Orewa" and indicates that the land is not to be zoned for development before 2050+ due to infrastructure constraints. The FDS also sets out Infrastructure Prerequisites for the area which are:

    - Wainui Road upgrade
    - Milldale and Grand Drive connection
    - North Shore Rapid Transit (extension to Milldale)
    - Army Bay Wastewater Treatment Plant Upgrade.

25. I note that the application is providing part of the Milldale and Grand Drive connection as discussed above.

26. The application therefore seeks the development of the land well in advance of timeline identified in Councils strategic planning document.

Regional Policy Statement

27. The Regional Policy Statement in B2 Urban Growth and Form sets out the high-level strategic objectives for the management of growth in Auckland and these comments focus on the B2.2 Urban growth and form objectives and policies. In the context of this application, in my view, the following objectives and policies are particularly relevant:

    B2.2 Urban growth and form
    Objectives 2.2.1

    (1A)A well-functioning urban environment that enables all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

    (1) A well-functioning urban environment with a quality compact urban form that enables all of the following:

    (a) a higher-quality urban environment;

    (b) greater productivity and economic growth;

    (c) better use of existing infrastructure and efficient provision of new infrastructure;

    (d) good accessibility for all people, including by improved and more effective efficient public transport or active transport;

    (e) greater social and cultural vitality;

    (f) better maintenance of rural character and rural productivity; ~~and~~

    (g) reduced adverse environmental effects; and

(h) improved resilience to the effects of climate change.

(5) The development of land within the Rural Urban Boundary, towns, and rural and coastal towns and villages is:

(a) integrated with the provision of appropriate infrastructure; and
(b) improves resilience to the effects of climate change.

Policies 2.2.2

(3) Enable rezoning of future urban zoned land for urbanisation following Structure Planning and plan change processes in accordance with Appendix 1 Structure plan guidelines.

(7) Enable rezoning of land within the Rural Urban Boundary or other land zoned future urban to accommodate urban growth in ways that contribute to a well-functioning urban environment and that do all of the following:

(a) support a quality compact urban form;

(b) provide for a range of housing types and employment choices for the area;

(c) integrate with the provision of infrastructure; and

(caa) provide good accessibility, including by way of efficient and effective public or active transport;

(ca) incorporate resilience to the effects of climate change;

(d) follow the structure plan guidelines as set out in Appendix 1.

(e)support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets.

(8) Enable the use of land zoned future urban within the Rural Urban Boundary or other land zoned future urban for rural activities until urban zonings are applied, provided that the subdivision, use and development does not hinder or prevent the future urban use of the land.

28. In respect of Objective 1, the applicant states[2]:

> *The proposal will be transformational for the Hibiscus Coast's social and cultural vitality as Delmore is designed has designed to be a sustainable destination where people can live and recreate in one location, with existing and planned employment opportunities within close proximity*.

It is unclear what social and cultural aspects the proposal is providing, as it seems to be relying on facilities provided elsewhere. As noted above, the issue is that the application does not seem to address these as they would have been required to do if the structure plan process followed the guidance in AUP Appendix 1.

[2] Appendix 43 Objectives and Policies Assessment pg20

29. In my view, the proposal is contrary to Objective 5 as there is uncertainty about the integrated provision of infrastructure, particularly wastewater, and which proposed option is to be used.

30. In respect of policies (3) and (8) in relation to structure planning and the plan change process, and the use of FUZ land, Appendix 43 Objectives and policies assessment addresses them. In respect of Policy (3), the assessment states:

    Whilst re-zoning is not proposed at this time, the application has taken a structure plan approach to designing the development.

    On Policy (8) it states:

    The proposal, as a master planned, comprehensive residential development is considered to represent the 'future' urban development envisaged by the Future Urban zoning under the AUP(OP).

31. In my view the application is contrary to these policies. I consider that this is significant as the policies set out the process for the conversion of land for urban development. The applicant has argued that it has taken a structure plan approach but as I have outlined above, I do not think that this has been done comprehensively or in as much detail as it should have been, taking account of the guidance in AUP Appendix 1. The applicant has argued that the application needs to be considered in the context of the objectives and policies as a whole. In my view, because it is contrary to these key policies, this is a significant issue as they set the regional process for the conversion of land for urban development, and this is not outweighed by the other objectives and policies.

32. In respect of Policy 7, there are aspects of the criteria that are not met. It is questionable the extent to which the proposal provides for a well-functioning urban environment, integrates with the provision of infrastructure, or provides good accessibility, and it does not follow the structure plan guidelines as set out in AUP Appendix 1.

Auckland Unitary Plan

33. The site is zoned Future Urban in the AUP(OP). The zone statement states that the Future Urban Zone is a transitional zone. Land may be used for a range of general rural activities but cannot be used for urban activities until the site is rezoned for urban purposes.

34. The Future Urban zone includes objectives and policies that seek to protect the land for future urbanisation and retain its use as rural until it is rezoned through a plan change process. They are:

    H18.2 Objectives

    (1) Land is used and developed to achieve the objectives of the Rural – Rural Production Zone until it has been rezoned for urban purposes.

    (2) Rural activities and services are provided for to support the rural community until the land is rezoned for urban purposes.

    (3) Future urban development is not compromised by premature subdivision, use or development.

(4) *Urbanisation on sites zoned Future Urban Zone is avoided until the sites have been rezoned for urban purposes.*

H18.3 Policies

(1) *Provide for use and development which supports the policies of the Rural – Rural Production Zone unless that use and development is inconsistent with policies H18.3(2) to (6).*

(2) *Enable activities that are reliant on the quality of the soil or require a rural location to operate or which provide for the day to day needs of the local rural community.*

(3) *Require subdivision, use and development to maintain and complement rural character and amenity.*

(4) *Avoid subdivision that will result in the fragmentation of land and compromise future urban development.*

(5) *Prevent the establishment of more than one dwelling on a site except for the provision for minor dwellings and workers' accommodation.*

(6) *Avoid subdivision, use and development of land that may result in one or more of the following:*

(a) *structures and buildings of a scale and form that will hinder or prevent future urban development;*

(b) *compromise the efficient and effective operation of the local and wider transport network;*

(c) *require significant upgrades, provisions or extension to the wastewater, water supply, or stormwater networks or other infrastructure:*

(d) *inhibit the efficient provision of infrastructure;*

(e) *give rise to reverse sensitivity effects when urban development occurs;*

(f) *give rise to reverse sensitivity effects in relation to existing rural activities or infrastructure; or*

(g) *undermine the form or nature of future urban development.*

35. At a broad level I have concerns with any urban type of activity occurring in the Future Urban Zone ahead of structure planning that follows the guidance in AUP Appendix 1, and rezoning through a plan change process.

36. The proposal is in my view specifically contrary to Objectives (1) (2) and (4) and is urban development occurring before the land is rezoned for urban purposes.

37. The proposal is contrary to Policies (1), (2), (3) and (5) as it is not retaining rural activities. On Policy (6), the first point to note is the use of the strong term to "avoid" activities relating to the subsequent bullet points. In relation to (6)(a) and (g) the application is proposing urban development, and I referred to this above in respect of the objectives. The bullets (b), (c), (d), (e), (f) relate to specific matters which other Council specialists will address, particularly relating to the provision of infrastructure and transport effects.

38. The issue of the development of the Future Urban Zone ahead of a plan change has been addressed by the High Court in Auckland Council V Matvin[3]. This was a case under the Covid Fast Track legislation and addressed a proposal for a retirement village ie urban development, in the FUZ. Justice Woolford's view is captured in his comment below[4]:

> *However, I view the Zone description as a synthesis of the objectives and policies. It is quite clear in its meaning. It succinctly states in three sentences:*
>
> *The Future Urban Zone is applied to greenfield land that has been identified as suitable for urbanisation. The Future Urban Zone is a transitional zone. Land may be used for a range of general rural activities but cannot be used for urban activities until the site is re-zoned for urban purposes.*

39. Justice Woolford goes further in his decision referring to the specific wording of the objectives and policies and refers to the strong words used – "require", "avoid" and "prevent"[5]. He then states:

> *[36] In interpreting the FUZ provisions, it is not a question of weighing up the various objectives and policies for and against urban development. There are no provisions specifically allowing urban development.*

40. At paragraph 37 Justice Woolford states:

> [37] *I am therefore persuaded that the Panel made an error of law in finding that the overall purpose of the FUZ was to preclude activities that may compromise future urban development. The overall purpose of the FUZ is as a holding zone and to provide a transition from rural to urban use and development. The zone recognises the need for comprehensive and intentional design for soon-to-be urban areas. Until rezoned urban, the primary set of activities that are to occur in the FUZ are rural.*

41. I am therefore of the view that the appropriate process for pursuing the development of the land is by the preparation of a comprehensive structure plan that accords with the guidance in AUP Appendix 1, followed by a plan change.

Conclusion

42. In my opinion, the proposal is contrary to key objectives and policies of the RPS and the Future Urban Zone as a comprehensive structure plan, in line with the guidance in AUP Appendix 1, and plan change process has not been followed.

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[3] CIV-2023-404-835 [2023] NZHC 2481

[4] Auckland Council V Matvin paragraph 29

[5] Auckland Council V Matvin paragraph

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 5:

Earthworks

Delmore Fast Track Application

To: Dylan Pope – Lead Planner

From: Matthew Byrne - **Erosion & Sediment Control Consultant to Earth, Streams and Trees Team**

Date: 21 April 2026

Re: Delmore Fast Track Application

1.0 Technical Specialist Memo – Earthworks & Erosion and Sediment Control

From:	Matthew Byrne - Erosion & Sediment Control Consultant to Earth, Streams and Trees Team
Qualifications & Relevant Experience:	I hold the qualifications of: Bachelor of Environmental Studies and have over 21 years of experience in the field of earthworks, streamworks and erosion and sediment control assessment, and earthworks and streamworks environmental compliance monitoring. I am a member of the International Erosion and Sediment Control Association (Australasia). I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications, and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23 April 2026

2.0 Original Specialist Review Memo

Based on my assessment of the initial application, I drafted an earthworks memorandum, dated 23 March 2026, which summarised project's earthworks and erosion and sediment control methodology, and related proposed conditions. This initial earthworks memorandum identified the following four information gaps:

1. The applicant had designed 3 of the 25 sediment retention ponds (SRPs) proposed for sediment control during earthworks, based on a 2% criteria rather than a 3% criteria. Based on my review

of the earthworks plans, I considered that all SRPs proposed during preparation of the final ESCP(s) ahead of earthworks commencing, were required to be constructed based on a 3% criteria as per the guidance contained in GD05.

2. The applicant had proposed provision of an Adaptive Management Plan (AMP) ahead of earthworks commencing and implementation of that plan throughout the duration of earthworks at the site. I did not consider that the applicant's proposed AMP condition was sufficient given the nature and type of earthworks proposed. I considered that additional AMP related conditions were required to help ensure the potential earthworks related effects were managed in accordance with industry best practice.

3. The initial application was silent regarding the need for updated ESCPs once bulk earthworks had been completed, i.e., at the subdivision stage of the development. I considered that post-bulk earthworks ESCPs were critical for helping manage the potential effects of ongoing land disturbance on receiving environments.

4. The applicant did not propose a review condition as part of their proposed conditions of consent, and I recommended that due to the proposed 15-year duration for the earthworks permit, I considered it was appropriate to include a review condition which allows for a review of the consent should it be deemed necessary at any point throughout the 15-year duration.

3.0 Updated Response to Applicant's Memo

Based on an Earthworks Response Memorandum by Jordan Chiswell from McKenzie & Co, and Charlotte MacDonald from Barker & Associates, the applicant's agents, all four items noted above have now been addressed.

Regarding bullet point 1, the applicant has confirmed that all SRPs are to be designed and constructed based on a 3% criteria.

Regarding bullet point 2, the applicant accepted the minor amendments to the AMP related condition which I proposed and also accepted the addition of three AMP related conditions. A fourth condition was not accepted and the applicant provided sufficient justification for this. This additional justification included a proposed wording change to main AMP requirement condition (proposed condition 22), to address what I considered were omissions to their draft AMP.

Regarding bullet point 3, the applicant highlighted that a requirement for post-bulk earthworks ESCPs was already included in their proposed condition set and identified that it was nested with the proposed Subdivision related conditions rather than the Earthworks related conditions.

Regarding bullet point 4, I note that whilst the applicant has accepted the inclusion of a review condition in principle, they are currently reviewing the specific wording of such a condition and will provide a separate response to Council on this matter. Provided this condition allows for a review of the consent to address any unforeseen and adverse earthworks and/or erosion and sediment control related effects, I support the applicant's proposal in this regard. I defer to the lead planner to ensure that the review condition is fit for purpose.

4.0 Conclusion

The initial application proposed that best practice erosion and sediment control measures were to be utilised throughout the earthworks operation to ensure the proper management of any potential

sediment related effects, and that any resulting effects would be less than minor. My review of the initial application concluded that provided the applicant adopt the additional conditions I recommended, the potential effects associated with sediment discharge would be appropriately managed.

Based on the Memorandum provided by the applicant and dated 15 April 2026, I support the applicant's proposed earthworks and erosion and sediment control proposal.

5.0 REVIEW

Memo prepared by:

Matthew Byrne

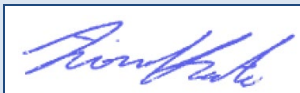


Specialist Advisor – Earth, Streams & Trees Team
Specialist Unit, Resource Consents

Date: 21 April 2026

Technical memo reviewed and approved for release by:

Fiona Harte



Team Leader, Earth, Streams and Trees Team
Specialist Unit, Resource Consents

Date: 21 April 2026

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Earthworks) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
The applicant has designed 3 of the 25 sediment retention ponds (SRPs) proposed for sediment control during earthworks, based on a 2% criteria rather than a 3% criteria. Based on my review of the earthworks plans, I consider that all SRPs proposed during preparation of the final ESCP(s) ahead of earthworks commencing, are required to be constructed based on a 3% criteria as per the guidance contained in GD05.	Accepted - The ESCP condition has been updated to respond to this request, as per Section 1.3 below.	Resolved and reflected in the updated condition set.
The applicant has proposed provision of an Adaptive Management Plan (AMP) ahead of earthworks commencing and implementation of that plan throughout the duration of earthworks at the site. I do not consider that the applicant's	A draft Adaptive Management Plan (AMP) has been prepared and is attached. The AMP incorporates the key components of the Council's recommended conditions, including baseline monitoring, receiving environment monitoring,	Resolved and reflected in the updated condition set.

proposed AMP condition is sufficient given the nature and type of earthworks proposed. I consider that additional AMP related conditions are required to help ensure the potential earthworks related effects are managed in accordance with industry best practice.	trigger levels, management responses, and reporting. While Council has requested that the AMP specify the number of sediment retention ponds (SRPs) subject to automated monitoring, this level of prescription is not reflected in their recommended conditions. The proposed approach of one instrumented SRP per stage is consistent with established practice on comparable fast-track projects and reflects an effects-based monitoring regime. Approved AMPs (e.g. Milldale) rely primarily on continuous upstream/downstream monitoring to assess environmental effects, with device-level monitoring used as a targeted diagnostic tool. Requiring multiple automated SRPs would not materially improve environmental outcomes, as in-pond monitoring is inherently variable, maintenance-intensive, and of limited additional value compared to receiving environment data, which provides the primary measure of effects. The proposed approach, supported by manual monitoring of remaining devices and a robust adaptive management framework, is therefore considered proportionate and sufficient to verify ESC performance and respond to any issues. Accordingly, one instrumented SRP per stage is appropriate and no further prescription is necessary.	

The application is silent regarding the need for ESCPs once bulk earthworks have been completed, i.e., at the subdivision stage of the development. I consider that post-bulk earthworks ESCPs are critical for helping manage the potential effects of ongoing land disturbance on receiving environments.	Conditions relating to ESCPs for the subdivision stage were included within the condition set at lodgement (Section 3.1.13 of that document). No further additions are considered necessary.	Resolved and reflected in the updated condition set.
The applicant has not proposed a review condition as part of their proposed conditions of consent. In this case, the proposed duration of the earthworks permit is 15-years, which I consider appropriate, however, I also consider inclusion of a review condition to also be appropriate as it will allow a review of the consent should it be deemed necessary at any point throughout the 15-year duration.	The applicant accepts a review condition in principle, however is reviewing the specific wording and will provide a separate response to Council on this matter.	Resolved, pending appropriateness of applicant's separate response.

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)	Applicant Response	Council Specialist Response
15. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, the consent holder must prepare and submit to Auckland Council for certification, a final Erosion and Sediment Control Plan (ESCP). The ESCP(s) must be prepared in accordance with the draft ESCP submitted with the application, and in accordance	This is accepted and updated in tracked changes within the condition set.	Resolved and reflected in the updated condition set.

with Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating any Amendments to this document (GD05). The ESCP must contain sufficient details to address the following matters: (a) Specific erosion and sediment control measures for the earthworks (location dimensions, capacity), including the location of any sediment retention ponds (SRPs), decanting earth bunds, super silt fences, silt fence clean and dirty water diversion bunds and stabilized construction entrances; (b) Supporting calculations and design drawings as necessary, including confirmation that all SRPs are to be constructed based on a 3% criteria; (c) Details of construction methods; (d) Monitoring, maintenance and inspection requirements; (e) Catchment boundaries and contour information as necessary; (f) Identify location of stabilised construction entrances; and (g) Details relating to the management of exposed areas (e.g. grassing, mulching). Advice note: The above ESCP requirement relates to bulk earthworks stages. Additional ESCPs are required at subdivision stage for civil works.		

22. No less than 20 working days prior to the commencement of any earthworks at the subject site, an Adaptive Management Plan (AMP) must be prepared in general accordance with Auckland Council's guideline document "Erosion and Sediment Control Adaptive Management Plan Discussion Document", July 2020, and provided to the Council for written certification. The AMP must address monitoring requirements and changes to management procedures in response to the results of monitoring, and must include but is not limited to, the following details: (a) Preparation and provision of a Freshwater Baseline Report prepared by a suitably qualified and experienced Ecologist and/or Water Quality Scientist and provided to the Council for written certification, no less than 20 working days prior to any earthworks or streamworks commencing. The purpose of the Freshwater Baseline Report is to confirm pre-construction baseline environmental conditions of the receiving environment and include pre-construction in stream monitoring results. The Freshwater Baseline Report must include as a minimum, information on the following matters: i. sediment quality such as description of sediment inputs, transport, substrate composition and embeddedness.	This condition is not required as a draft AMP has now been provided to Council. We suggest the following condition to replace the existing Condition 22: *"At least 20 working days prior to the commencement of earthworks for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a final Adaptive Management Plan (AMP) for all earthworks which are to be undertaken throughout the full duration of consent. The AMP must be in general accordance with the draft AMP submitted with the application and referenced under Condition 1, and must be prepared in general accordance with Auckland Council's guideline document "Erosion and Sediment Control Adaptive Management Plan Discussion Document", July 2020. The AMP must address monitoring requirements and changes to management procedures in response to the results of monitoring."*	Resolved and reflected in the updated condition set.

j. water quality measurements such as total suspended solids (TSS) and turbidity. k. actual and potential inanga (Galaxias maculatus) spawning habitat. l. identify the pre-construction condition of any Erosion Prone Streams against which to measure construction effects and possible mitigation measures. m. The presence of any threatened aquatic species or habitat, susceptible to sediment discharge. (b) Details of weather forecasting and monitoring, including implementation of an onsite rain gauge with a telemetered system that provides text and email notifications; (d) Trigger levels for water quality and rainfall events (actual and forecasted events); (e) Details of an ongoing monitoring and sampling regime for the receiving environment, including turbidity and / or TSS monitoring downstream within the receiving environment; (f) An automated monitoring regime (inlet and outlet TSS and / or turbidity) on at least one sediment retention pond throughout the duration of earthworks at the site, and a manual sampling regime for all remaining sediment retention ponds and decanting earth bunds;		

(h) Management responses when a trigger level is exceeded, including the ability to reduce exposed area; and (i) Reporting to Council. Advice Note: Turbidity results can be substituted providing a correlation between TSS and turbidity has been established. Any proposed revisions to the AMP must be submitted to the Council for written certification prior to formalising and implementing the revised Plan.		
22A. An appropriate efficiency of sediment retention ponds and/or decanting earth bunds should be established where efficiency measurements are only activated when inlet samples indicate high sediment loadings. i.e., the efficiency of a pond need not be scrutinised when both inlet and outlet samples show low TSS / NTU. Advice Note: Further guidance on preparation of an Adaptive Management Plan can be found in Auckland Council guidance document - Erosion and Sediment Control Adaptive Management Plan Guidance Document, Report to support preparation of Adaptive Management Plans, RC 3.2.22, July 2020.	This is condition is not clear on what it is trying to achieve and therefore has not been adopted.	Resolved. Condition no longer required.
22B. All monitoring and management procedures as detailed within the certified Adaptive Management Plan required by condition 22, and	This is accepted and updated in tracked changes within the condition set.	Resolved and reflected in the updated condition set.

any subsequent revisions, must be implemented on an ongoing basis throughout the duration of all earthworks activities on site. Advice Note: The AMP is a live document, and updates are expected to address unforeseen circumstances or changes in the earthworks methodology as the site responds though its adaptive monitoring regime, to ensure sediment discharges are minimised and the potential for significant adverse effects are avoided.		
22C. An earthworks area which has been stabilised as a result of a trigger level exceedance or a management response as defined and required by the certified Adaptive Management Plan (required under condition X13) and any subsequent revisions approved by the Council, can only be re-opened for earthworks on the written approval of the Council.	This is accepted and updated in tracked changes within the condition set.	Resolved and reflected in the updated condition set.
22D. As a result of observed inefficiencies upon site inspection or identified within the site reporting, Council may request that the Adaptive Management Plan be updated to address those inefficiencies. If such a request is made by the Council, the revised plan must be submitted to the Council within 5 working days of the request. The updated AMP must not be implemented without the Council's approval.	This is accepted and updated in tracked changes within the condition set.	Resolved and reflected in the updated condition set.

New Condition: Prior to the commencement of any Subdivision or Civil-Construction earthworks at the site, an Erosion and Sediment Control Plan, specific to that stage of subdivision, must be prepared in accordance with Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating any Amendments to this document (GD05), and submitted to the Council for written certification. Earthworks activity on that stage of the site must not commence until the Council has certified that that the ESCP satisfactorily meets the requirements of GD05. The plan must contain sufficient details to address the following matters: a. Specific erosion and sediment control measures for the earthworks (location, dimensions, capacity) including the location of any sediment retention ponds, decanting earth bunds, super silt fences, silt fences, clean and dirty water diversion bunds and stabilised construction entrances, in accordance with GD05; b. supporting calculations and design drawings, as necessary; c. details of construction methods; d. monitoring and maintenance requirements; e. catchment boundaries and contour information as necessary; and,	As per comment above, this condition is already included (Section 3.1.13 within the subdivision conditions). No further amendments are considered necessary.	Resolved and reflected in the updated condition set.

f. details relating to the management of exposed areas (e.g. grassing, mulching). g. Advice Note: In the event that minor amendments to the ESCP are required, any such amendments must be limited to the scope of this consent. Any amendments which affect the performance of the ESCP may require an application to be made in accordance with section 127 of the RMA. Any minor amendments must be provided to the Council prior to implementation to confirm that they are within the scope of this consent.		
New Condition: The conditions of this consent may be reviewed every two years from the date of granting pursuant to section 128 of the RMA, by giving notice pursuant to section 129 of the RMA, for the following purposes: a. To deal with any significant adverse effect on the environment arising or potentially arising from the exercise of the consent and which was not apparent at the time of granting the consent. b. In the case of contamination, to require the consent holder to adopt the best practicable option to remove or reduce any adverse effect on the environment. c. In the case of earthworks, to alter monitoring requirements as a result of previous monitoring	The applicant accepts a review condition in principle, however is reviewing the specific wording and will provide a separate response to Council on this matter.	Resolved, pending appropriateness of applicant's separate response.

outcomes, and/or in response to changes to the environment and/or hydro-geological knowledge. d. To deal with any adverse effect on the environment arising or potentially arising from the exercise of this consent and in particular effects on: water quality; sediment transport; and functioning of natural ecosystems; through altering or providing specific performance standards.		

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 6:

Geotechnical

Delmore Fast Track Application

To: Auckland Council – Geotechnical

From: James Beaumont – Riley

Date: 15 April 2026

Re: Geotechnical Response Memorandum

1.0 Technical Specialist Memo – Geotechnical Review

From:	Frank Zhou, Senior Geotechnical Specialist
Qualifications & Relevant Experience:	I hold the qualification(s) of: **Bachelor of Civil Engineering** and have 8 years of geotechnical experience in both private and public sectors for land development, hazard remediation and infrastructure projects across the Auckland region. I am a full member of **Engineering New Zealand** and **New Zealand Geotechnical Society.** I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified. Please note that this review is specific to the Operative AUP requirements and excludes assessment against PC120.
Signature:	Frank Zhou
Date:	23/04/2026

2.0 Original Specialist Review Memo

Our geotechnical assessment has been detailed in the previous memo. Below is a brief summary of key missing information of the previously provided geotechnical information. For more details, please refer to the previous memo.

- The potential risk that the geotechnical assessment and reporting has been prepared by outdated plans.
- Minor errors in the slope stability output pages, which limit our regulatory review and could potentially lead to underestimating slope instability and the adequacy of proposed remedial measures.
- Remediation plan indicated the use of reinforced earth batter to retain a cut slope however was presented where filling is proposed.

3.0 Updated Response to Applicant's Memo

I have reviewed the following information provided by the applicant in response to the queries outlined in our previous memo:

- Geotechnical Attachments.pdf
- 240065-SK143 Rev E.pdf
- Appendix 44_Proposed Conditions_post lodgement updates
- Applicant's response to queries and conditions (attached at the end of this memo)

In addition to the above, an online meeting was held on 20 April 2026 with Council specialists including Healthy Waters (HW) and the applicant's engineers from Riley and Morphum. The meeting primarily focused on outstanding queries raised by HW regarding the geomorphology assessment and the uncertainty associated with future stream migration. HW also raised concerns that potential stream migration could significantly affect the stability of the reinforced earth (RE) slopes on either side of the stream, which may in turn pose instability risks to the building platforms located above.

There also appears to be some obstructions in the slope stability models for Section AC (seismic and worst credible GW) which limit the reader to view the modelled slopes. The existing slope stability models presented in Appendix F of the Geotechnical Reporting has been relied upon this these cases noting that the same factor of safety values are presented in the models.

Based on the information provided, I confirm that all geotechnical queries raised in our previous memo have been satisfactorily addressed.

In relation to HW's concerns, I agree that stream migration has the potential to impact the RE slope design and should be appropriately accounted for. I note that the submitted geotechnical analyses have incorporated allowances for potential downcutting and channel widening, consistent with recommendations from Morphum. The analyses indicate that adequate factors of safety and therefore slope stability can be achieved with these geomorphic considerations included.

On this basis and the available information, from a geotechnical perspective, the proposal is generally acceptable. Should there be any changes to the geomorphology assessment, including the extent or location of anticipated downcutting and channel widening, the geotechnical assessment will need to be updated accordingly to reflect those changes.

4.0 Conclusion

Based on the information provided I can advise that the reporting, conclusions and recommendations of the provided geotechnical report are generally reasonable for the scale and magnitude of the works and indicate the site could be safely developed from a geotechnical/stability perspective, subject to the conditions mentioned below. If appropriately managed, no other properties are likely to be affected from soil instability issues arising from the earthworks.

I understand there are outstanding queries related to geomorphology assessment. Should there be any changes to the assessment, including the extent or location of anticipated downcutting and channel widening, the geotechnical assessment will need to be updated accordingly to reflect those changes.

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Geotechnical) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
Earthworks contours Appendix I (Riley Sketches) indicates that the earthworks cut and fill profiles were based on drawings prepared by McKenzie & Co dated 10 December 2025, whereas the latest earthworks plan package is dated 12 December 2025. Suggest confirmation whether the most recent plans have been adopted in the assessment be provided.	Review of the 12 December 2025 drawings prepared by McKenzie and Co indicates that the updates from the 10 December drawings are inconsequential to the proposed cuts/fills, and finished contours. Therefore, the stability analyses are considered to be appropriate and no updates are required.	Accepted and closed.
Slope stability output The stability analysis output pages do not include the soil parameters and support parameters adopted in the modelling (e.g. Sections H, O, AA, AB, AF, AG, AH, etc.).	Stability analysis outputs for these cross-sections showing the soil and support parameters are attached. No notable change to the output results. Recommendations in the GIR remain appropriate.	Accepted and closed.

Suggest that these details be provided to support the analysis and verify model outputs.		
Slope stability output For Section I (remedial option case), the search limits appear to be focused on the toe slope. Suggest that the model extend the search limits to include the upper development area.	Stability analysis outputs for this cross-section with the search limits extended are attached to this memo. No notable change to the output results. Recommendations in the GIR remain appropriate.	Accepted and closed.
Slope stability output For Section Z, no surcharge load appears to have been considered in the analysis. Suggest that this decision be clarified or the model revised.	Stability analysis outputs for this cross-section with the surcharge added are attached to this memo. No notable change to the output results. Recommendations in the GIR remain appropriate.	Accepted and closed.
Slope stability output The output page for Section AC is not legible for regulatory review. Suggest that a clearer output be provided.	Stability analysis outputs for this cross-section have been re-outputted to be clear and are attached to this memo. No change to the calculated FoS. Recommendations in the GIR remain appropriate.	Accepted and closed.
Remediation Plan It is noted that the remediation plan indicates the use of a reinforced earth batter (REB) to retain a cut slope. It appears that the REB may have been erroneously extended from Section AD where filling is proposed. A more practicable option in this instance may be appropriate. Suggest that confirmation that the notation on the remediation plan is correct or a revision provided to reflect intended works.	The remediation plan has been updated and is attached to this memo. The subject portion where cuts are proposed to be formed has been changed to soil nails (consistent with the nearby Section AC). The extent of each type of stability enhancement measure will need to be confirmed during detailed the design. See updated Riley sketch SK143 attached.	Accepted and closed.

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)	Applicant Response	Council Specialist Response
26. At least 10 working days prior to the commencement of works for any stage or sub-stage of the development, the consent holder must provide a detailed construction methodology endorsed by a chartered geo-professional who must provide written confirmation of the review. The methodology must include earthworks, boundary works and installation of slope protection measures in accordance with the recommendations provided within the Geotechnical Report, referenced in Condition 1 and submitted to Auckland Council. No works onsite are permitted prior to written confirmation that the detailed construction methodology has been reviewed and accepted by the Council. Advice note: The ~~earthworks~~ detailed construction methodology is required to ensure stability is maintained throughout the civil works stage of the development.	This condition is accepted and has been updated within the condition set (refer Section 2.1.10 of the conditions).	Accepted and closed on the premise of the applicant's response however we note that the updated conditions varies from what has agreed in the applicant response which is specific to bulk earthworks. We suggest that this be revised. *At least 10 working days prior to the commencement of works for any stage or sub-stage of the development, the consent holder must provide a detailed construction methodology endorsed by a chartered geo-professional who must provide written confirmation of the review. The methodology must include earthworks, boundary works and installation of slope protection measures in accordance with the recommendations provided within the Geotechnical Report, referenced in Condition 1 and submitted to Auckland Council. No ~~bulk earth~~works onsite are permitted prior to written confirmation that the detailed construction methodology has been reviewed and accepted by the Council.*
44. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, a Settlement	This condition is accepted and has been updated within the condition set (refer Section 2.1.17 of the conditions).	Accepted and closed.

Monitoring Plan (SeMP) prepared by a ~~SQEP~~ chartered geo-professional, must be submitted to Council for certification. Any later proposed amendment of the SeMP must also be submitted to Council for certification.		
45. The purpose of the SeMP is to set out the practices and procedures to be adopted to ensure compliance with the consent conditions regarding earthworks fill settlement monitoring and ~~shall~~ must include, at a minimum, the following information: a) A monitoring location plan, showing the location and type and construction detail of all settlement monitoring points; b) Details of the monitoring frequency; c) All monitoring data, the identification of services susceptible to damage and all building/service condition surveys undertaken to date; and d) Details of criteria to confirm that fill induced settlements have sufficiently attenuated. Settlement monitoring results must be presented in the Geotechnical Completion Report (refer Condition 46 and Condition 47).	This condition is accepted and has been updated within the condition set (refer Section 2.1.17 of the conditions).	Accepted and closed.
46. The placement and compaction of fill material, construction of geogrid reinforced slopes, shear piles, retaining and palisade walls, soil nails, shear keys, counterfort drains and subsoil drainage	This condition is accepted and has been updated within the condition set (refer Section 2.1.17 of the conditions).	Accepted and closed.

works must be supervised by a ~~SQEP~~ geo-professional. In supervising the works, the SQEP geo-professional must ensure that they are constructed and otherwise completed in accordance with the recommendations contained within the Geotechnical Report approved under Condition 1, relevant engineering code of practice, and the detailed plans forming part of the application and approved under Condition 1.		
47. Within 20 working days from the completion of earthworks, subsoil drainage and slope protection structures, a Geotechnical Completion Report (GCR) signed by the chartered geo-professional must be provided to the Council. The GCR must include (but not to be limited to): a) Earthworks operations (e.g. fill compaction, testing, inspections etc.); b) Site inspections, observations, recommendations and photo evidence c) Results of settlement monitoring; d) Statement of professional opinion (as per schedule 2A of NZS4404:2010); and e) Certified as-built plans for the implemented ~~earth~~works including but not being limited to earthworks cut and fill, shear keys, reinforced earth batter slopes, soil nails, retaining and palisade walls, counterfort drains and subsoil drainage.	This condition is accepted and has been updated within the condition set (refer Section 2.1.17 of the conditions).	Accepted and closed.

48. The GCR must ~~also~~ provide justification on soil expansivity, subsoil site class, foundation requirements, geotechnical input of erosion protection measures for dispersal devices on each lot and confirming that the works have been completed in accordance with the approved construction methodology as required by Condition 26 and evidence of settlement monitoring as required by Condition 4~~7~~5 have been met. The GCR must include results of settlement monitoring and demonstration that sufficient settlement attenuation has occurred and be provided to the satisfaction of the Council.	This condition is accepted and has been updated within the condition set (refer Section 2.1.17 of the conditions).	Please note that the condition relating to construction methodology is numbered 29 in the updated set, rather than 26. Further the Settlement Monitoring is no longer condition 45 but Condition 47. The finalised condition set should be amended to reference the correct condition number.
49. All earthworks must be managed to ensure that they do not lead to any uncontrolled instability or collapse either affecting the site or adversely affecting any neighboring properties. In the event that such collapse or instability does occur,~~it~~ the consent holder must immediately be rectified the damage.	This condition is accepted and has been updated within the condition set, subject to a minor amendment to fix the grammar (refer Section 2.1.17 of the conditions).	Accepted and closed.
104. The consent holder must construct the earthworks, ~~geogrid~~ reinforced earth batters, slopes, shear piles, retaining and palisade walls, soil nails, shear keys, counterfort drains and subsoil drainage in accordance with the recommendations of the Riley Consultants Ltd Geotechnical Investigation Report approved under Condition 1 to ensure the site is stable and suitable for development.	This condition is accepted and has been updated within the condition set (refer Section 3.1.7 of the conditions).	Accepted and closed.

105. A Geotechnical Completion Report (GCR) from a suitably qualified and experienced chartered geo-professional must be prepared and submitted to Council to confirm that all residential and commercial lots are stable and suitable for development when applying for a certificate under section 224(c) for a subdivision stage (or sub-stage). The GCR must include a Building Restriction Zone plan that identifies specific design zones and no-build zones. Development must be undertaken in accordance with the recommendations of the GCR. The preceding paragraph must be registered as a consent notice on the records of title for all residential and commercial lots to ensure that it is complied with on a continuing basis. ~~The specific name and date of the GCR provided must be referenced in the consent notice.~~ Advice note: The specific name and date of the GCR provided must be referenced in the consent notice. Refer to Auckland Council Code of Practice 2023 (Chapter 2) which details expectations of a geotechnical completion report.	This condition is accepted and has been updated within the condition set (refer Section 3.1.7 of the conditions).	Accepted and closed.
106. Certified as-built details of installed counterfort drains ~~shall~~ must be included within the Geotechnical Completion Report, together with records of counterfort drain commissioning observations and flushing.	This condition is accepted and has been updated within the condition set (refer Section 3.1.7 of the conditions).	Accepted and closed. Please note that there appears to be an error in the Advice note which should be rectified: *The drain commissioning information will provide*

Advice Note: The drain commissioning information will provide baseline data for the counterfort drain operation and maintenance plan. The as-built drawings ~~shall~~ should also include locations of the flushing ports and outlet structures.		*baseline data for the counterfort drain operation and maintenance plan. The as-built drawings should also include locations of the flushing ports and outlet structures.*
107. Where counterfort drains are installed within a stage of the development, a counterfort drain operation and maintenance plan (CDOMP) must ~~shall~~ be provided as an attachment to the Geotechnical Completion Report to the Council for certification, incorporating a staged maintenance approach. This ~~shall~~ must include the observations to be made, their frequency and any associated actions to ensure their serviceability. Any subsequent revision of the CDOMP must also be submitted to the Council for certification. The consent holder must meet the costs of the production, certification, monitoring and review of the CDOMP. Advice Note: • The council acknowledges that the CDOMP is intended to provide flexibility both for the consent holder and the council for the management of the counterfort drainage and slope stability. Accordingly, the CDOMP may need to be reviewed over time. Any reviews should be in accordance with the stated objectives of the management plan and limited to the scope of this consent.	This condition is accepted and has been updated within the condition set (refer Section 3.1.7 of the conditions).	Accepted and closed.

• Certification of the CDOMP by the council relates only to those aspects of the management plan that are relevant under the Resource Management Act 1991. The certification does not amount to an approval or acceptance of suitability by the council of any elements of the management plan that relate to other legislation, for example, but not limited to, the Building Act 2004, the Heritage New Zealand Pouhere Taonga Act 2014, or the Health and Safety in Employment Act 1992.		

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 7:

Groundwater Diversion and Dewatering

Delmore Fast Track Application

To: Auckland Council – Groundwater Diversion and Dewatering

From: James Beaumont - Riley

Date: 15 April 2026

Re: Groundwater Diversion and Dewatering Response Memorandum

2.0 Technical Specialist Memo – Groundwater Diversion and Dewatering

From:	Hester Hoogenboezem – Senior Specialist – Coastal and Water Allocation Team
Qualifications & Relevant Experience:	I hold the qualification(s) of: Bachelor of Science in Environmental and Engineering Geology, Bachelor of Science (Hons) In Engineering and Environmental Geology and have 18 years of experience in geotechnical engineering and engineering geological assessments. I am a member of Engineering New Zealand. I have prepared expert evidence and technical assessments for resource consent applications and fast-track applications on numerous occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23 April 2026

2.0 Original Specialist Review Memo

I considered that the proposed dewatering and groundwater diversion could have potential adverse effects on the wetlands, because significant dewatering is proposed. Riley Consultants and Viridis confirmed that the size of the water catchment is not proposed to be altered, and groundwater is proposed to be discharged into the wetlands at discrete locations via appropriate designed energy dissipation devices ensuring **less than minor** change to the existing catchment.

I understand that most excavations near the boundaries are proposed to be formed by batter slopes and some excavations will be supported by near boundary retaining walls extending to a maximum height of approximately 3 m. I understand that additional geotechnical design inputs will be required for specific design of retaining walls and that further investigation may be required to enable specific designs to be completed.

3.0 Updated Response to Applicant's Memo

The Applicant indicated acceptance of proposed additional conditions. I understand that the wording of the condition below is under review by the Applicant.

Provide for a review under section 128

Condition: Under section 128 of the RMA, the conditions of this consent WAT may be reviewed by the Manager Resource Consents at the Consent Holder's cost:

Within six (6) months after Completion of Construction Phase Dewatering and subsequently at intervals of not less than five (5) years thereafter, in order:

- To deal with any adverse effects on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage.
- To vary the monitoring and reporting requirements, and performance standards, in order to take account of information, including the results of previous monitoring and changed environmental knowledge on:
    1) ground conditions
    2) aquifer parameters
    3) groundwater levels
    4) ground surface movement

4.0 Outstanding Issues

The Applicant accepted a **review condition under section 128 of the RMA** in principle, however, noted that they are reviewing the specific wording and will provide a separate response to council on this matter.

Response to Recommended / Amended Conditions

Please note that this is a standard condition that has undergone a rigorous review process by council Principal Specialists and legal advisors. As such, council is unlikely to be open to amendments to its wording.

5.0 Conclusion

Based on the inclusion of the recommended conditions associated with the current application and addressing dewatering and diversion at the existing wetlands, I am in support of the application.

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Groundwater Diversion and Dewatering) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

No further information requests have been identified.

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)	Applicant Response	Council Specialist Response
I have reviewed conditions 178 to 200. I agree with the draft condition set. However, I noted that the word 'shall' was used in some of the conditions and change from 'shall' to 'must' is required to align with current practice.	This has been accepted and is included within the updated set of conditions.	Closed.
I recommend that definitions be included in the condition set for clarity during monitoring.	The proposed definitions are accepted and have been partially adopted, with the following exception:	Accepted. Closed.

	• The definition of 'Completion of Excavation' which has amended to *"Means the stage when all Bulk Excavation has been completed"*. Reference to foundations and footings have been deleted as these are not part of the proposed development works.	
In the table detailing Building Damage, the column headed "Description of Typical Damage" applies to masonry buildings only and the column headed "General Category" applies to all buildings. I recommend that provision for review under section 128 be included. Provide for a review under section 128 Condition: Under section 128 of the RMA, the conditions of this consent WAT may be reviewed by the Manager Resource Consents at the Consent Holder's cost: Within six (6) months after Completion of Construction Phase Dewatering and subsequently at intervals of not less than five (5) years thereafter, in order: • To deal with any adverse effects on the environment which may arise or potentially arise from the exercise of this consent and which it is appropriate to deal with at a later stage. • To vary the monitoring and reporting requirements, and performance standards, in order to take account of information, including the	The applicant accepts a review condition in principle, however is reviewing the specific wording and will provide a separate response to Council on this matter.	Please note that this is a standard condition that has undergone a rigorous review process by Council Principal Specialists and legal advisors. As such, council is unlikely to be open to amendments to its wording.

results of previous monitoring and changed environmental knowledge on: 1) ground conditions 2) aquifer parameters 3) groundwater levels 4) and ground surface movement.		

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 8:

Temporary Surface Water Diversion

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo - Hydrology

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Nick Hazard, Consultant Hydrogeologist, Coastal and Water Allocation
Qualifications & Relevant Experience:	I hold the qualification(s) of: Bachelor of Science in Geology and Economics, a GradDipSc (Groundwater Hydrology), and have 25 years of experience in geology and 17 years in groundwater and surface water hydrology. I am a full member of IAH and NZHS. I have prepared expert evidence and technical assessments for resource consent applications and fast-track applications and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	26 March 2026

3.0 Executive Summary / Principal Issues

The Applicant is seeking consent to temporarily divert stream flow during the construction of multiple permanent stream crossings which requires consent under discretionary rule E7.4.1 (A13). It is understood that the diversions will comprise temporary channels excavated adjacent to the stream channel, diverting the entire flow for a period ranging from a few days to around 30 days. All of these crossings are located in the immediate vicinity of existing degraded culvert crossings that are mostly planned to be removed and replaced by new culverts in slightly different locations. The crossings are expected to be completed in periods of low flow during dry summer conditions.

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. The construction of new culverts and associated diversion need to be designed so as not to lower water level range in upstream wetlands or the hydrological function of the wetland.

The locations of these culverts in presented in the current AEE remain unchanged from the previous positions. The length of the individual culverts and the invert levels are slightly changed however. I would expect there to be limited effects on flow and nearby wetland levels due to these change. The methodology for the installation of these culverts and temporary diversion is clearly laid out in the memo 'Methodolgy For Culvert Works Within Stream' included as Appendix D of the Earthworks Report (AEE Appendix 36). This methodology is expected to provide sufficient guidance so as to avoid any adverse effects on the stream flow regime, the stability of stream banks and the preservation of existing hydrological function of any adjacent wetlands.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore Fast-Track AEE, B&A, Ref025108, rev1, dated 23 December 2025
- Appendix 16, Ecological Impact Assessment, Viridis Limited, Ref 10122-018-1, 18 December 2025
- Appendix 36, Earthworks Report, McKenzie & Co Ltd, dated 15/12/2025
  And related Appendix D: Memo: Delmore – Methodology for Culvert Works within a Stream, McKenzie & Co, dated 12 June 2025
- Appendix 10, Stage 1 and 2 Scheme Plans, McKenzie and Co Ltd, dated 12 December 2025
- Appendix 34, Stormwater Management Plan, McKenzie and Co Ltd, dated 18 December 2025
- Appendix 33, Stormwater Drawings Culvert Plans
- Appendix 12, Stormwater Report, McKenzie and Co Ltd, dated 22 December 2025
- Appendix 44, Delmore Proposed conditions, B&A
- Appendix 22, Wetland and Culvert Assessment, Williamson Water and Land Advisory, ref WWLA1147, dated 18 December 2025

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

Temporary Surface Water Diversion

I have reviewed the above documents to specifically assess whether there have been any significant changes to location or scale of the proposed culvert locations. I consider that the proposed temporary diversions could be constructed so that they will not adversely affect upstream wetlands and water levels beyond what is proposed for the permanent culvert crossings. While no specific effects assessment is provided in the AEE, the specific methodology for the temporary surface water diversion activity is well documented in the Earthworks Report, McKenzie & Co, Appendix D memo dated 12 June 2025, outlining methodology for the construction of temporary diversions for the construction of permanent culverts. It is important this memo is adequately referenced in conditions.

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

I recommend that the Appendix 36 Earthworks Report Table of contents be corrected to include the missing reference to Appendix D. In addition the condition 168 (previously 191) refers to the broad earthworks report rather than specifically to the memo "Methodolgy For Culvert Works Within Stream" as was previously the case in Condition 191, in the 7 July 2025 version of Conditions. Based on the recommended conditions associated with the current application and the methodology outlined in the application documents for temporary surface water diversions for culvert construction, I am in support of the application.

9.0 Proposed Conditions

I have reviewed the draft conditions and the inclusion of two conditions I had previously recommended (Conditions 168 and 172) have been included. However as outlined above Condition 168 now refers to Appendix 36, Earthworks Report rather than the more pertinent Appendix D, 'Methodolgy For Culvert Works Within Stream'.

<u>Preferred wording for condition 168</u>

The methodology for the installation of the short-term surface water diversions must be in general accordance with the memorandum "Delmore – Methodology for Culvert Works within Stream", Appendix D, Earthworks Report, McKensie & Co dated 15 December 2025.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 9:

Noise & Vibration

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

1.0 Technical Specialist – Duffy Visser, Noise

From:	Duffy Visser - Specialist, Specialist Unit, Planning & Resource Consents, Auckland Council
Date:	17/03/2026

2.0 Executive Summary / Principal Issues

The applicant has proposed to undertake large scale of earthworks and to operate an onsite wastewater treatment plant, Senior specialist, Bin Qiu peer-reviewed the applicant's noise report (SLR) and provided comments in May 2025.
SLR has since provided an updated report to assess the noise as a result of the changes to the latest lot plan, that indicates that the truck filling activity could be within approximately 45 to 55 m of the nearest proposed residential lots to the north-east, and directly adjacent to lots to the north.

3.0 Specialist Assessment – Previous Memo / Comments Overview

Senior specialist, Bin Qiu peer-reviewed the applicant's noise report (SLR) and provided comments in May 2025.

4.0 Specialist Assessment – Material Reviewed

I have reviewed the following documents:

Assessment of Environmental Effects and Statutory Analysis prepared by B&A Urban and Environmental, dated 23 December 2025. (AEE)

Noise Assessment Delmore Residential Development, Wainui, prepared by SLR, dated 18 December 2025. (acoustic report)
The updated SLR has demonstrated that the noise can be mitigated to comply with the relevant AUP noise standards with a suitable acoustic fence constructed along the affected residential lot. I agree with the SLR assessment and that the proposed noise barrier is suitable to mitigate the noise.

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 have reviewed the proposed noise Conditions in Appendix 57 and provide my comments below:

Condition 19, CNVMP: they are appropriate and acceptable, noting requirement to add 'monitoring'.
Condition 40 requires CNVMP to be maintained and implemented
Condition 41, construction hours, the proposed construction hours are acceptable,
Condition 42: previously recommended changes to the original condition 28 for 59 Russell Rd has been included. Noise limits are acceptable.
Condition 43: max 5mm/s is referred, and this condition is acceptable.
Condition 62 requires the acoustic fence to be built along Lot 203 and sets out relevant noise limits for the WWTP and filling activity. The condition is suitable.
Condition 63 WWTP designed to comply with noise rules, this condition is acceptable

Overall, these proposed noise conditions are appropriate and acceptable.

7.0 Recommendation

I support this application based on the information available, the potential noise effect in relation to the proposed construction and operation of WWTP, including transporting the wastewater to the offsite location which can be managed to a reasonable level.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 10:

Contamination

2.0 Technical Specialist Memo -Soil Contamination

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Duffy Visser Specialist - Contamination
Qualifications & Relevant Experience:	I hold the qualification(s) of: Diploma in Public Health and have 4 years of experience in soil contamination. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirements for designation and fast-track applications and have appeared as an expert witness before consent authorities on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferences, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	16 March 2026.

3.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Assessment of Environmental Effects and Statutory Analysis, prepared by B&A Urban and Environmental, dated 23 December 2025. (AEE)
- Preliminary Site Investigation (Ground Contamination), prepared by Williamson Water & Land Advisory, dated 16 December 2025. (PSI)

4.0 Specialist Assessment

As requested, the above application and relevant supporting information have been reviewed with reference to the requirements of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES:CS) and Chapter E30 of the Auckland Unitary Plan (Operative in Part) AUP(OP)).

The PSI and council records show that no HAIL activities have been identified; to have occurred on the site and soils containing 'elevated levels of contaminants are not expected to be present, thus the requirements of the NES:CS and Section E30 of the AUP do not apply to the site.

Consents are not required for ground contamination matters under either the NES:CS or contaminated land rules in the Auckland Unitary Plan (AUP).

No specific soil remediation requirements have been identified for the site.

I agree with the PSI that: soil and debris around existing dwellings and associated buildings (generally a 2 m wide halo) should either be tested for suitability for reuse, or removed for disposal to appropriate facilities, during the demolition and clearance process.

Localised soils around dwellings and associated structures may contain contaminants at concentrations that exceed background (cleanfill) ranges and therefore need to be reused or disposed of appropriately.

5.0 Recommendation

I support the application.

6.0 Proposed Conditions

2.1.19 Contaminated Soils

57. Following demolition and removal of the existing dwellings and other buildings (garages, sheds, barns etc.) existing within the site as at the date of grant of consent, surficial soil and debris (to the lesser of 300mm depth or top of natural insitu soils) across the footprint of each former structure, and a halo 2 metres wide on all sides around it, shall be either:

(a) Excavated and disposed offsite to a consented Class 1 landfill if physically/geotechnically unsuitable for reuse; or

(b) Tested by a suitably qualified and experienced contaminated land professional, as defined in the Users' Guide to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, 2012, to confirm its suitability for reuse onsite or disposal to alternative offsite facilities. All sampling and testing must be undertaken in accordance with the Contaminated Land

Management Guidelines No.5: Site Investigation and Analysis of Soils (Ministry for the Environment, revised 2021).

58. In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works within a 2-metre halo of the contamination, notify Auckland Council, and engage a suitably qualified and experienced contaminated land professional to assess the situation (including possible sampling and testing) and decide on the best option for managing the material.

Proposed condition 58 mirrors the Permitted Activity Standards for all earthworks activities under AUP(OP) E11.6.1 and E12.6.1.

The following advice note should be added

Advice Note: Asbestos Containing Materials

If you are demolishing any building that may have asbestos containing materials (ACM) in it:

- *You have obligations under the relevant regulations for the management and removal of asbestos, including the need to engage a Competent Asbestos Surveyor to confirm the presence or absence of any ACM.*
- *Work may have to be carried out under the control of a person holding a WorkSafe NZ Certificate of Competence (CoC) for restricted works.*
- *If any ACM is found, removal or demolition will have to meet the Health and Safety at Work (Asbestos) Regulations 2016.*
- *Information on asbestos containing materials and your obligations can be found at www.worksafe.govt.nz.*

If ACM is found on site following the demolition or removal of the existing buildings you may be required to remediate the site and carry out validation sampling. Dependent on the amount of soil disturbance a further consent application may be required.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 11:

Archaeology / Heritage

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Archaeology/Historic Heritage

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Mica Plowman - Principal Heritage Advisor
Qualifications & Relevant Experience:	I hold the qualification(s) of: Bachelor of Arts (BA) and Master of Arts (MA) in Anthropology (archaeology) and have 30 years of experience in historic heritage and archaeological resource management under the RMA (Part 2, Section 6 e and f matters) and the HNZPT Act (2014). I am a full member of the New Zealand Archaeological Association**.** I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications, and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferences, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	13/3/2026

3.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore. Fast Track Approval Application. Assessment of Environmental Effects and Statutory Analysis. Prepared for Vineway Limited by B & A Urban and Environmental Limited, 23 December 2025.
- Appendix 23 Archaeological Assessment. Delmore Proposed Residential Development, Upper Ōrewa, Auckland: Fast Track Archaeological Assessment. Prepared for Vineways Ltd by Clough and Associates Limited (Ellen Cameron) December 2025.
- Appendix 23.1 Archaeological Management Plan. Archaeological Management Plan: Delmore Proposed Residential Development, Upper Ōrewa, Auckland. Prepared for Vineways Ltd by Clough and Associates Limited (Ellen Cameron) December 2025.
- Appendix 23.2 Archaeological Authority Approved Person – Ellen Cameron
- Appendix 44. Delmore Fast-track - Proposed Consent Conditions

4.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

The proposed works, as described in the FTAA application and supporting documents, do not affect scheduled archaeological sites in Schedule 14.1 (Schedule of Historic Heritage) in the Auckland Unitary Plan operative in part (January 23rd 2026) [AUP OIP]. No consents are required under Chapter D17 Historic Heritage [AUP OIP].

5.0 Specialist Assessment

The Archaeological Assessment prepared by Clough and Associates (Appendix 9) confirms that there are two recorded archaeological features within the property; both are shell midden (R10/776 and R10/1573). Archaeological site R10/776 is a previously recorded archaeological site; whilst site R10/1573 was identified by Clough and Associates during a site survey on 21 November 2024 and was subsequently entered into the NZAA database.

Both of the recorded middens are located outside of the project's primary earthworks extent. There is no work planned in the vicinity of site R10/776, and it will not be affected by the proposed development. Site R10/1573 is located in an area where vegetation clearance and planting are planned; and the assessment provides archaeological management methods to avoid detrimental effects to the site.

The Clough and Associates assessment concludes that although the two recorded archaeological sites in the Project Area will be avoided there is the potential for unrecorded subsurface prehistoric archaeological features to exist in the area of works and to be exposed during development, particularly

in areas bordering streams.

To mitigate the risk of discovery of unrecorded subsurface archaeological within the project area, Clough and Associates advise that a general precautionary Archaeological Authority from Heritage New Zealand Pouhere Taonga (2014) be obtained prior to the onset of earthworks.

The AEE confirms that an authority to undertake works that will or may modify or destroy the whole or any part of any archaeological site (whether or not a site is a recorded archaeological site) that would otherwise be sought under section 44(a) of the HNZPT Act is sought under section 43 of the FTAA.

I agree with and support the Clough and Associates assessment of the potential risk to previously unidentified archaeological/historic heritage features within the project area. I also agree that it is appropriate to secure a Authority under section 43 of the FTAA.

6.0 Section 67 Information Gap

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

7.0 Recommendation

I have assessed the effects of the proposed Delmore application on historic heritage resource, the magnitude of these effects, and whether adverse effects are avoided, minimised or mitigated.

There is no National Policy Statement on Historic Heritage to assess this application against.
In reviewing the application documentation, the conditions outlined in section 1.0 General Conditions (1.1.6 e Pre-start meeting) and section 9.0 Archaeological Authority? (conditions 1-8) nominated by the applicant are sufficient to mitigate the potential risk of archaeological/historic heritage discovery and give effect to s6 (f) of the RMA.

8.0 Proposed Conditions

No amendments or additions to the proposed conditions are necessary.

DRAFT

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 12:

Māori Heritage

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Māori Heritage

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Alex Jorgensen, Senior Specialist, Māori Heritage
Qualifications & Relevant Experience:	I hold the qualification(s) of Ph.D in Anthropology and an LLB from the University of Auckland and have 15 years of experience in the Māori Heritage field. I am a full member of the New Zealand Archaeological Association. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, and fast-track applications.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	*Alex Jorgensen*
Date:	23/03/26

3.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Vineways Delmore Fast Track AEE
- Appendix 7 – Consultation Report
- Appendix 7.1 – Tangata Whenua Consultation Summary
- Appendix 7.2 – CIAs and Applicant Response
- Appendix 23 – Archaeological Assessment
- Appendix 23.1- Archaeological Management Plan
- Appendix 44 – Proposed Conditions

I have also viewed the Archaeology/Historic Heritage Specialist Memo Prepared by Mica Plowman dated 13/3/2026 (the "Historic Heritage Report").

4.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

The proposed works as set out in FTAA-2512-1164 do not affect scheduled Sites and Places of Significance to Mana Whenua in Schedule 12 of the Auckland Unitary Plan operative in part (January 23rd 2026).

5.0 Specialist Assessment

Please note: *This memo does not purport to incorporate the mātauranga (knowledgebase and knowledge systems) or tikanga (customs, lore and processes) of specific hapū or iwi in the review of the application documentation. The Māori Cultural Heritage team defer to the tohunga, kaumātua, kuia and other tangata whenua knowledge holders of affected iwi on such matters. The cultural and other values that mana whenua place on the area may differ from iwi to iwi, and are determined by mana whenua. It is the applicants' responsibility to liaise with mana whenua to determine mana whenua values.*

This application reflects a new Fast Track Substantive Application 109.18 ha of land at 88 Upper Orewa Road, Upper Orewa 0992. The same land was subject to a previous (withdrawn) Fast Track Application from the applicant in May 2025 and the author provided a specialist memo, and update to same on 22/05/25 and 10/07/2025.

This assessment takes into account the Auckland Unitary Plan operative in part (January 23rd 2026).and the Fast-Track Approvals Act 2024.

Māori heritage values within the application boundaries

This section summarises the Māori heritage of the area within the resource consent application's boundaries, and includes any specific Māori heritage sites that have been identified. The information derives from the resource consent application and its supporting documentation, and from the Auckland Council Māori Heritage Alert Layer and Tūtangi Ora.

- There are no scheduled or nominated sites of significance to Mana Whenua recorded within the application boundaries. This does not mean that there are no Māori heritage values associated with the area, and mana whenua may hold further information

concerning those values that the Māori heritage team is not aware of. The Cultural Impact Assessments/Cultural Investigation Reports provided by iwi should be referred to for further information concerning heritage values for the area.

- Two archaeological sites of Māori origin have been identified within the application boundaries:
  - R10/776 (Midden)
  - R10/1573 (Midden)

The Archaeological Assessment provided by Clough and Associates has also identified that there may be unrecorded, subsurface archaeological features of Māori origin within the application boundaries, which could be affected by the proposed work.

Potential impact of the proposed works on Māori heritage

- The Fast-Track approval application and the assessment of environmental effects identify the proposed works as occurring close to the two identified recorded archaeological sites of Māori origin noted above. However, these two sites are outside the area for proposed ground disturbance as part of the works.

- Clough and Associates consider that the land within the application boundary as a whole has the potential to contain unrecorded archaeological sites of Māori origin. An authority to undertake works that will or may modify or destroy the whole or any part of any archaeological site (whether or not a site is a recorded archaeological site) that would otherwise be sought under section 44(a) of the HNZPT Act should be sought under section 43 of the FTAA.

Applicant's proposed conditions

The Fast-Track approval application and the assessment of environmental effects propose that the following conditions should attach to the proposal:

- Archaeological Management Plan (Appendix 23.1)

The application of the Archaeological Management Plan conditions will help avoid or mitigate the potential impacts of the proposed works on recorded or unrecorded tangible Māori heritage within the application boundaries.

The Archaeological Management Plan notes at page 2 ("Māori Cultural Values"):

"Contact details for representatives of iwi that have an interest in the sites within the project area are provided in this document, as are protocols that must be adhered to if archaeological remains of Māori origin are exposed. In carrying out the requirements of the authority the archaeologists will be guided by the Iwi representatives in matters of tikanga.

Vineways Ltd or their designated representative should ensure that the iwi representatives are informed at least 48 hours before the start of the works requiring archaeological monitoring."

This requirement is supported.

Accidental Discovery Protocols

The Archaeological Management Plan records at pages 5-8, accidental discovery protocols in relation to unrecorded archaeology of Māori origin, koiwi tangata and taonga tuturu.

These protocols are supported.

Heritage New Zealand Pouhere Taonga

The Fast-Track approval application and the assessment of environmental effects also note that, an authority to undertake works that will or may modify or destroy the whole or any part of any archaeological site (whether or not a site is a recorded archaeological site) that would otherwise be sought under section 44(a) of the HNZPT Act should be sought under section 43 of the FTAA.

The acquisition of such an authority is supported.

Historic Heritage Report

I concur with the findings and recommendations set out in the Historic Heritage Report.

Mana Whenua engagement

The iwi approached by the applicant were those shown as having the site within their area of interest by Te Kāhui Māngai. They are Ngāi Tai ki Tāmaki; Ngāti Manuhiri; Ngāti Maru; Ngāti Paoa; Ngāti Tamaoho; Ngāti Tamaterā; Ngaati Te Ata; Ngaati Whanaunga; Ngāti Whātua o Orakei; Ngāti Whātua o Kaipara; te Runganga o Ngāti Whātua; Ngātiwai; Te Akitai Waiohua; Te Kawerau a Maki; Te Patukirikiri; Te Uri o Hau; Hauraki Māori Trust Board; Te Kupenga o Ngāti Hako.

Responses to iwi engagement are summarised in Appendix 7.1 – Tangata Whenua Engagement Summary, and are summarised as follows:

- Ngāi Tai ki Tāmaki – no response to engagement requests
- Ngāti Manuhiri – **Cultural Impact Assessment provided – do not oppose subject to conditions**
- Ngāti Maru - no response to engagement requests
- Ngāti Paoa Iwi Trust/Ngāti Paoa Trust Board - no response to engagement requests
- Ngāti Tamaoho – **confirmed no interest in withdrawn 2025 application, defer to local iwi, but have not provided a response to engagement requests for current application**
- Ngāti Tamaterā - no response to engagement requests
- Ngaati Te Ata – **confirmed no interest in withdrawn 2025 application, but have not provided a response to engagement requests for current application**
- Ngaati Whanaunga – **Cultural Impact Assessment provided - support**
- Ngāti Whātua Ōrākei - no response to engagement requests
- Ngāti Whatua o Kaipara – **correspondence ongoing**

- Runanga o Ngāti Whatua – **iwi confirmed interest in withdrawn 2025 application, but have not provided a response to engagement requests for current application**
- Ngātiwai - no response to engagement requests
- Te Akitai Waiohua - no response to engagement requests
- Te Kawerau a Maki - **provided Cultural Investigation Report for withdrawn 2025 application, but have not provided a response to engagement requests for current application**
- Te Patukirikiru - no response to engagement requests
- Te Uri o Hau – **confirmed no interest in application**

6.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

7.0 Recommendation

This section sets out Auckland Council's Māori Heritage Team's assessment of the impact of the proposed works, as described in the submitted documents. Given the:

- engagement undertaken with iwi to date and the applicant's stated commitment to ongoing engagement;
- the avoidance of the recorded archaeology of Māori origin with respect to planned earthworks within the application boundary;
- the provisions of the Archaeological Management Plan in relation to Māori cultural values
- the provisions of the Archaeological Management Plan in relation to Accidental Discovery Protocols

I assess the impact on Māori cultural heritage has been appropriately accounted for by the application to date.

8.0 Proposed Conditions

Condition 9.0 (Archaeological Authority) is supported.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 13:

Wastewater

To: Auckland Council – Wastewater

From: Jack Taylor and Matt Savage, Apex; James Beaumont - Riley

Date: 16 April 2026

Re: Wastewater Response Memorandum

1.0 Technical Specialist Memo – Wastewater

From:	Patrick O'Riordan
Qualifications & Relevant Experience:	I hold the qualification(s) of: Beng (Hons) Mechanical and Manufacturing, BA. Mathematics and a PGDip in Clean Technology Management and have 16 years of experience in process, water & wastewater engineering. I am a full member of Engineering New Zealand and Water New Zealand. I am a Chartered Professional Engineer (CPEng.) My practice areas are Environmental engineering and Water engineering. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, and fast-track applications and have appeared as an expert witness before consent authorities.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	Patrick O'Riordan
Date:	22/04/2026

2.0 Original Specialist Review Memo

- The original review found that the proposed Stage 1 private wastewater treatment and discharge system was generally feasible in principle, but the information lodged was insufficient to complete a full technical assessment.
- Key missing information related to the land disposal components, including the absence of concept designs for the wastewater disposal trench and irrigation field.
- No field investigation information had been provided for the proposed disposal areas, limiting assessment of soil suitability, groundwater separation, setbacks, and disposal field layout.
- Confirmation was required that the instantaneous peak flow from the low-pressure sewer system had been accounted for in the wastewater treatment plant design.

- Further clarification was needed on how wastewater irrigation areas affected by earthworks or compaction would remain suitable for treated wastewater disposal.
- Slope stability of the proposed disposal areas had not been adequately addressed at the time of the original review.
- The material provided on off-site disposal did not confirm how much receiving capacity was actually available at Chemwaste for this proposal.
- No receiving soils assessment had been provided, so the effects of long-term discharge on soil condition could not be properly assessed.
- A range of amended and additional consent conditions were also recommended to strengthen flow monitoring, non-compliance response, soil monitoring, irrigation system certification, off-site disposal controls, spill response, and operational auditing

3.0 Updated Response to Applicant's Memo

The applicant's response has addressed the majority of the wastewater matters raised in the earlier memo. Concept designs have now been provided for both the disposal trench and irrigation areas; further geotechnical investigation information has been supplied in relation to the disposal areas; and Apex has confirmed that the treatment plant design includes provision for the instantaneous peak flow of the LPS system through inclusion of a balance tank.

The applicant has also provided additional explanation regarding management of disposal areas subject to cut/fill and compaction, and this can be addressed through appropriate conditions requiring inspection, scarification/ripping where needed, engineered fill specifications where relevant, and geotechnical oversight. In addition, the applicant has provided a response on receiving soils effects which, when coupled with the proposed soil monitoring conditions, is sufficient at this stage.

In relation to consent conditions, the applicant has accepted, or accepted in substance, nearly all of the wastewater conditions recommended, including conditions addressing receiving soils monitoring, baseline and ongoing soil monitoring, irrigation zone certification, nutrient loading verification, annual auditing, off-site disposal management, approved receiving facilities, tanker operator requirements, holding capacity, spill response, waste tracking, and contingency arrangements where a receiving facility is unavailable. The applicant's responses are generally acceptable from a wastewater servicing perspective.

Overall, most wastewater matters are now resolved either by the further information provided or through the amended consent conditions. The principal remaining matter is the proposed review / trigger condition relating to off-site disposal, for which the applicant has indicated acceptance in principle but has not yet provided final wording or a complete response. Subject to that matter being satisfactorily resolved, I consider the wastewater issues can be appropriately managed by condition

4.0 Outstanding Issues

The majority of my original wastewater concerns have now been addressed. The only material outstanding matter identified from the applicant's response memorandum is the review / trigger condition for the off-site disposal regime, where the applicant has stated that it accepts a review condition in principle but is still

reviewing the specific wording and will provide a separate response. This remains outstanding because off-site tankering is an important component of the Stage 1 summer wastewater disposal strategy and Council should retain an effective review mechanism if trucking volumes, associated effects, or receiving facility arrangements differ materially from those assessed.

For completeness, I note that the slope stability matter is now adequately addressed at the level required for this application, noting Riley's advice that the proposed dripper line locations are suitable subject to GD06-aligned application rates, separation distances, and implementation of the stability enhancement measures identified in the geotechnical reporting. I do not consider this to remain an outstanding issue for the purposes of this memo.

Response to Further Information Requests / Technical Comments

- All of the further information requests raised in Section 67 of the original memo have now been addressed to a level sufficient for this stage of the consent process. This includes provision of concept designs for the disposal trench and irrigation field, investigation information relevant to the proposed disposal areas, confirmation regarding treatment plant peak flow design, clarification on management of disposal areas affected by earthworks or compaction, confirmation of how off-site disposal will be managed through conditions, and commentary on receiving soils effects. No further wastewater information requests are recommended at this stage.

Response to Recommended / Amended Conditions

- I continue to recommend inclusion of a review condition allowing Council to review the trucking / off-site disposal conditions if truck movements materially exceed those anticipated, complaints are received, a receiving facility changes its acceptance criteria, or monitoring indicates that off-site disposal is being used more extensively than assessed. Given the seasonal dependence on off-site disposal, particularly during summer, this condition remains appropriate and should be finalised before the wastewater package is considered fully resolved.

- I recommend that a condition for the remediation of areas of cut/fill in the disposal field is included, stating a methodology and supervision requirements, as per the following condition:

Prior to installation of any wastewater disposal lines within the disposal field, all areas of cut, fill, or otherwise disturbed ground within the proposed disposal area shall be identified and assessed by a suitably qualified and experienced person.

Where wastewater disposal lines are proposed to be installed within areas of cut or fill, those areas shall be remediated to ensure that soil structure, permeability, stability, and wastewater treatment and dispersal capacity are suitable for the proposed onsite wastewater system.

Remediation shall include, as a minimum:

a. removal of unsuitable, compacted, or poorly draining fill material where necessary;
b. reinstatement using clean, suitable, permeable soil material compatible with wastewater disposal;
c. placement of material in controlled layers to avoid excessive compaction;
d. contouring of the disposal field to prevent ponding, scouring, or concentration of stormwater

flows; and

e. confirmation that the final ground conditions are suitable for installation and operation of the wastewater disposal lines.

All remediation works and installation of wastewater disposal lines within any cut or fill areas shall be undertaken under the supervision of a suitably qualified and experienced wastewater practitioner, geotechnical engineer, or soil specialist. Written confirmation shall be provided to the Council prior to commissioning of the wastewater system, confirming that the disposal field has been remediated and installed in accordance with this condition and is suitable for its intended use.

5.0 Conclusion

The applicant's further information and condition amendments have addressed the wastewater concerns identified in my original memo. In my opinion, the wastewater treatment, discharge, irrigation, and off-site disposal aspects of the proposal can now generally be managed through the amended condition framework. Subject to satisfactory resolution of the remaining review / trigger condition for off-site disposal, I consider that the wastewater issues are substantially resolved and do not present a reason, in themselves, to decline the application.

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Wastewater) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
No concept design for wastewater disposal trench has been provided.	Apex: A concept design for the treated effluent disposal trench is attached as **Appendix A.**	Accepted
No concept design for wastewater irrigation field has been provided. A detailed design is not required, but the level of information on the disposal field currently provided is not sufficient.	Apex: A concept design for the wastewater irrigation field is attached as **Appendix B.**	Accepted
No field investigation (hand augers or surface assessment) for proposed disposal field.	Riley: Across the site we have drilled 85no. hand auger boreholes, excavated 53no. test pits and drill 6no. deep machine boreholes. A number of them are near or immediately adjacent to the areas identified for effluent disposal. Overall, we consider that the number and spread of the investigation test locations provides an appropriate level of coverage for assessment of the soil soakage category for the site in terms of GD06.	Accepted

	The locations of the investigations in relation to the wastewater disposal areas are depicted in Appendix C of this memo.	
Confirmation that the peaking factor for the LPS, not the infiltration peaking factor, but instantaneous flow rate of the LPS system has been accounted for in the design of the wastewater treatment plant.	Apex: The treatment plant design has considered the instantaneous peak flow rate within the design of the treatment train. Specifically, the membrane bioreactor is decoupled from the incoming flow through the inclusion of a raw wastewater balance tank.	Accepted
The Apex report states that the irrigation field will be installed as follows: *The installation of the surface drip irrigation line shall be carried out in both newly developed and earth worked areas, as well as in existing bush.* Can the applicant provide details of how this area shall be managed so that the disposal field will not be installed in areas that are compacted and no longer suitable for wastewater irrigation?	Apex: The design cut / fill contours have been presented alongside the proposed irrigation areas. By comparing these two drawings, it can be seen that the proposed irrigation zones fall in areas that generally require removal of material to achieve the final development levels. Zones E and H are the exceptions which require both localised cut and fill to achieve the final design levels. In areas requiring cut to achieve final development levels, prior to the placement of topsoil the area shall be inspected for compaction caused by the movement of plant and smearing caused by scraping or contouring areas. Where identified these areas shall be lightly scarified / ripped to reopen the soil structure prior to the placement of topsoil. In areas where localised fill is required, such as zones E and H, it is proposed that where native soils are exposed these are lightly scarified / ripped	Accepted. This needs to be reflected in an appropriate condition. *Prior to installation of any wastewater disposal lines within the disposal field, all areas of cut, fill, or otherwise disturbed ground within the proposed disposal area shall be identified and assessed by a suitably qualified and experienced person.* *Where wastewater disposal lines are proposed to be installed within areas of cut or fill, those areas shall be remediated to ensure that soil structure, permeability, stability, and wastewater treatment and dispersal capacity are suitable for the proposed onsite wastewater system.* *Remediation shall include, as a minimum:* *a. removal of unsuitable, compacted, or poorly draining fill material where necessary;*

	prior to fill placement and a specification for a engineered soil fill including compaction is provided by a Geotechnical specialist that has for a suitable level of permeability allowing treated wastewater to reach the underlying native soils whilst providing structural stability necessary for the location. This work would need to be overseen and inspected by a suitably trained and competent Geotechnical engineer.	*b. reinstatement using clean, suitable, permeable soil material compatible with wastewater disposal;* *c. placement of material in controlled layers to avoid excessive compaction;* *d. contouring of the disposal field to prevent ponding, scouring, or concentration of stormwater flows; and* *e. confirmation that the final ground conditions are suitable for installation and operation of the wastewater disposal lines.* *All remediation works and installation of wastewater disposal lines within any cut or fill areas shall be undertaken under the supervision of a suitably qualified and experienced wastewater practitioner, geotechnical engineer, or soil specialist. Written confirmation shall be provided to the Council prior to commissioning of the wastewater system, confirming that the disposal field has been remediated and installed in accordance with this condition and is suitable for its intended use.*
Slope stability of the disposal field is proposed for detailed design. Where the slopes of the disposal field are a concern, this would typically be assessed during the resource consent application.	Riley: As highlighted in Section 5.10 of the Riley GIR we consider that the proposed dripper line locations should be suitable with respect to stability, provided the application rate gives due allowance to the land gradients and separation	Accepted

	distances recommended in GD06. Review of the cross-section layout indicates that geotechnically critical cross-sections are nearby or aligned through the proposed disposal areas and that the scenarios considered (eg. a high level of ground saturation) are appropriate to inform our views in regard to the suitability of the slopes for effluent disposal. In a number of cases, stability enhancement measures have been proposed in our GIR to ensure that adequate FoS against instability are available.	
Communication provided by the applicant with Chemwaste indicates that Chemwaste has a consent to discharge 400m3/day but does not indicate how much of that capacity is available for this specific discharge.	Vineway is providing further information on this which will be addressed in a separate letter. Notwithstanding, the applicant accepts the conditions proposed (refer below) relating to the "Off-site Disposal Management Plan". This requires confirmation of the receiving facility prior to the commencement of any tankering from the site.	Accepted.
No commentary has been provided on the effect on receiving soils. A receiving soils assessment should be undertaken.	Riley: Assuming a well maintained treatment plant, discharging secondary or advanced second effluent at rates not exceeding the recommended design maximum for the soils present on the site and with adequate surface and ground water separation, the effects of this discharge on the receiving soil should be equivalent or less than those outlined in the TP58/GD06 for this system type and, as such, are considered to be less than minor.	Accepted

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)	Applicant Response	Council Specialist Response
209. The WWTP shall be designed and constructed in general accordance with the "Delmore Wastewater Treatment Plant Design Report" prepared by Apex and approved under Condition 1. Comment: The WW system is designed for Stage 1 of the development only. What is the trigger point for transferring to Stage 2?	Consent has not been sought for Stage 2 wastewater discharge. The subdivision conditions (section 3.1.12 – infrastructure servicing) requires that evidence is provided to Council to show that suitable provision has been made for the disposal of wastewater prior to the occupation of any dwellings within Stage 2.	Accepted.
218. Should three consecutive samples return results above the median mass load limits for the parameters detailed in Condition 216 or Condition 217 (depending on the time of the year), the consent holder shall notify Auckland Council within 5 working days. The consent holder must then conduct an investigation into the cause, supported by a report to be supplied to Auckland Council. The report shall outline the actions being undertaken to address and remedy the cause of the exceedance and detail whether further monitoring is required. Comment: As I&I is a risk where a low infiltration factor is used, some more flow monitoring at	The reason we have used three in this instance is that testing turnaround times for a fortnightly sampling regime means that once a non-compliant result has been received there is typically insufficient time for the changes to be made, the process to respond accordingly and the operator to validate this change has impacted the discharge quality prior to the next fortnightly sample being taken. As such, a single non-compliant result may be captured by two sampling occurrences due to result turnaround times. In the pre-consenting phase this was recommended by the council's expert, and Apex agrees that this provides a proactive means of ensuring compliance is maintained.	Accepted

various pump stations may be appropriate to isolate sources of infiltration when it occurs. This would mean 6 weeks of the effluent potentially being out of spec. Re-sampling and investigation needs to happen sooner to understand the reason for non-compliance and strategy to rectify. Recommended failure of samples should trigger immediate re-sampling and investigation.		
227. No more than 12 samples out of any 24 consecutive fortnightly samples shall exceed the specified limit. Comment: This appears to be very lenient, allowing considerable non-compliance.	The terms agreed during pre-consenting were for median limits. This condition simply defines the basis by which the median is calculated. To avoid extended non-compliance condition 218 was added in addition to median compliance requirements.	Accepted
231. The total nutrient loading into the irrigation field must not exceed the following application rates: Comment: The nitrogen loading in the design will exceed this limit very slightly. 220kg/ha/yr vs 220.8kg/ha/yr. No headroom in event of extended non-compliance for N.	The sustainable irrigation nutrient loadings have formed the basis of irrigation field sizing, hence the matching numbers at full design flow. While non-compliance will require a year to establish (by definition) regular testing and continuous flow monitoring to each irrigation zone will provide early indication if the limits are likely to be reached, allowing mitigation or corrective measures to be implemented.	Accepted.
Suggested New Consent Conditions		
Receiving Soils Monitoring Plan Prior to discharge commencing, the consent holder shall submit to Council for certification a Receiving Soils Monitoring Plan for all irrigation	This condition is accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted

areas and land treatment areas. The plan shall identify: • baseline soil sampling locations and depths; • parameters to be monitored, including at least total nitrogen, nitrate-nitrogen, ammonium-nitrogen, Olsen phosphorus or equivalent plant-available phosphorus, pH, electrical conductivity, sodium adsorption ratio or sodicity indicator, organic matter, and soil permeability/infiltration characteristics; • sampling frequency; • trigger levels for management response; and • corrective actions if adverse trends are identified		
Baseline and ongoing soil monitoring The consent holder shall: • undertake baseline soil monitoring before the first discharge to each irrigation area; and • thereafter undertake soil monitoring at least annually for the first 5 years, and thereafter at a frequency approved by Council based on demonstrated performance. If monitoring identifies nutrient accumulation, declining infiltration, salinity/sodicity effects, or other deterioration in soil condition attributable to the discharge, the consent holder shall investigate and implement remedial action.	This condition is accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted
No discharge to saturated soils / during unsuitable conditions	This condition is partially accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).. The	Accepted

No treated wastewater shall be applied to land irrigation areas when soils are saturated, when rainfall conditions are such that ponding or runoff is likely, or when field conditions are inconsistent with the certified Seasonal Discharge Management Plan.	update has removed reference to a seasonal discharge management plan as there is no requirement for this in the conditions.	
Irrigation zone integrity and as-built certification Before operation of any irrigation area, the consent holder shall provide to Council: • as-built plans of all irrigation lines, valves, zones and buffers; • certification from a SQEP that the irrigation system has been installed in accordance with the certified design; and • confirmation that all buffer setbacks to bores, watercourses, buildings and other sensitive features have been achieved.	This condition is accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted
Nutrient loading verification by zone The consent holder shall maintain a monthly record of: • the volume discharged to each irrigation zone; • the nutrient concentrations used for loading calculations; and • the resulting nitrogen and phosphorus loading rate for each zone and for the irrigation field as a whole. These records shall be provided to Council on request and summarised annually.	This condition is accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted

Independent annual operational audit The consent holder shall engage a suitably qualified and independent wastewater professional to undertake an annual audit of: • treatment plant performance; • compliance with discharge limits; • irrigation and infiltration field performance; • maintenance records; • alarm history; • incidents, spills, odour complaints, and corrective actions; and • adequacy of on-site discharge capacity relative to actual flows. The audit report shall be provided to Council.	This condition is partially accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted
Off-site Disposal Management Plan Prior to the commencement of any tankering of treated or untreated wastewater from the site, the consent holder shall submit to Council for certification an Off-site Wastewater Disposal Management Plan. That plan should identify: • the circumstances in which wastewater may be removed from the site; • whether the wastewater is treated wastewater, untreated wastewater, or sludge; • the approved receiving facility or facilities; • maximum daily volumes to be removed; • temporary storage arrangements on site; • truck loading procedures;	This condition is accepted and has been included within the updated condition set (refer section 2.1.21 – on-site wastewater servicing). The existing tankering management plan condition has been removed.	Accepted

• hours of operation; • spill prevention and spill response measures; • contingency measures in the event the nominated receiving facility is unavailable; and • record-keeping and reporting requirements. This is justified because the application material contemplates both treated and untreated wastewater being removed off site, and identifies third-party disposal pathways rather than a single permanent receiving point.		
Restriction to approved receiving facilities No wastewater shall be tankered from the site except to a lawfully authorised receiving facility that is identified in the certified management plan and has confirmed capacity and acceptance criteria. The consent holder shall maintain current written confirmation of acceptance from each receiving facility.	This condition is accepted and has been included within the updated condition set (refer section 2.1.21 – on-site wastewater servicing).	Accepted
Code-compliant tanker operators only All wastewater removed from the site shall be transported only by operators holding all required approvals, licences and codes of compliance for wastewater transport.	This condition is accepted and has been included within the updated condition set (refer section 2.1.21 – on-site wastewater servicing).	Accepted
Holding Capacity The consent holder shall maintain sufficient on-site holding capacity at all times to avoid unauthorised discharge, including during delays to tanker collection or temporary closure of any receiving facility. No wastewater shall be loaded to	This condition is accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted

or stored in a manner that could result in overtopping, leakage, or emergency discharge to land or water.		
Spill response and emergency management The consent holder shall maintain spill kits and emergency response procedures at the loading area and along the tanker loading interface. In the event of any spill, leak, tanker rollover, hose failure, or other accidental discharge, the consent holder shall: • immediately stop the discharge if safe to do so; • contain and recover the spill; • prevent any wastewater entering the stormwater system or watercourses; • notify Council as soon as practicable; and • provide a written incident report within a specified period.	This condition is accepted and has been included within the updated condition set (refer Section 7 – wastewater discharge permit).	Accepted
Odour and nuisance control All wastewater holding, loading and transport operations shall be undertaken so as to avoid offensive or objectionable odour beyond the site boundary. The consent holder shall maintain odour controls associated with the storage and handling infrastructure, particularly during any period of raw wastewater storage prior to collection.	Section 8 of the conditions relates to air discharges from the WWTP. This condition is not considered necessary as it is covered under the air discharge conditions.	Accepted
Waste tracking and reporting	This condition is accepted and has been included within the updated condition set. Wording has	Accepted

The consent holder shall keep a record of every tanker load removed from the site, including: • date and time of collection; • tanker operator; • wastewater type; • load volume; • destination facility; and • evidence of receipt / disposal. A summary of all off-site wastewater removed from the site shall be provided to Council at regular intervals.	been amended to say that the records must be provided to Council every 3 months (refer section 2.1.21 – on-site wastewater servicing).	
Contingency if receiving facility unavailable If an approved receiving facility cannot accept wastewater, tankering from the site shall cease unless and until wastewater can be directed to another approved facility identified in the certified management plan. The consent holder shall maintain contingency storage and alternative disposal arrangements sufficient to avoid any unauthorised discharge.	This condition is accepted and has been included within the updated condition set (refer section 2.1.21 – on-site wastewater servicing).	Accepted
Review / trigger condition Council should reserve the right to review the trucking conditions if: • truck numbers materially exceed those anticipated; • complaints are received regarding traffic, noise, odour or spills;	The applicant accepts a review condition in principle, however is reviewing the specific wording and will provide a separate response to Council on this matter.	I continue to recommend inclusion of a review condition allowing Council to review the trucking / off-site disposal conditions if truck movements materially exceed those anticipated, complaints are received, a receiving facility changes its acceptance criteria, or monitoring indicates that off-site disposal is being used more extensively than assessed. Given the seasonal dependence on off-

• a nominated receiving facility changes its acceptance criteria; or • monitoring shows the off-site disposal regime is being used more extensively than assessed. That would give a practical mechanism to respond if trucking becomes a more intensive or longer-term part of the operation than currently presented.		site disposal, particularly during summer, this condition remains appropriate and should be finalised before the wastewater package is considered fully resolved. Noted that the applicant is preparing a condition.

Appendix A: Wastewater Disposal Trench

A concept design for a treated effluent disposal trench was designed by Calthom Consultants for the Karaka North Village land development project and has been shown in the figure below. The concept that this trench design is based on is well suited to the Delmore site as it does not rely on infiltration through the native soils but rather provides a naturalised and discrete discharge pathway allowing flows to enter the local unnamed tributary.

The trench consists of two separate parts, (i) the trench itself and (ii) the drainage blanket that extends from the edge of the trench down to the edge of the unnamed tributary. When the underlying soils are unable to assimilate flows into the trench, it shall overfill beneath the surface before diverting down through the drainage blanket. The drainage blanket, installed beneath the surface as a part of riparian improvement works provides a naturalised discharge pathway

where discharges can enter the unnamed tributary without requiring a physical pipe, or other discharge structure. This allows the discharge to have minimal impact on the natural environment while also making the treated wastewater available for uptake by planting within the riparian zone.

The figure below shows a conceptual design for this infiltration trench and drainage blanket. Site topography, slope stability and various other geotechnical considerations will be confirmed prior to detailing a suitable design for construction.

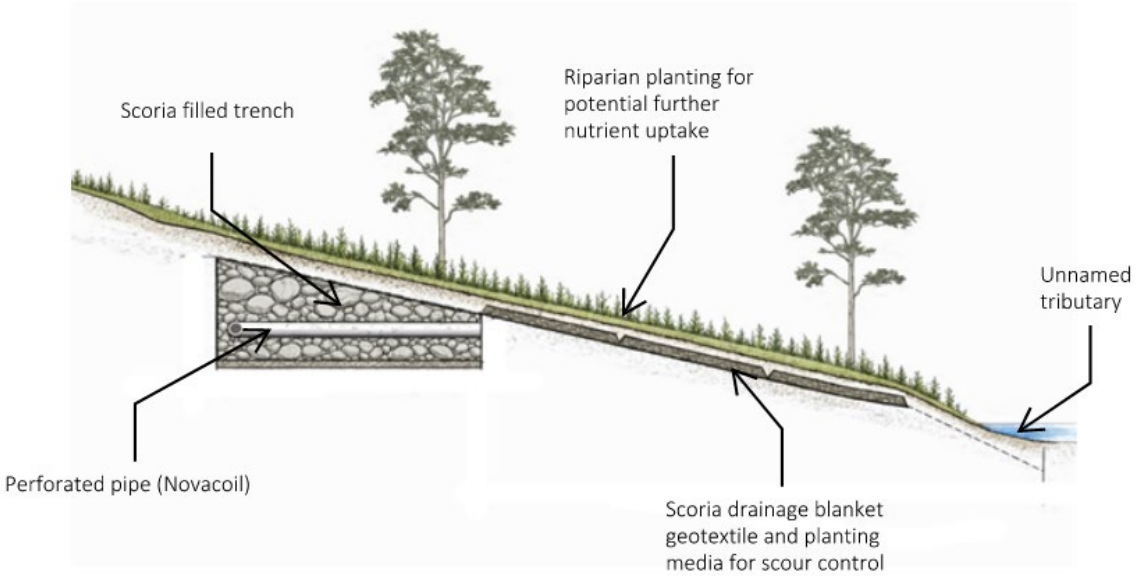
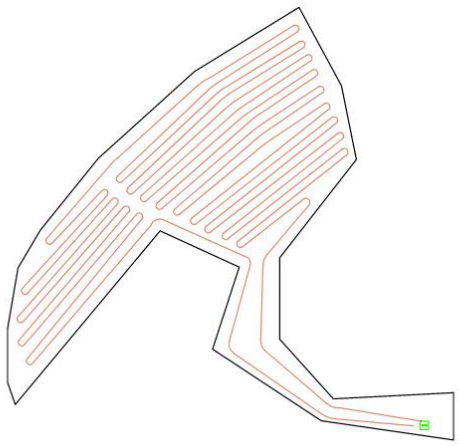


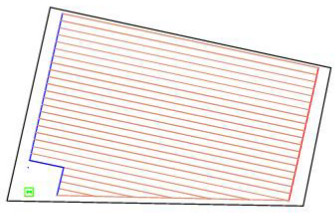
Figure 1 – Concept design of the infiltration trench used to provide land contact to discharges prior to entry into the unnamed tributary. (Calthom Consultants, 2021)

Appendix B: Wastewater Irrigation Areas

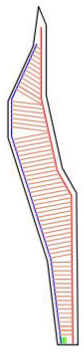
A concept design for the irrigation areas is shown below in Figure 2, 3 and 4.



IRRIGATION ZONE - H
AREA - 1400m2



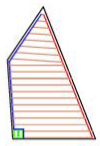
IRRIGATION ZONE - I
AREA - 1000m2



IRRIGATION ZONE - F
AREA - 570m2



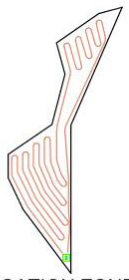
DELMORE STAGE-1 IRRIGATION ZONES
SHOWN IN BLUE



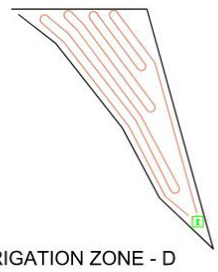
IRRIGATION ZONE - G
AREA - 170m2



IRRIGATION ZONE - B
AREA - 620m2



IRRIGATION ZONE - C
AREA - 290m2



IRRIGATION ZONE - D
AREA - 200m2

IRRIGATION ZONE AREA	
A	3590
B	620
C	290
D	200
E	3300
F	570
G	170
H	1400
I	1000
J	10000
TOTAL	21140

NOTES:
1. AIR AND VACUUM RELIEF TO BE INCLUDED DURING DETAIL DESIGN
2. ZONES MAY BE SPLIT DEPENDING ON LAYOUT REQUIREMENTS
3. GENERAL NETAFIM DETAILS TO BE FOLLOWED
4. LAYOUT CONCEPT ONLY.

DRAWN:
APPD:
DATE:
ZONE | REV | DRN | DATE

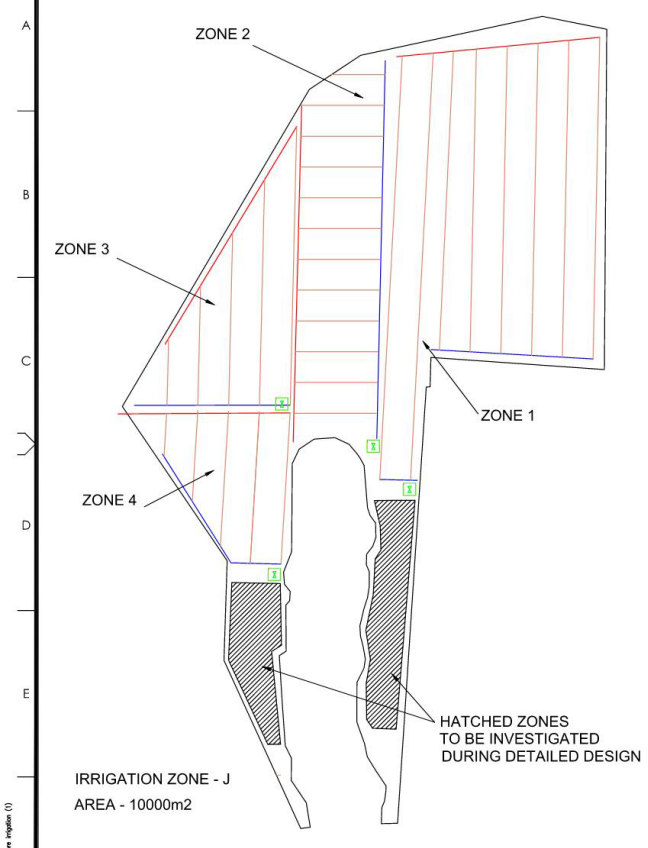
Apex Water
APEXWATER.CO.NZ
• Level 1, 18 Woolcombe Street, Timaru 7910.
• Unit B1/570 Mt Wellington Highway, Mt Wellington, Auckland, 1062.
• Unit 1, 1 Edmonton Rd, Hornby South, Christchurch, 8042.
P: 03 929 2675 NEW ZEALAND

PROJECT NAME: DELMORE
PROCESS AREA: WASTEWATER DISCHARGE
TYPE: IRRIGATION LOCATION PLAN
TITLE: CONCEPT IRRIGATION PLAN -1

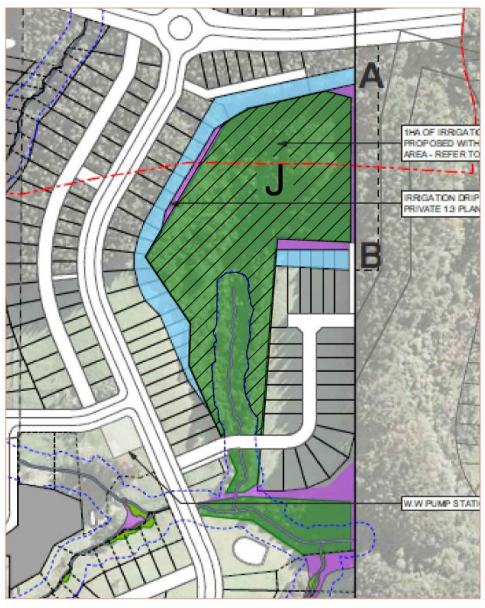
CAD FILE | SCALE: NTS | A3
CONTRACT No. DELMORE | REV. 1
DRAWING No. SKETCH

c:\users\jacktaylor\downloads\delmore irrigation (1)
May 17, 2023

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IRRIGATION ZONE - J
AREA - 10000m2



DELMORE STAGE-1 MAIN IRRIGATION ZONE
AS HATCHED

DRAWN:
APPD:
DATE:
ZONE | REV | DRN | DATE

Apex Water
APEXWATER.CO.NZ
• Level 1, 18 Woolcombe Street, Timaru 7910.
• Unit B1/570 Mt Wellington Highway, Mt Wellington, Auckland, 1062.
• Unit 1, 1 Edmonton Rd, Hornby South, Christchurch, 8042.
P: 03 929 2675 NEW ZEALAND

PROJECT NAME: DELMORE
PROCESS AREA: WASTEWATER DISCHARGE
TYPE: IRRIGATION LOCATION PLAN
TITLE: CONCEPT IRRIGATION PLAN -3

CAD FILE | SCALE: NTS | A3
CONTRACT No. DELMORE | REV. 1
DRAWING No. SKETCH

c:\users\jacktaylor\downloads\delmore irrigation (1)
May 17, 2023

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Figure 4 – Proposed Irrigation Zone (Sheet 3 of 3)

Figure 3 – Proposed Irrigation Zone (Sheet 2 of 3)

Appendix C: Geotechnical Investigations in relation to Wastewater Disposal Areas

Appendix D: Redundancy in design to avoid loss of containment (in response to Terrestrial Ecology Comments)

There are various aspects of the proposed wastewater treatment plant design that protect against the accidental loss of containment of raw or partially treated wastewater. These include:

Duty / Standby Configuration of Key Equipment

By providing redundancy in the form of a duplicated items of equipment for critical plant or control elements (i.e pumps or instrumentation) the process can automatically switch to the spare piece of equipment in the event of a failure. This means that in practice, if a critical pump was to fail the process would identify this and the spare would come automatically into service. If an instrument was to fail to same would occur and the plant control would be secured. This protects against accidental overflows, loss of containment or loss of control and aligns with standard practice for municipal level wastewater treatment plants throughout New Zealand.

Balance Tank

Should a process interruption or maintenance activity require a restriction to the plant throughput or for the plant to be taken offline entirely, the balance tank will act as a buffer to allow for the receipt of flows regardless of downstream treatment. Raw wastewater will flow into the balance tank and accumulate until the process is back online. Should the works require a significant period of time offline (greater than 1-day) then the raw wastewater can be removed from site utilising the existing infrastructure proposed.

Back-up Generator

It is proposed that the plant includes provision for a back-up generator with auto-changeover in the event of power loss. The generator would be sized to power all critical processes and would in short allow the treatment plant to operate without mains supply power. It is noteworthy that if the treatment plant does not have power, it is likely that the development is also without power and the low-pressure sewer system will not be in use and all flows to the plant will seize over this period of time.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 14:

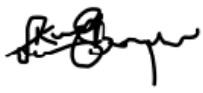
Hazardous Substances

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Hazardous Substances

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Louis Boamponsem
Qualifications & Relevant Experience:	I hold a PhD in Environmental Science degree from The University of Auckland. I have 14 years' experience in research and broad environmental science lecturing including more than 20 published articles. I am employed as a Senior Specialist within the Contamination, Air and Noise team of the Specialist Unit, Planning and Resource Consents Department, Auckland Council. I have held this role since May 2024 and am principally involved in evaluating and preparing specialist and technical input to resource consenting issues and proposals.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	17/3/2026

3.0 Executive Summary / Principal Issues

The hazardous substances component of the revised Delmore application remains unchanged from the original proposal. The same chemicals, volumes and storage arrangements assessed in the initial application continue to apply, and the updated design information confirms there has been no change to the hazardous substances risk profile of the temporary wastewater treatment plant (WWTP).

As before, the aggregate quantities of toxic, corrosive and eco-toxic substances exceed the permitted thresholds for the Future Urban Zone, meaning the activity retains its Discretionary Activity status under AUP (OP) E31 provisions.

What has changed in the current application is the structure and wording of the proposed consent conditions relating to hazardous substances. In Appendix 44, the original "Wastewater Treatment Plant Management Plan" (WTPMP) framework has been replaced with a more comprehensive Wastewater Management Plan (WMP). The WMP conditions now sit within the on-site wastewater servicing and wastewater discharge consent sections and have been refined to:

- strengthen requirements for spill response and reporting,
- clarify expectations around drainage plans, inventories and auditing,
- integrate operational requirements for the WWTP (including staff training and maintenance), and
- introduce additional controls where wastewater is taken off-site (e.g., tanker filling hygiene and odour controls).

Despite these structural changes, the purpose and effect of the proposed conditions remain consistent with the earlier version: to ensure safe handling, containment and management of hazardous substances associated with the WWTP. The HSITA assessment still applies as originally prepared, and the updated conditions maintain or enhance the level of control expected for a discretionary hazardous facility.

Overall, the revised condition set does not alter the hazardous substances risk profile of the proposal. With the updated WMP-based conditions in place, the hazardous substances aspects of the WWTP continue to present a low overall risk to people, property and the environment, and can be supported.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore Fast-track Approval Application – Assessment of Environmental Effects (AEE), prepared by Barker & Associates Ltd, dated 17 February 2025.
- Appendix 22 – Delmore Fast-track: Proposed Consent Conditions (withdrawn application).
- Appendix 32: Delmore Subdivision: Hazardous Substances and ITA Assessment (HSITA), 13, February 2025, (withdrawn application)
- Appendix 40: Delmore Subdivision: Hazardous Substances and ITA Assessment (HSITA), 16 December 2025, (New application)

- Appendix 44 – Proposed Conditions (December 2025 application), including the updated hazardous substances conditions.
- Wastewater Disposal Memorandum (Vineway Ltd), dated 18 December 2025 (supporting information for treated/untreated wastewater tankering).

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

6.1 Existing Environment and Proposal Context

The temporary WWTP is located on a knoll between two gullies containing tributaries of the Ōrewa River, which naturally separates the facility from both existing and proposed residential areas. This remains unchanged from the original application, and the hazardous substances proposed (acetic acid, sodium hydroxide, sodium hypochlorite, aluminium sulphate, citric acid and diesel) are the same substances and volumes previously assessed. No new substances or storage configurations have been introduced in the revised application.

6.2 Actual and Potential Effects

The activity continues to exceed the permitted thresholds for toxic, corrosive and eco-toxic substances under AUP (OP) E31, and therefore retains its Discretionary Activity status. The HSITA assessment confirms that with standard engineering controls (secondary containment, bunding, closed transfer systems, spill containment) and operational controls (training, inventories, spill response, stormwater isolation), the likelihood of an off-site release is very low and any potential consequences are low to moderate. Overall, the WWTP presents a low level of residual risk to people, property and the environment.

6.3 Mitigation Measures and Proposed Conditions

Although the hazardous substances profile of the proposal has not changed, the applicant has refined the conditions in the revised Appendix 44. The previous WTPMP framework has been replaced with a more comprehensive Wastewater Management Plan (WMP), which strengthens requirements around spill response, drainage mapping, auditing, staff training and maintenance. The updated condition set also integrates stormwater isolation, tanker-filling hygiene, and odour controls where wastewater is taken off-site. These refinements maintain or improve the level of protection anticipated in the initial application.

Based on the information provided and the controls proposed, I consider the potential adverse effects associated with hazardous substances to be acceptable. The proposed Conditions 51, 60 and 209 are appropriate to ensure safe operation of the WWTP for the duration of its use.

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

Based on the information provided in the AEE, the HSITA assessment, the updated condition set in Appendix 44, and my review of the hazardous substances aspects of the proposal, I support the application from a hazardous substances perspective.

The revised application does not introduce any new hazardous substances or alter the volumes or storage arrangements previously assessed. The overall activity status under E31 remains Discretionary due to exceedance of the toxic, corrosive and eco-toxic thresholds, consistent with the original application.

The updated conditions (now incorporated into the Wastewater Management Plan (WMP) framework) strengthen operational requirements around spill response, containment, inventories, training, auditing, and stormwater isolation. These refinements maintain or enhance the level of control anticipated in the earlier version of the application.

The HSITA concludes that, with the proposed controls, the likelihood of an off-site release is very low and any potential consequences are low to moderate, resulting in a low overall risk to people, property and the environment. I agree with these conclusions.

Accordingly, I consider that the hazardous substances component of the proposal can be appropriately managed through the recommended conditions and that the application can be supported.

9.0 Proposed Conditions

Proposed condition 209, together with the supporting site-management requirements in conditions 51 and 60, provides a sufficient framework to manage and mitigate potential adverse effects associated with hazardous substances. These conditions collectively ensure that hazardous substances are stored, handled and used in accordance with appropriate containment, spill response, operational controls and environmental safeguards.

In my view, these conditions are adequate to avoid or minimise risks to people, property and the environment over the duration of the temporary WWTP.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 15:

Air Quality

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Air Quality

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Louis Boamponsem
Qualifications & Relevant Experience:	I hold a PhD in Environmental Science degree from The University of Auckland (specialising in air quality monitoring and assessment). I have 14 years' experience in air quality monitoring, research and broad environmental science lecturing including more than 20 published articles. I am employed as a Senior Specialist within the Contamination, Air and Noise team of the Specialist Unit, Planning and Resource Consents Department, Auckland Council. I have held this role since May 2024 and am principally involved in evaluating and preparing specialist and technical input to resource consenting issues and proposals. I was previously employed by the Research and Evaluation Unit (RIMU), Auckland Council as an Air Quality Scientist.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	17/3/2026

3.0 Executive Summary / Principal Issues

The revised Delmore application introduces several important changes that affect air quality outcomes and the suitability of the proposed conditions. The updated air discharge assessment covers the project more fully than the withdrawn version, and it identifies several new activities that have the potential to generate odour or dust. These additions change the overall risk profile of the proposal and require stronger, more targeted conditions to ensure any effects remain appropriately managed.

The key points are summarised below:

1. New odour-generating activities now form part of the proposal

The introduction of off-site tankering of untreated wastewater is a significant change from the earlier application. This creates new odour sources at the tanker filling point, the tanker back-vent, and the raw wastewater holding tank. These activities were not previously assessed or conditioned, and they sit close to existing and future residential receptors. As a result, the application now presents greater odour risk than the withdrawn proposal.

2. Odour control conditions have been strengthened to match the increased risk

The new set of conditions responds to these new sources through:

- Dedicated odour control for tanker back-vent air.
- Odour control for holding tank ventilation.
- Early-stage verification of odour control performance by a Suitably Qualified and Experienced Practitioner (SQEP).
- A broader and more robust Odour Management Plan (OMP) that covers both the WWTP and tankering operations.

These additions address the gaps in the earlier conditions and are necessary to maintain acceptable odour performance at the site boundary.

3. Construction dust is now addressed

A key improvement in the new application is the requirement for a Construction Air Quality Management Plan (CAQMP). This introduces clear expectations around dust mitigation, daily inspections, complaints handling, and contingency actions. Given the extent of earthworks and the use of an unsealed portion of Russell Road for tanker movements, these measures are essential.
Additional conditions requiring inspection, maintenance and re-surfacing of the unsealed road further reduce the likelihood of dust problems beyond the site.

4. Core WWTP odour controls are retained and strengthened

The main odour control measures for the WWTP (enclosure, extraction, activated carbon treatment, and stack discharge) remain in place. The new conditions make them more rigorous by requiring SQEP verification and by embedding them within the expanded OMP. This improves the enforceability and operational clarity of the controls.

5. Overall conclusion

From an air quality perspective, the new application represents both an increase in potential risk (through untreated wastewater tankering) and a substantial improvement in the control framework designed to manage those risks.

With the strengthened conditions (particularly for odour control, dust management, verification, and ongoing operational planning) the air quality effects of the proposal can be managed so they remain acceptable and less than minor.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Delmore Fast-track Approval Application – Assessment of Environmental Effects (AEE), prepared by Barker & Associates Ltd, dated 17 February 2025.
- Appendix 22 – Delmore Fast-track: Proposed Consent Conditions (withdrawn application).
- Appendix 31 – Technical Assessment of Discharges to Air from the Proposed Wastewater Treatment Plant – Delmore, Ōrewa, prepared by Air Matters Ltd, dated 11 February 2025 (withdrawn air quality report).
- Appendix 44 – Proposed Conditions (December 2025 application), including the updated air discharge conditions.
- Appendix 39 – Air Discharge Assessment, prepared by Air Matters Ltd, dated 19 December 2025 (updated air quality report).
- Wastewater Disposal Memorandum (Vineway Ltd), dated 18 December 2025 (supporting information for treated/untreated wastewater tankering).

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

6.1 Existing Environment and Sensitivity of Receptors

The receiving environment is a developing area with a mixture of rural land, ongoing construction activities, and new residential neighbourhoods emerging through the Delmore and Ara Hills developments. Sensitive receptors exist in all directions around the WWTP site, including dwellings within approximately 70 -150 metres of the plant footprint. These receptors will increase in number as subdivision progresses.

6.2 Potential Adverse Effects

6.2.1 Odour Effects from the WWTP

The proposed WWTP includes standard odour generating components such as screening, sludge handling, and biological treatment. These processes can produce strong and unpleasant odours if not adequately controlled. The updated air discharge assessment indicates that, under normal operating conditions, odour can be effectively contained through enclosure, extraction, and treatment using activated carbon. However, the plant's close proximity to residential areas means that abnormal events (e.g., mechanical failure, loss of aeration, extraction faults) could result in temporary but noticeable odour off-site if not well managed.

6.2.2 Additional Odour Sources - Untreated Wastewater Tankering

A key change in the revised application is the potential for off-site tankering of untreated wastewater, which introduces new odour risks at the filling point, the tanker back-vent, and the raw wastewater holding tank.

These activities have a higher probability of generating acute, short-duration odour plumes, particularly during filling operations. Given the short separation distances to housing, these sources require robust controls to ensure effects remain within acceptable levels.

6.2.3 Dust Effects from Earthworks and Tanker Movements

The scale of the development means construction dust is an inherent risk, particularly on dry days and during periods of significant earthworks. The use of an unsealed portion of Russell Road by wastewater tankers presents an additional dust pathway that needs to be addressed in the conditions. Without specific mitigation, dust emissions from truck movements could result in nuisance effects for nearby properties and construction workers.

6.3 Proposed Mitigation Measures

6.3.1 Odour Mitigation

The application includes a more complete and appropriate set of mitigation measures. These include:

- Enclosure of key odour-producing components.
- Negative pressure extraction systems.
- Activated carbon odour treatment with pre-heating to reduce humidity.
- Backup power to maintain aeration and extraction in the event of outages.
- A strengthened Odour Management Plan (OMP).
- SQEP verification of odour control system performance following installation.

For tankering, the new requirement to install odour control for both tanker back-vent air and holding tank venting, along with mandatory performance certification, materially reduces the risk of off-site odour.

6.3.2 Dust Mitigation

The new Construction Air Quality Management Plan (CAQMP) introduces appropriate minimum standards for dust control, including routine inspections, water suppression, wheel wash controls, and contingency actions.

Additional measures requiring surface maintenance of the unsealed road and soil tracking management at the turning head will help reduce dust generated from tanker activity. These controls were absent from the withdrawn application and are important for protecting amenity.

6.4 Alignment with AUP (OP) E14 Provisions

The proposed conditions and mitigations are consistent with the expectations of the Auckland Unitary Plan (AUP), Chapter E14 (Air Quality). The discharge of odour from a municipal WWTP is discretionary activity under AUP (OP) E14 provisions.

Based on the controls now proposed; especially the enclosure, extraction and treatment systems, the OMP, and the new tankering-related odour controls; the proposal meets the intent of the AUP provisions and the Ministry for the Environment's Good Practice Guide for Assessing and Managing Odour (2016).

6.5 Overall Opinion and Recommendation

In my view, the revised proposal presents higher inherent air quality risks than the withdrawn application due to the introduction of untreated wastewater tankering. However, the proposed conditions have also been significantly strengthened, and now include the necessary measures to manage both odour and dust effects to an acceptable level.

Provided the full suite of new air quality conditions is included without dilution; particularly those relating to tanker odour control, verification, the OMP, the CAQMP, and unsealed road dust management; I consider that the air quality effects of the proposal can be managed so that they remain less than minor.

Accordingly, I support the application from an air quality perspective, subject to the retention of the strengthened conditions in the updated package.

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

Based on the information provided in the application, the updated air discharge assessment, and the strengthened package of conditions, I consider that the air quality effects associated with the proposal can be appropriately managed. The introduction of untreated wastewater tankering certainly increases the potential for odour and dust impacts; however, the revised conditions now include the necessary controls, verification steps, and management plans to reduce these effects to an acceptable level.

On this basis, I support the application from an air quality perspective, provided that the full suite of air quality related conditions contained in the updated proposal is included without weakening or removal. These conditions (particularly those relating to odour control for tanker operations, the Odour Management Plan, verification requirements, construction dust management, and ongoing monitoring) are essential to ensuring that adverse air quality effects remain less than minor.

9.0 Proposed Conditions

The updated air discharge conditions (18, 245 - 257) in Appendix 44 represent a significant improvement over the withdrawn version. They introduce targeted controls for tankering odour, strengthen WWTP odour requirements, and add a robust Construction Air Quality Management Plan. This is a solid base, and all of the proposed conditions are appropriate.

Recommended amendment:

Add a condition requiring a field-based odour survey undertaken by an independent SQEP within the first 2 months of operation (WWTP + tankering), with a requirement to implement corrective actions if odour is detected at the boundary.

Within two months of the first operation of the wastewater treatment plant and commencement of tanker filling activities (whichever occurs first), the consent holder must engage an independent Suitably Qualified and Experienced Practitioner (SQEP) to undertake a post-commissioning odour assessment.

The assessment must:
(a) Include field-based odour observations at and beyond the site boundary under representative operating conditions for both the WWTP and tanker filling activities;
(b) Be carried out in general accordance with the Ministry for the Environment's *Good Practice Guide for Assessing and Managing Odour (2016)*;
(c) Identify any odour that is, in the opinion of the SQEP, offensive or objectionable beyond the boundary of the site; and
(d) Recommend corrective actions where necessary to avoid future odour effects.

Within 20 working days of completing the assessment, the consent holder must provide the odour assessment report to the Council and implement any corrective actions identified in the report within the timeframe specified by the SQEP.

10.0 Supporting Documents

N/A

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 16:

Groundwater Use

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	PRR00043360 (EPA: FTAA-2512-1164)

2.0 Technical Specialist Memo – Water Supply

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Marija Jukic – Team Leader – Coastal and Water Allocation Team
Qualifications & Relevant Experience:	I hold the qualification(s) of: **Bachelor of Science in Chemistry, a Master of Science (Hons) in Geology** and a **Master of Science in Hydrogeology and Groundwater Management** and have **9** years of experience in **hydrogeological assessments**. I have prepared expert evidence and technical assessments for resource consent applications and fast-track applications on numerous occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	26 March 2026

3.0 Executive Summary / Principal Issues

In response to advice from Watercare that connection of the proposed Delmore residential development at 88, 130, 132 Upper Orewa Road and 53A, 53B and 55 Russell Road, Orewa (the 'site'), to the public water supply would not occur until approximately 2038, the Applicant **has developed** two water servicing options for the planned two-staged development.

Option 1

The Applicant proposes to use four groundwater bores, a water treatment plan (WTP) and on-site reservoir to provide a private on-site potable water supply. This option would be carried in two phases to align with the two stages of the Delmore development.

Phase 1 would services Stage 1 of the Delmore development via two groundwater bores located in the Stage 1 area, with the abstracted water pumped to the WTP and then a booster pump pressurizing the network.

Phase 2 would services Stage 2 of the Delmore development with groundwater abstracted from two proposed groundwater bores located within Stage 2 of the development fed into the WTP. The booster pump would transfer treated water to proposed reservoirs, with potable water being distributed from these points around the site.

The Applicant has proposed a number of options to treat the abstracted groundwater to ensure it is of a quality suitable for potable use that meets Drinking Water Standards for New Zealand. The proposed drinking water treatment plant will be located at the site of the Wastewater Treatment Plan (WWTP).

Option 2

The Applicant has proposed a two-phase approach to connect to the existing watermains adjacent to the site. Phase 1 would involve connection to an existing main east of the site located on Grand Drive, and Phase 2 would see connection to the south that is required at ~550 homes.

Watercare have indicated that connection to a proposed reservoir on the adjacent Ara Hills Site will be necessary to service the Delmore Development. Construction of the proposed reservoir is planned to commence in January 2027. The Applicant has suggested that a commercial agreement between Delmore and Ara Hills to increase the size of the proposed reservoir so that it could also service the Delmore Development, would enable the site to be serviced. The Applicant is working with Auckland Council and Watercare on addressing servicing infrastructure requirements including the reservoir and the main from the reservoir to the Delmore site.

The Applicant notes that all options for Stages 1 and 2 do not rely on each other to provide servicing for the other, with the exception of the WTP and surrounding infrastructure.

The Applicant has proposed a number of water conservation measures for Stage 2 to ensure adequate water supply can be provided, including water efficient fittings, water recycling systems, and rainfall harvesting tanks.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- AEE titled, *"Delmore Fast Track Approval Application Assessment of Environmental Effects and Statutory Analysis",* prepared by B&A Urban &Environmental, revision 1 and dated 23 December 2025
- Appendix 27 Infrastructure Report, *"Water Wastewater and Utility Infrastructure Report",* prepared by McKenzie & Co, revision G and dated 22 December 2025
- Appendix 28 Wastewater Plan, *"Delmore Stage 1 53a, 53b & 55 Russell Rd Orewa Options 1a &1b Low Pressure System Wastewater Treatment Plant",* prepared by McKenzie & Co., Revision B and dated 17 December 2025.

5.0 Specialist Assessment

It is understood that the Applicant proposes to provide water to Delmore through the proposed on-site system (Option 1). However, the on-site infrastructure has been designed to enable connection to the public network at any time (Option 2).

I note that the Applicant has initiated steps under Option 1, having sought and been granted a groundwater take and use consent WAT60456696 to take 1,385m^3/d and 195,707m^3/yr for domestic supply for up to 1,217 dwellings from the underlying Orewa Waitemata Aquifer. The Council's assessment of the groundwater take consent application concluded that the proposed bores on site are likely capable of producing the daily and annual abstraction limits based on yields from neighbouring bores in the area.

Additionally, two land use consents LUC60456721 and LUC60456730 to drill the two proposed groundwater production bores within proposed Stage 1 of the Delmore development have been granted.

I consider that the implementation of either one of the two water servicing options developed by the Applicant will secure an adequate water supply for both stages of the proposed Delmore development.

As drinking water suppliers, the Applicant will be required to comply with mandatory requirements under the Water Services Act 2021, the Water Services (Drinking Water Standards for New Zealand) Regulations 2022 and Drinking Water Quality Assurance Rules 2022 ensuring the water supply is safe to drink.

6.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

7.0 Recommendation

Based on the information provided by the applicant with respect to water supply, I am in support of the application.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 17:

Water Treatment

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Water

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Patrick O'Riordan
Qualifications & Relevant Experience:	I hold the qualification(s) of: Beng (Hons) Mechanical and Manufacturing, BA. Mathematics and a PGDip in Clean Technology Management and have 16 years of experience in process, mechanical, water & wastewater engineering. I am a full member of Engineering New Zealand and Water New Zealand. I am a Chartered Professional Engineer (CPEng.) My practice areas are Environmental engineering and Water engineering. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, and fast-track applications and have appeared as an expert witness before consent authorities.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	17 April 2026

3.0 Executive Summary / Principal Issues

Water

In relation to water supply, the proposal also provides for a private on-site potable water servicing strategy in circumstances where connection to Watercare's public water network is not presently available or assured. Option 1 is based on four groundwater bores abstracting from the Orewa Waitemata aquifer, feeding a water treatment plant and on-site storage / reservoir infrastructure.

Stage 1 would be serviced by bores PB1 and PB2 via a raw water collection tank, treatment plant and booster system pressurising the Stage 1 reticulation. Stage 2 would be serviced by bores PB3 and PB4, with treated water pumped to elevated reservoirs from which the network would be gravity fed. The supporting drawings show a 400 m3 raw water collection tank, a 1,600 m3 treated water storage tank for Stage 1, and two 565 m3 Stage 2 reservoirs with provision for a third if required.

Apex states that the potable water treatment plant is required irrespective of the wastewater option and is initially sized for Stage 1, with modular expansion for later stages. The treatment process is described as either cartridge filtration and UV disinfection, or multi-media filtration and UV disinfection, with chemical dosing and online monitoring to produce potable water complying with the Drinking Water Standards for New Zealand. The Stage 1 average and peak daily demands are stated as 321 m3/day and 642 m3/day respectively, increasing to 692 m3/day and 1,385 m3/day for Stage 2.

The applicant also relies on demand reduction measures, including greywater recycling and rainwater harvesting, to reduce pressure on the bore supply. Firefighting has been addressed at a concept level, with Appendix 27 stating the Stage 1 booster arrangement is intended to provide adequate firefighting pressures, and Apex stating reservoir sizing has taken account of firewater requirements. The principal issue for assessment is therefore whether the proposed water supply, treatment process, storage and private reticulation arrangements have been sufficiently demonstrated to provide a reliable and resilient potable and firefighting supply.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Appendix 27 McKenzie & Co, *Water, Wastewater and Utility Infrastructure Report Rev G, dated 22 December 2025.*
- *Appendix 28 McKenzie & Co, Water, Wastewater and Utilities Drawings Rev B, dated 22 December 2025*
- *Appendix 29 – Water and Wastewater Design Report*. Apex Water Limited dated 25 November 2025.
- *Appendix 44 – Proposed Consent Conditions*. December 2025.
- *WAT60456696 (Groundwater take)*
- *LUC60456730 (Land use Consent)*
- *LUC60456721 (Land use Consent)*

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

None identified

6.0 Specialist Assessment

Summary

Water Supply

6.1. The proposal relates to the treatment of water for potable supply to the residential development.
6.2. Water shall be extracted from a series of bores on site. The abstraction consent is not part of this application, and therefore the effects of this activity are not covered in this assessment.
6.3. The Council groundwater specialist has advised that the bore is likely to provide the volume of water required without adverse effects on the aquifer.
6.4. Reticulation of the water shall be done in accordance with the WSL code of practice for potable water.
6.5. Hazardous substances associated with operation of the Water Treatment Plant will need to be stored and transferred correctly. This can be mitigated through appropriate design of the chemical handling and storage equipment which will require HSNO Certification.
6.6. The waste stream from the water treatment plant needs to be quantified, and the discharge of this waste stream confirmed.

7.0 Section 67 Information Gap

Water

Description of Missing Information

7.1. The Water take consent has been granted, however there is no water quality data for design of the treatment plant. The sample used is from 2016, from a bore located outside of the property.
7.2. The application does not provide a water balance sufficient to demonstrate how the water shall be supplied reliably to the development during increased use periods, which will typically coincide with drought conditions. Water harvesting is mentioned but not detailed.
7.3. A “Hydroloop” system is also referred to, however the figure of 30-40% water re-use is not tested, nor detailed as to how this would be integrated into the overall water supply for the development. Is this going to be a condition for developing dwellings on the site?
7.4. There is likely to be a waste stream from the water treatment plant, while this is likely to be small when compared to the wastewater from the balance of the development, can this please be quantified and its management confirmed?

7.5.	The application material indicates that the proposed reticulation network and treatment plant are to remain in private ownership of a private infrastructure company that will seek network operator status. However, the application does not clearly identify the proposed legal entity that will own the water and wastewater assets, nor does it explain whether ownership and governance will sit with a network utility operator, body corporate, incorporated society, or another structure. Please refer to suggested condition below.
7.6.	The application also does not clearly allocate long-term responsibility for operation, maintenance, renewal, compliance, auditing, customer interface, charging/revenue collection, emergency response, and asset replacement across the proposed private water and wastewater systems. The supporting material refers variously to a private infrastructure company, a utility company, Apex as operator, and the owner of the plants carrying out audits, but without a single clear governance and responsibility framework. Please refer to suggested condition below.

8.0	**Proposed Conditions**	
	Applicant Proposed Conditions *The consent holder must construct the on-site water treatment infrastructure in general accordance with the "Delmore Water and Wastewater Treatment Plant Design Report" prepared by Apex and approved under Condition 1.*	**GWE Comment**
69	*Groundwater for domestic supply shall be taken and treated in accordance with the relevant conditions of the groundwater take consent referenced under consent number WAT60456696.*	Agreed
70		Agreed
NEW	***Requested Additional Conditions*** **Private Utility Ownership and Governance Plan** Prior to the commencement of operation of any private water supply or wastewater reticulation, treatment plant, reservoir, bore, pump station, or associated private utility infrastructure authorised by this consent, the consent holder shall submit to Council for certification a Private Utility Ownership and Governance Plan. The plan shall identify: • the legal entity that will own the infrastructure; • the party responsible for operation, maintenance, renewal, compliance monitoring, emergency response, customer interface and complaints management;	Suggested condition addressing point 7.5 and 7.6 above.

- the intended pathway and timeframe for obtaining any required network operator status, registrations, or approvals from the relevant regulator(s);
- the arrangements for long-term funding and asset management; and
- contingency arrangements if the nominated owner or operator ceases to act.

No operation of the private potable water supply system shall commence until the consent holder has provided to Council evidence that all approvals, registrations, and operator requirements required by the relevant drinking water regulator, including Taumata Arowai where applicable, have been obtained**.**

Hazardous Substances – Water Treatment Plant
Prior to the commencement of operation of the water treatment plant, the consent holder shall submit to Council for certification a Hazardous Substances Storage and Management Plan for the water treatment plant and associated potable water infrastructure.
Water Supply Management Plan

Suggested condition addressing point 6.5 above

Prior to commissioning of the on-site potable water supply system, the consent holder must submit to Council for certification a Water Supply Management Plan prepared by a suitably qualified water engineer and drinking-water specialist.
The Plan should include:

- source description and bore construction details;
- sustainable yield assessment;
- peak day, average day, and seasonal demand calculations for each stage and full build-out;
- treatment process description and design capacity;
- storage volumes for operational, emergency and fire-fighting purposes;
- backup power and critical spares;
- network layout and pressure management;
- monitoring, sampling, reporting and incident response procedures;
- water conservation and demand management measures;
- triggers for restricting use, staging occupation, or augmenting supply;
- operation, maintenance and asset renewal responsibilities.

Demonstrated Source Capacity

Prior to the issue of section 224(c) certification for any subdivision stage, and prior to occupation of any dwelling within that stage, the consent holder must provide certification from a suitably qualified hydrogeologist and water engineer confirming that:

- the groundwater take authorised for the development is sufficient to service that stage and all previously completed stages;
- adequate residual capacity remains for later stages consistent with the approved staging plan; and
- the abstraction regime will not compromise the long-term sustainable yield of the source or any minimum performance requirements specified in the groundwater take consent.

Prior to occupation of more than a specified threshold number of dwellings, such as 250, 500, 1,000, and 1,300 dwellings, the consent holder must submit an updated **Water Security Assessment** demonstrating that the source, treatment plant, storage, pumps, and reticulation have sufficient capacity for the occupied dwellings plus the next stage, under:

- average demand,
- peak day demand,
- summer demand,
- drought conditions,
- plant outage contingency,
- and fire-flow requirements where applicable.

Compliance with Taumata Arowai drinking water requirements

The consent holder must ensure that all water supplied for human consumption from the development complies at all times with the applicable requirements of the Water Services Act 2021, the Drinking Water Standards for New Zealand, and the Drinking Water Quality Assurance Rules issued or administered by Taumata Arowai, including any amendments or replacements in force from time to time.

Water efficiency and demand management

To improve sustainability, require all dwellings to incorporate water-efficiency measures, such as:

- low-flow fixtures,
- maximum flow-rate fittings,
- efficient appliances,
- leak detection provisions,
- and potentially rainwater tanks for non-potable uses where appropriate.

A useful condition would require the consent holder to demonstrate that projected per-dwelling potable demand assumptions used in the design are enforceable through design standards or consent notices.

Drought and low-yield response plan

The Water Supply Management Plan should include staged drought triggers and mandatory responses, such as:

- non-essential use restrictions,
- irrigation bans,
- leak detection and repair,
- temporary reduction in construction water take,
- use of supplementary tanker supply,
- and a halt on occupation of further dwellings until security of supply is restored.

Minimum treated water storage

The consent holder must provide treated potable water storage sufficient to meet:

- at least 24 hours of average day demand for occupied dwellings,
- emergency reserve,
- and any required fire-fighting storage,

with the exact volumes certified by a suitably qualified water engineer prior to commissioning.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 18:

Watercare

Watercare Services Limited
73 Remuera Road, Remuera,
Auckland 1050, New Zealand
Private Bag 92521, Victoria Street West,
Auckland 1142, New Zealand
Telephone +64 9 442 2222
www.watercare.co.nz

23 April 2026

Carly Hinde
Planning & Resource Consents – Premium Unit
Auckland Council
carly.hinde@aucklandcouncil.govt.nz

Dear Carly,

BUN60444768 - Delmore Fast-track Application
88 Upper Orewa Road, Upper Orewa 0992

Introduction

1. Watercare Services Limited ("Watercare") welcomes the opportunity to provide comments on the substantive Delmore Fast-track Second Application ("Application"), made under the Fast-track Approvals Act 2024 ("Act"). The purpose of this letter is to set out Watercare's position, relevant information and, notwithstanding Watercare's position, comment on conditions.

2. The Application seeks to enable the construction of a comprehensively planned residential development including approximately 1,213 dwellings comprising a mixture of dwelling types, one commercial super-lot, one residential superlot, two neighbourhood parks and a network of open space and ecological areas, roading and transport infrastructure, an on-site wastewater treatment plan and on-site water supply and treatment (in the event that connection to the public networks cannot be provided) and associated infrastructure ("Delmore Project"). The Applicant is proposing to undertake the development in two stages. The Delmore Project is located at 88, 130, 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road, Ōrewa ("the Site").

3. The Site is zoned Future Urban Zone (FUZ) under the Auckland Unitary Plan – Operative in Part (AUP) and is located in the Upper Orewa Future Urban Area (FUA) which is sequenced in the Future Development Strategy (FDS) to be development ready from 2050+. The listed infrastructure pre-requisites for the Upper Orewa FUA, as stated in the FDS, include the Army Bay Wastewater Treatment Plant (WWTP) Upgrade. However, it is important to note that, as expressly stated in the FDS, this is not an exhaustive list and may be subject to change as further strategic planning is developed[1]. In the recently published Auckland Future Development Strategy 2023-2053 Monitoring Report dated December 2025 the following infrastructure pre-requisites have been identified for the Upper Orewa FUA in relation to water and wastewater[2]:

    - Army Bay WWTP Upgrade
    - Army Bay WWTP Stage 2 Upgrade

[1] Future Development Strategy, Appendix 6, page 35.
[2] https://www.aucklandcouncil.govt.nz/content/dam/ac/docs/plans/auckland-plan/ap-ds-monitoring-report.pdf

- Stanmore Wastewater Pump Station (WWPS) and Rising Main (RM) Upgrade
- Orewa to Stanmore Trunk Network Upgrade (wastewater)
- North Harbour Number 2 Watermain (NH2)
- Orewa 3 Watermain.

4. The Application material for the Delmore Project identifies a number of options for water supply and wastewater servicing:

   (a) For wastewater:

      i. Option 1 involves a private low-pressure sewer (LPS) system that conveys wastewater to an onsite private wastewater treatment and disposal scheme.

      ii. Option 2 utilises a LPS system which will connect to Watercare's network.

      iii. Option 3 uses a LPS system to collect untreated wastewater and store it in a holding tank prior to tanker trucks collecting the raw sewage and trucking it to an off-site disposal facility.

   (b) For water supply:

      i. Option 1 is an on-site, private potable water supply system including four groundwater bores, a water treatment plan (WTP) and on-site reservoirs.

      ii. Option 2 is a two-phase approach connecting to the existing public watermains adjacent to the site. Phase 1 is a connection to an existing main east of the site located on Grand Drive. Phase 2 is an additional connection to the south that is required at ~550 lots.

5. Watercare has been involved in pre-application discussions and correspondence with the Applicant. As part of this, Watercare provided information on the existing infrastructure capacity and what wastewater and water supply upgrades would be required to support the Delmore Project and the estimated timing of those upgrades.

6. Watercare's comments in this letter are based on the Application as at today's date, in particular the following lodged Application documents:

   - Assessment of Environmental Effects and Statutory Analysis dated 23/12/25,
   - Appendix 7: Consultation Overview Report dated 19/12/26,
   - Appendix 27: Water Wastewater and Utility Infrastructure Report dated 22/12/25,
   - Appendix 28: Water, Wastewater and Utilities Drawings dated 12/12/25,
   - Appendix 29: Delmore Water and Wastewater Treatment Plant Design Report dated 25/12/25,
   - Appendix 30: Wastewater Disposal Memorandum dated 18/12/25,
   - Appendix 31: Wastewater Discharge Assessment dated 19/12/25, and
   - Appendix 44: Proposed Consent Conditions.

7. Any amendment to the Application will require further review from Watercare.
8. Any infrastructure delivery dates provided in this letter are forecast dates only and are subject to change.

Watercare's purpose and statutory obligations

10. Watercare is New Zealand's largest provider of water and wastewater services, operating as a substantive council-controlled organisation owned by Auckland Council with the purpose embodied in the Māori whakatauki "Ki te ora te wai, ka ora te whenua, ka ora te tangata" (When the water is healthy, the land and the people are healthy), reflecting the connection between its services and the wellbeing of the community and local environment.
11. Watercare is required to manage its operations efficiently with a view to keeping overall costs at minimum levels while maintaining long-term asset integrity[3], subject to economic regulation under the Watercare Charter with oversight by the Commerce Commission as the appointed Crown Monitor, and must give effect to relevant aspects of Council's Long-Term Plan and act consistently with other Council plans and strategies as specified by the Council, including the FDS[4]. The current Letter of Expectation from the Mayor expressly states that "CCO plans and investment should be aligned with the Future Development Strategy…", and that the Council "expect[s] Watercare alignment with council's position in relation to… developments that do not confirm with the Future Development Strategy".[5]
12. Through its annual Statement of Intent responding to Council's Letter of Expectation[6], Watercare commits to contributing to Auckland Plan 2050 outcomes by collaborating with the wider Council group to support areas of growth identified by Council, acting consistently with Council's FDS for major infrastructure development for FUAs, ensuring alignment of infrastructure projects with other utilities, fully recovering growth costs so that growth pays for growth, and abiding by the Statement of Expectations of Substantive Council Controlled Organisation's (CCOs) which requires working with Council and other CCOs to achieve the outcomes and objectives set out in the Auckland Plan 2050.

Watercare's position

Watercare's Growth Servicing Policy

13. As noted above, the Site is zoned FUZ under the AUP.
14. Watercare's Board-approved Strategic Direction for Providing Services to Support Urban Growth (approved May 2015) sets out the policies and principles for providing water and wastewater infrastructure to service growth. It is accompanied by an explanation of Growth Areas and Service

[3] Section 57 of Local Government (Auckland Council) Act 2009 | New Zealand Legislation.
[4] Section 58 of Local Government (Auckland Council) Act 2009 | New Zealand Legislation.
[5] Mayor of Auckland (Wayne Brown), Letter of Expectation for Statement of Intent 2026-2029 (18 December 2025).
[6] Watercare Services Ltd (Watercare) Statement of Intent, 2025-2028

Categories, which clearly states that "Future Urban Zones must become 'live' urban zones for services to be provided, regardless of funding provisions"[7].

15. In line with this direction, Watercare does not provide water or wastewater connections to FUZ land.

17. Notwithstanding Watercare's position on servicing FUZ land, the below comments are provided in relation to the existing and future capacity of the bulk networks and the local network servicing requirements.

Development out of sequence with the FDS

18. Watercare does not support out-of-sequence development that puts pressure on Watercare to reprioritise or reallocate funding in the current Watercare Asset Management Plan (AMP) away from live zoned areas and sequenced growth. It is not possible for Watercare to immediately invest in areas that are developed out of sequence given its asset management planning requirements to be aligned with the FDS, economic regulation requirements, and resourcing and funding constraints.

19. Where out of sequence development is approved and land is developed decades earlier than anticipated under the FDS and the Auckland Growth Scenario (current version 2023 v1.1) (AGS), the actual growth rate within a geographic catchment may become more rapid than forecast by the AGS projection, causing the capacity of Watercare's infrastructure providing for that catchment to be taken up faster than the programmed or future upgrades can be delivered. This directly impacts Watercare's ability to service existing customers and planned growth in already live-zoned areas.

20. Given the fundamental trade-offs involved, it is not always possible to reallocate or bring forward investment to these areas. Inevitably, to reallocate investment to a FUZ area ahead of schedule, other projects such as infrastructure for other growth areas, or renewals and upgrades required to ensure level of service and/or improved environmental outcomes would need to be deprioritised. Where connections are granted, infrastructure capacity may be taken up faster than planned, resulting in constraints to growth in live zoned areas (i.e. areas with operative urban zoning). This would place Watercare in an unacceptable position.

21. In addition, approval of out of sequence growth results in considerable, additional operational costs being brought forward to support the bulk infrastructure required, and newly vested local assets.

22. As an infrastructure provider, Watercare needs to be able to plan for future development and it is therefore necessary that development of FUAs is aligned with the sequencing and timing provided in the Council's long term planning documents (such as the FDS).

[7] 17 May 2015 Report to Watercare Board on Strategic Direction for Providing Services to Support Urban Growth, Attachment B: Growth Areas and Service Categories, Explanations and Definitions.

Wastewater

23. The Site is not currently serviced by the public wastewater network. As a future urban zone, Watercare does plan to provide service to this area in the future.

24. As noted, the Application refers to three wastewater options, with the proposed conditions enabling any of these options to be adopted.

25. **Option 1** involves a private LPS system that conveys wastewater to an interim onsite private WWTP. Treated wastewater is proposed to then discharge to land from the WWTP within the site, with a back-up system that diverts treated wastewater to a holding tank / fill point station for trucking away during dry periods. Treated wastewater is discharged to land (infiltration trench and irrigation zones) on-site or, during the dry, low flow period (summer) some of the treated wastewater is diverted to a holding tank at a fill point station at the south of the site at the bottom of road 1 where it is collected by tanker and disposed of at a licensed facility. A valve arrangement will be provided on the LPS to allow it to become part of the public network and connect to the eastern gravity reticulation in the future and ultimately discharge to the Army Bay WWTP. This option enables connection to the public wastewater network in the future when capacity is available.

26. Any comments on, or assessment of, potential permanent **private** water supply and/or wastewater servicing will be made by Auckland Council. Additionally, any private water supply and/or wastewater servicing would be subject to regulation by Taumata Arowai as the Water Services Regulator. However, it is noted that the provision of permanent private water/wastewater systems in the future urban zone will affect Watercare's planning, and may result in a down-size and/or loss of efficiency and economic feasibility of planned networks for the area, ultimately increasing the price of servicing for others in the area.

27. The Applicant indicates that wastewater may need to be trucked off-site and the Applicant has assessed the Rosedale WWTP and Pukekohe WWTP as having capacity to accept tanker truck discharges. However, due to there being no agreement with Watercare the Applicant has confirmed with Whangarei District Council that it can receive treated and untreated wastewater at its disposal facility.

28. While the Rosedale and Pukekohe WWTP's are equipped with facilities to receive wastewater from tankers, assuming Watercare would allow access to any additional tankers at these sites is incorrect. We have advised the applicant that neither of these sites is available. Watercare does not support any tankering of wastewater as an interim solution, whether treated or untreated, that would discharge to its public network and there is no general right of entry of wastewater tankers onto Watercare sites for disposal (Watercare's consent would be required).

29. Watercare does not support trucking / tankering of wastewater to a Watercare facility for the following reasons:

    (a) Increased traffic associated with tankering operations can lead to disruptions to the local community including noise, odour, congestion, and safety concerns.

(b) Tankering wastewater requires specialised tankers and trained personnel, leading to significant operational costs. The fuel consumption, monitoring, cleaning and equipment maintenance contribute to the overall high cost of tankering.

(c) Wastewater from tank farms contains hazardous silt or sludge that requires regular cleaning via specialist Hydro Evacuation trucks and disposal at specialist waste facilities, adding cost and complexity.

(d) Transporting wastewater over long distances has a high carbon footprint as there are only limited facilities that can receive the tankers in Auckland. There is also the risk of spills or leaks during transportation which can result in damage to the natural environment.

(e) There is the potential for infiltration of stormwater into the wastewater network, particularly during heavy rainfall events. This can fill the tank farms in a very short period of time and requires increased tankering to empty the tanks. It carries risk of system failure and overflows.

30. For the avoidance of doubt, Watercare confirms that:

(a) No part of its wastewater infrastructure, including the RO waste stream, will accept discharge from the Delmore Project's tankered effluent; and

(b) It will not enter into any arrangement with the Applicant for tankering of waste to any of its facilities.

26. While the Applicant proposes to decommission the private WWTP and disposal area once connection to Watercare's network is available, this is not considered a reliable or supported outcome, due to the proposed design of the local network. All proposed options rely on a large-scale LPS system, which is not supported under the Water and Wastewater Code of Practice for Land Development and Subdivision (Code of Practice) for developments of this size, due to associated operational and septicity risks, and its misalignment with the long-term network servicing plan for the area. In addition, public network capacity for the Delmore Project is not anticipated to be available until at least 2050, and Watercare cannot confirm future connection or asset acceptance. Accordingly, the proposed servicing must be treated as a permanent private solution and designed, consented, and operated on that basis, without reliance on a future connection to the public network.

27. In addition, Watercare does not support interim private systems for servicing residential subdivisions, which create multiple freehold titles and therefore multiple asset owners. This fragments responsibility for operation, maintenance, renewals and eventual decommissioning. From Watercare's perspective, this creates long-term uncertainty and risk: interim private systems may be inconsistently maintained, are difficult or impossible to integrate into the public network and often become permanent by default.

28. **Option 2** utilises a LPS system that pumps to a discharge manhole at the top of Grand Drive, which subsequently discharges to the existing public gravity wastewater reticulation on Grand Drive, east of the site, that ultimately discharges to the Army Bay WWTP.

29. The applicant's assessment of available public wastewater capacity is not supported by Watercare. Planned upgrades to the Army Bay WWTP are intended to service forecast growth and committed

developments in accordance with the AGS, and cannot be relied upon to accommodate out-of-sequence developments such as Delmore without adversely affecting the wider catchment, including existing live zones.

30. Reliance on an LPS-based network is also not acceptable. Watercare's Code of Practice advises against LPS systems of this scale due to operational and septicity risks, and the proposed approach is also inconsistent with current long-term servicing plans for the area. As a result, the reduced peak flows and discharge assumptions cannot be used to determine downstream network capacity.

31. In November 2024 there were approximately 4,000 connections available to the existing Army Bay WWTP for sites that had valid resource consents as at 14th November 2024 within the live zoned area. Since then, Watercare has connected approximately 1028 new dwellings (or equivalent). This number of connections has been updated as of 3 December 2025 from the original information sent to the Applicant in October 2025 which quoted 500 new connections. Watercare has implemented this management approach as we anticipate the connections will be allocated prior to the full upgrade of Army Bay.

28. Watercare's current model shows that the Stanmore WWPS has a capacity of 450L/s and currently receives a peak dry weather flow of 220L/s and a peak wet weather flow of 450-500L/s. For the Orewa WWPS, Watercare's modelling shows it currently has a capacity of 300L/s and receives a peak dry weather flow of 130L/s and a peak wet weather flow of 280L/s . Therefore, Watercare's existing transmission wastewater network, including the Orewa WWPS, the Orewa–Stanmore Wastewater Trunk Network, and the Stanmore WWPS and RM, are all programmed for upgrades prior to servicing any additional growth above that allowed for by the resource consents already granted.

29. Therefore, the following bulk wastewater pre-requisites are identified as being required to enable wastewater servicing of the Upper Ōrewa FUA, including the Site:

    - Army Bay WWTP Stage 1 Upgrade currently anticipated to be completed 2031.
    - Army Bay WWTP Stage 2 Upgrade, currently anticipated to be delivered in line with the FDS timing of 2050+;
    - Orewa to Stanmore Wastewater Trunk Network Upgrade, currently anticipated to be completed by 2033.
    - Stanmore Wastewater Pump Station (WWPS) and Rising Main (RM) Upgrade, currently anticipated to be completed by 2031.

30. **Option 3** uses LPS to collect untreated wastewater and store it in a holding tank prior to tanker trucks coming to collect the raw sewage and trucking it to an off-site disposal facility.

31. Watercare's position on trucking and tankering is covered in points 27- 30 above.

Water supply

32. The Site is not currently serviced by the public water supply network. As noted above, the Application refers to two options for water supply servicing.

33. **Option 1** is an on-site, private potable water supply comprising four groundwater bores, a WTP and two on-site reservoirs. Option 1 services Stage 1 of the development via two of the groundwater bores pumping to the WTP and then a booster pump pressurising the network. Stage 2 will be serviced by 2 further ground water bores also feeding into the WTP, and instead of using the booster pump to pressurise the system, it will be used to pump treated water to proposed reservoirs at a higher elevation to pressurise the network. The on-site infrastructure has been designed to enable future connection to the public network once capacity is confirmed as available.

34. Any comments on, or assessment of, potential permanent **private** water supply servicing will be made by Auckland Council. Additionally, any private water supply servicing would be subject to regulation by Taumata Arowai as the Water Services Regulator. However, it is noted that the provision of permanent private water/wastewater systems in the future urban zone will affect Watercare's planning, and may result in a down-size and/or loss of efficiency and economic feasibility of planned networks for the area, ultimately increasing the price of servicing for others in the area.

35. The Applicants proposed private water system, including the location of proposed reservoirs, is incompatible with Watercare's network servicing plan for the area which may preclude future connection to the public network.

36. Watercare notes that the same risks apply to interim water supply servicing as interim wastewater servicing outlined above, however there are likely to be higher operational and water safety risks associated with connecting a private serviced area to the public network at a future time. These risks, including significant water quality risks to connected customers, may mean the system needs to remain independent from the wider public network which may mean it becomes permanently private. Technical solutions to overcome these risks include super chlorination, flushing and water outage programme or complete duplication of the water supply network.

37. The Application does not set out whether the proposed private WTP, headworks and bores would be decommissioned prior to future connection to the public system. Watercare's preference, if the system is to connect to the wider public network in the future, is for the WTP, headworks and bores to be decommissioned prior to connection.

38. **Option 2** is a two-phase approach connecting to the existing public watermains adjacent to the site. Phase 1 is a connection to an existing main east of the site located on Grand Drive. Phase 2 is an additional connection in the south that is required at ~550 lots.

39. The existing bulk water supply network is limited in this area and does not have sufficient capacity to support the anticipated growth in the existing live zoned areas in addition to the Delmore Project. Watercare have proactively shared a recently published report on the remaining capacity of the NH1 and the risks of unanticipated growth in this area. The following bulk water supply pre-requisites are identified as being required to enable servicing of the Upper Ōrewa FUA, including the Site:

    - The Orewa 3 Watermain scheme (transmission watermain, reservoir and pump station) which is currently anticipated to be completed by 2038 and is dependent on the completion of the North Harbour 2 (NH2) watermain;
    - The NH2 watermain, currently anticipated to be completed in 2034+.

40. The NH2 is a significant project that will run for 32 kilometres between the proposed Manuka Road Reservoir in Titirangi and the Albany Reservoirs. While the NH2 is currently forecast for completion in 2034, there are risks associated with its delivery timeline, and this could extend beyond 2035. That poses programme risk for the Orewa 3 Watermain which is dependent on the completion of NH2 first.

Private Servicing

41. Watercare fundamentally does not support the establishment of permanent long-term private water or wastewater treatment facilities for servicing of FUZ land. This is due to the lack of efficiency and long-term sustainability of private infrastructure including the different legislative obligations of private bodies corporate versus public bodies, the impact on funding of planned public infrastructure to support planned growth, and the risk of sub-standard process units being installed, incurring costs to homeowners or the public sector later if the infrastructure is proposed to be vested to Watercare (assuming Watercare were to decide to accept vesting of such infrastructure).

42. However, due to the complexity of connecting 1,213 individually owned dwellings to the public network some 25 years in the future, including the vesting of private assets that have been operational, managed and maintained outside of Watercare's control, future connections to the public networks may not be feasible and cannot be committed to now. Given this considerable uncertainty, it would be prudent for the Applicant to assume that private water and wastewater servicing will be required on an ongoing basis. That is, the interim solutions cannot rely on a future connection to the public networks and should be designed and consented to be able to continue for an indefinite period of time without needing to switch to public servicing.

Section 67 information gaps

43. As set out in Watercare's initial comments dated 24th March 2026, the Application does not consider how the proposed private WTP and WWTP will be decommissioned in the future and connected to the public system. More information, including appropriate conditions, is required to confirm that any water supply and/ or wastewater systems will be designed and constructed in accordance with Watercare's Code of Practice, and addressing the monitoring and reporting, decommissioning, and potential future connection to the public system.

Conclusion

44. Watercare has assessed the capacity of the existing and planned bulk infrastructure required to support the Delmore Project ahead of the 2050+ timing in the FDS and confirms that the earliest connections could be provided without limiting development of the existing live zoned areas and sequenced growth would be from 2038+ for water supply and 2050+ for wastewater servicing.

45. On this basis, even if the Application is granted, Watercare may refuse water and wastewater connections for the Delmore Project in accordance with its policies and under the Water Supply and Wastewater Bylaw 2015.

46. The Applicant is proposing for both water supply and wastewater, permanent private servicing, interim private servicing with connection to the public network in the future, or connection the public network immediately. There are challenges and significant risks associated with each of these options. Notwithstanding Watercare's position above, if the Panel is minded to grant the resource consent application, Watercare has a number of proposed amendments to the conditions (refer to the attachment).

47. Watercare is open to further discussions with the applicant.

Yours faithfully,



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AMENDMENTS TO PROPOSED CONDITIONS

Watercare proposed amendments provided in red text with ~~strikethrough~~ underline

Delmore: Proposed Consent Conditions

1.0 General

2.0 Land Use (s9)

3.0 Subdivision (s11)

4.0 Streamworks Conditions (s13)

5.0 Water Permit for Dewatering/Diversion of Groundwater (s14)

6.0 Stormwater Discharge Permit (s15)

7.0 Wastewater Discharge Permit (s15)

8.0 Air Discharge Permit (s15)

9.0 Archaeological Authority

The following consent conditions are proposed for the Delmore substantive application under the Fast-track Approvals Act 2024.

1.0 General

1.1.1 Activity in accordance with application

1. The consent holder must undertake the works in general accordance with the application formally received by the Environmental Protection Authority on the 23 December 2025, and the following documents. In the event that any of the provisions of the following documents conflict with the requirements of these conditions of consent, these conditions of consent must prevail.

    - Application form and Assessment of Environmental Effects and Statutory Analysis prepared by Barker & Associates Ltd titled "*Delmore – 88, 130, 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road, Ōrewa"* and dated December 2025; and
    - The following reports, plans and further responses listed at Attachment 1.

7.0.1 Consent Lapse

2. Under section 125 of the RMA, these consents lapse eight years after the date they are granted, unless:

    (a) The consents are given effect to; or

    (b) The council extends the period after which the consents lapse.

7.0.2 Consent Duration

3. Resource consents for streamworks, groundwater diversion/dewatering, stormwater discharge, wastewater discharge and discharge to air expire 35 years from the date the consent is granted, unless it has lapsed, been surrendered, or cancelled at an earlier date pursuant to the RMA.

4. Resource consents for bulk earthworks expire 15 years from the date the consent is granted, unless it has lapsed, been surrendered, or cancelled at an earlier date pursuant to the RMA.

7.0.3 Monitoring Deposit

5. The consent holder must pay the Auckland Council an initial consent compliance monitoring charge of $3,000 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to these consents.

Advice Note: The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consents. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, these will be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consents have been met, will Auckland Council issue a letter confirming compliance on request of the consent holder.

Pre-commencement conditions

7.0.4 Construction Management Plans

6. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the management plans required under the following conditions must be submitted to Council for certification.

   (a) A Construction Management Plan (CMP) – see Condition 2.1.2 of land use consent;

   (b) An Erosion and Sediment Control Plan (ESCP) – see Condition 15 of land use consent;

   (c) A Construction Air Quality Management Plan (CAQMP) – see Condition 18 of land use consent;

   (d) A Construction Traffic Management Plan (CTMP) – see Condition 17 of land use consent;

   (e) A Construction Noise and Vibration Management Plan (CNVMP) – see Condition 19 of land use consent;

   (f) A Chemical Treatment Plan (ChTMP) – see Condition 20 of land use consent;

   (g) A Tree Management Plan (TMP) – see Condition 27 of land use consent;

   (h) A Fauna Management Plan (FMP) – see Condition 28 of land use consent;

   (i) An Adaptive Management Plan (AMP) – see Condition 21 of land use consent; and

   (j) A Settlement Monitoring Plan (SeMP) – see Condition 44 of land use consent; and

   (k) A Stream Works Management Plan (SWMP) – see Condition 166 of the stream works consent.

   Advice note: Management Plans shall be sent to *monitoring@aucklandcouncil.govt.nz.*

7. The management plans required by Condition 6 may be separate documents or may form part of the CMP. Management plans may be submitted in parts or in sub-stages to reflect the staged implementation of the project.

8. A copy of the CMP, SWMP and the ESCP (and any updates to these documents) shall be provided to Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga at the same time as they are provided to Auckland Council.

7.0.5 Pre-start Meeting

9. For each of Stage 1 and Stage 2, prior to the commencement of any works within the area covered by that Stage (or sub-stage), the consent holder must hold a pre-start meeting that:

   (a) Is located on the subject site;

   (b) Is scheduled not less than five (5) days before the anticipated commencement of any enabling works, construction and/or earthworks;

   (c) Includes the relevant Auckland Council representative(s);

   (d) Includes representation from the contractors who will undertake the works and any Suitably Qualified and Experienced Professionals (SQEPs) if required by other conditions; and

   (e) Includes the archaeologist approved to oversee the project works covered by the Archaeological Authority obtained for the project works.

10. The meeting must discuss the erosion and sediment control measures and must ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. The following information must be made available at the pre-start meeting:

   (a) Timeframes for key stages of the works authorised under this consent;

   (b) Resource consent conditions;

   (c) The finalised Erosion and Sediment Control Plan required by Condition 15; and

   (d) The Chemical Treatment Management Plan required by Condition 20.

11. The consent holder will invite Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga to attend the pre-start meeting no less than 10 working days before the scheduled meeting. The purpose of the meeting is to discuss cultural induction and monitoring, archaeological monitoring, the erosion and sediment control measures, earthworks methodologies, stormwater management, relevant management plans, timeframes for the work and to ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. The following information must be made available at the pre-start meeting:

   - Timeframes for key stages of the works authorised under this consent;
   - Name and contact details for key contractors and SQEPs (as required);
   - Resource consent conditions;
   - Final or draft copies of the management plans listed in Condition 6;
   - Any cultural induction and monitoring material supplied to the consent holder by or on behalf of Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga before the meeting;
   - A copy of the Archaeological Authority obtained for the works; and
   - Confirmation from the consultant acting for consent holder that the contractor's Public Liability cover, and Health & Safety Plan / policy have been viewed and found satisfactory.

   Advice Note: To arrange the pre-construction meeting please contact Auckland Council to arrange this meeting on email at monitoring@aucklandcouncil.govt.nz.

7.0.6 Cultural Monitoring

12. The consent holder must invite Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga to attend each of the following activities at least 10 working days before the activity begins specifically to carry out cultural monitoring and observation:

    (a) Commencement of Stage 2 topsoil strip;

    (b) Commencement of Stage 2 topsoil strip;

    (c) Commencement of works within the area covered by consent notice 10576706.2; and

    (d) If any archaeological sites or artefacts are discovered per Condition 59.

    Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga shall be notified no later than 15 working days after the completion of each of the activities set out in Condition 12(a)-(c).

8.0 Land Use (s9)

8.0.1 Consent Holder

13. The land use consent is to attach to the consent holder, Vineway Limited. The consent holder may transfer the whole or part of its interest in the consent to any other person and must provide written notice of the transfer to Auckland Council.

Advice Note: This purpose of this condition is to expressly provide for the land-use consent to attach to the applicant, in accordance with Section 134 of the Resource Management Act.

8.0.2 Construction Management Plan

14. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Auckland Council for certification, a Construction Management Plan (CMP). The purpose of the CMP is to detail the management procedures and construction methods to be undertaken to avoid, remedy or mitigate potential adverse effects on the environment arising from earthworks and construction works. The CMP must include the following as applicable to the project or project stage.

    (a) Details of the site manager, including their contact details;

    (b) The location of a notice board that clearly identifies the name, telephone number and address for service of the site manager;

    (c) Construction methodology;

    (d) An outline construction programme of the works;

    (e) Measures to be adopted to maintain the land in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities;

    (f) Measures to ensure that no rubbish, fuel, solvents, concrete wash-down material or other related materials enter the freshwater environment;

    (g) Location of workers' offices, conveniences and parking;

    (h) Procedures for avoiding the deposit of soil debris on public roads, and procedures for the removal of soil debris and demolition and construction materials from public roads and places;

    (i) Location and layout of construction yards, including associated buildings, fencing and site access;

    (j) Means of maintaining safety of the general public;

    (k) Any cultural induction and/or monitoring material provided in accordance with Condition 11 and 12, which must be appended to the CMP.

8.0.3 Erosion Sediment Control Plan

15. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, the consent holder must prepare and submit to Auckland Council for certification, a final Erosion and Sediment Control Plan (ESCP). The ESCP must be prepared in accordance with the draft ESCP submitted with the application, and in accordance with *Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 2 (GD05)*. The ESCP must contain sufficient details to address the following matters:

(a) Specific erosion and sediment control measures for the earthworks (location dimensions, capacity), including the location of any sediment retention ponds (SRPs), decanting earth bunds, super silt fences, silt fence clean and dirty water diversion bunds and stabilized construction entrances;

(b) Supporting calculations and design drawings as necessary, including confirmation of 2% vs 3% SRPs where required;

(c) Details of construction methods;

(d) Monitoring, maintenance and inspection requirements;

(e) Catchment boundaries and contour information as necessary;

(f) Identify location of stabilised construction entrances; and

(g) Details relating to the management of exposed areas (e.g. grassing, mulching).

Advice note: The above ESCP requirement relates to bulk earthworks stages. Additional ESCPs are required at subdivision stage for civil works.

16. Within 10 working days following implementation and completion of the specific erosion and sediment controls required by the ESCP (referred to in Condition 15) and prior to the commencement of the earthworks activity, the consent holder must provide to Auckland Council written certification prepared by a SQEP confirming that the erosion and sediment control measures have been constructed in accordance with GD05.

Advice Notes: Certification of the sediment and erosion control structure should contain sufficient details to address the following matters:

- *Details on the contributing catchment area;*
- *Retention volume of structure (dead storage and live storage measured to the top of the primary spillway);*
- *Dimensions and shape of structure;*
- *Position of inlets/outlets; and*
- *Details regarding the stabilisation of the structure.*

8.0.4 Construction Traffic Management Plan

17. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Construction Traffic Management Plan (CTMP) in accordance with the Auckland Council's requirements for CTMPs and the New Zealand Transport Agency's Code of Practice for Temporary Traffic Management. The purpose of the CTMP is to ensure that during construction the surrounding road network (including the footpaths) operates safely and efficiently for all road users including existing residents and pedestrians, and that internal construction traffic movements operate safely and efficiently. The CTMP plan must contain sufficient details to address the following matters:

(a) Construction dates and hours of operation including any specific hours for traffic congestion/noise outside the construction hours in Condition 41;

(b) Truck route diagrams both internal to the site and external to the local road network;

(c) Temporary road closure and traffic management signage/details for both pedestrians and vehicles to appropriately manage the interaction of these road users with heavy construction traffic;

(d) Details of site access/egress over the entire construction period. Noting that all egress points to be positioned so that they achieve appropriate site distance as per the Land Transport Safety Authority "Guidelines for visibility at driveways" RTS-6 document;

(e) Details of staging areas / work area;

(f) Details of vehicle cleaning facilities within the site to avoid mud and other material being dropped on the road; and

(g) Location of construction vehicle parking onsite.

8.0.5 Construction Air Quality Management Plan

18. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Construction Air Quality Management Plan (CAQMP). The objective of the CAQMP is to avoid as far as practicable, offensive or objectionable dust, arising from construction activities beyond the boundary of the project site. The CAQMP must address the following matters as a minimum:

(a) Description of the works, anticipated equipment/processes, and durations.

(b) Periods of time when emissions of dust might arise from construction activities.

(c) Identification of sensitive land uses likely to be adversely affected by emissions of dust from construction activities.

(d) Methods for mitigating dust that may arise from the construction site, potentially including but not limited to:

- Controlling vehicle speeds
- The use of vacuum sweeping (hard paved areas)
- Water suppression
- Restabilising ground cover on exposed earth by way of revegetation or geotechnical cloth (or similar) and wheel washes for vehicles at exit points.

(e) Methods for undertaking and reporting on the results of daily inspections of construction activities that might give rise to dust.

(f) Procedures for maintaining contact with stakeholders, notification of proposed construction activities and handling complaints about dust or other air quality matters.

(g) Identification of contingency measures to address verified effects on neighbouring property in the event of a process malfunction or accidental dust discharge.

(h) Contact numbers for key construction staff responsible for managing air quality during construction.

8.0.6 Construction Noise and Vibration Management Plan

19. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the

development, the consent holder must prepare and submit to Council for certification a Construction Noise and Vibration Management Plan (CNVMP). The objective of the CNVMP is to identify and implement the best practicable option to minimise adverse construction noise and vibration effects. The CNVMP must be prepared with reference to Annex E of NZS 6803:1999 Acoustics – Construction Noise and must address the following matters as a minimum:

(a) Applicable site noise and vibration criteria, including the criteria in Condition 42;

(b) Programme of works and hours of operation;

(c) Identification of surrounding noise and/or vibration sensitive receivers;

(d) Details of the specific management and mitigation measures required to comply with the relevant noise and vibration criteria;

(e) The requirement to provide written communication to occupants of all immediately neighbouring buildings prior to the commencement of activities on site. The written communication shall set out:

- A brief overview of the construction works;
- The working hours and expected duration;
- All mitigation measures to be implemented;
- The procedure for recording concerns/complaints regarding noise and vibration;
- The procedure for noise and vibration monitoring where concerns are raised by receivers; and
- Contact details for site personnel for any concerns regarding noise and vibration.

8.0.7 Chemical Treatment Plan

20. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Chemical Treatment Management Plan (ChTMP). The ChTMP must be prepared in general accordance with Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 2 (GD05). The ChTMP must include as a minimum:

(a) Specific design details of a chemical treatment system based on a rainfall activated methodology for the site's sediment retention ponds, decanting earth bunds, or any other approved impoundment devices;

(b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);

(c) Details of optimum dosage (including assumptions);

(d) Results of initial chemical treatment trial;

(e) A spill contingency plan; and

(f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

21. All sediment retention ponds and any other impoundment devices, must be chemically treated in

accordance with the ChTMP required by Condition 20. All measures required by the ChTMP must be put in place prior to commencement of the earthworks activity and be maintained for the duration of the earthworks activity.

8.0.8 Adaptive Management Plan

22. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification, an Adaptative Management Plan (AMP) for all earthworks which are to be undertaken throughout the full duration of consent. The AMP must address monitoring requirements and changes to management procedures in response to the results of monitoring, and must include but is not limited to, the following details:

    (a) Pre-construction Baseline monitoring containing the in-stream results for turbidity and / or total suspended solids (TSS) within the receiving environment;

    (b) Baseline monitoring results from an appropriate location;

    (c) Weather forecasting and monitoring;

    (d) Trigger levels for water quality and rainfall events (actual and forecasted events);

    (e) Ongoing monitoring and sampling regime for the receiving environment, including turbidity and / or TSS monitoring downstream within the receiving environment; and

    (f) Management responses when a trigger level is exceeded.

8.0.9 Culvert Management and Monitoring Plan

23. At least 20 working days prior to the commencement of any vegetation clearance within the site, the consent holder must prepare and submit to Council for certification an Culvert Management and Monitoring Plan to manage the risk of blockage of the NZTA culvert from residual slash, debris, or sediment during construction activities.

24. The certified Culvert Management and Monitoring Plan must be implemented for the duration of construction works and shall remain in effect until the development is fully built out and the site has been stabilised to the satisfaction of Council.

25. Should the Culvert Management and Monitoring Plan identify that accelerated scour or erosion has been observed, the consent holder must consult with NZTA to determine whether further mitigation is necessary for the culvert. This may be through the installation of a relief inlet riser (consistent with NZTA P46 standard design) and/or additional embankment interface reinforcement/resilience measures.

8.0.10 Geotechnical Earthworks Review

26. At least 10 working days prior to the commencement of works for any stage or sub-stage of the development, the consent holder must provide a detailed construction methodology endorsed by a chartered geo-professional who must provide written confirmation of the review. The methodology must include earthworks, boundary works and installation of slope protection measures in accordance with the recommendations provided within the Geotechnical Report, referenced in Condition 1 and submitted to Auckland Council.

Advice note: The earthworks construction methodology is required to ensure stability is maintained throughout the civil works stage of the development.

8.0.11 Tree Management Plan

27. At least 20 working days prior to the commencement of any vegetation clearance works for any stage or sub-stage of the development, the consent holder must prepare and submit to Council a final Tree Management Plan (TMP) for certification. Council must respond to the request within 20 working days, or the TMP is deemed to be certified. The purpose of the TMP is to manage arboricultural effects on vegetation identified within the Arboricultural Report.

8.0.12 Fauna Management Plan (FMP)

28. At least 20 working days prior to the commencement of works for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a final FMP. The FMP must be in general accordance with the draft FMP submitted to Council and approved under Condition 1 and must include the measures as outlined in Condition 28(a) – (d).

Advice note: The FMP may be prepared in parts to align with the development staging.

Long tail bats

(a) The FMP must include the following measures relating to long tail bats:

- Measures to minimise as far as practicable, disturbance from construction activities within 50m of any active long tail bat roosts that are discovered through survey until such roosts are confirmed to be vacant of bats;
- Timing of any construction works within 50m of any active maternity long tail bat roosts. Those construction works shall be undertaken outside the bat maternity period (between December and March) where reasonably practicable; and
- Details of areas where vegetation is to be retained and where additional planting is proposed to be provided and maintained for the purposes of the connectivity of long tail bat habitats.

Native Avifauna (Birds) (excluding wetland birds)

(b) The FMP must include the following measures relating to native avifauna (birds):

- Timing of any construction works which may have adverse effects on native avifauna (birds) (excluding wetland birds). Those construction works shall be undertaken outside of the bird breeding season (September to February) where practicable; and
- Where works are required during the bird breeding season, methods to minimise adverse effects on native avifauna (birds); and
- Where works are required during the bird breeding season, methods to minimise adverse effects on native avifauna (birds).

Native Wetland Birds

(c) The FMP must include the following measures relating to native wetland birds:

- Details of any nesting bird surveys of native wetland birds. Nesting bird surveys shall be undertaken within any wetland where works are proposed, including a 50m radius from the wetland. Surveys shall be undertaken prior to any such works taking place and repeated at the beginning of each wetland bird breeding season until the completion of construction;

- Timing of any construction works which may have adverse effects on native wetland birds. Those construction works shall be undertaken outside of the bird breeding season (September to February) where practicable;
- Where works are required during the bird breeding season, methods to minimise adverse effects on native wetland birds; and
- Details of what protection and buffer measures are proposed to manage effects on nesting native wetland birds. Proposed measures shall address:
    - The type, intensity and duration of construction activity;
    - The likely sensitivity of the nesting bird species to the construction activity; and
    - Any environmental features (e.g. vegetation and contour) that could influence the extent of potential adverse effects on the native wetland birds.

Native Lizards

(d) The FMP must include the following measures relating to native lizards:

- Credentials and contact details of the ecologist/herpetologist who will implement the plan;
- Timing of the implementation of the FMP;
- A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols (including method used to identify suitable relocation site(s)), nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols, artificial cover object protocols, and opportunistic relocation protocols;
- A description of the relocation site; including discussion of:
    - Provision for additional refugia, if required e.g. depositing salvaged logs, wood or debris for newly released skinks that have been rescued;
    - Any protection mechanisms (if required) to ensure the relocation site is maintained (e.g.) covenants, consent notices etc;
    - Any weed and pest management to ensure the relocation site is maintained as appropriate habitat.

Advice note: It is recommended that the lizard rescue plan is undertaken in conjunction with the vegetation clearance operations (and contractor) for an integrated approach (on the same day), to enable the physical search for gecko's following felling of trees and shrubs, and to rescue any skinks from ground cover vegetation and terrestrial retreats.

29. All construction works undertaken on site must comply with the certified FMP.

30. A suitably qualified and experienced ecologist/herpetologist approved to oversee the implementation of the lizard management measures outlined in Condition 28 must certify that the lizard related works have been carried out according to the certified FMP within two weeks of completion of the vegetation clearance works.

31. A copy of the FMP (and any updates to these documents) shall be provided to Ngāti Manuhiri, Te

Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga at the same time as they are provided to Auckland Council.

8.0.13 Wetland and Stream Delineation

32. Within each of Stage 1 and Stage 2, and prior to the commencement of any works authorised by this consent within that Stage area, the consent holder must delineate and establish with an exclusion fence at least a 10 metre setback from the natural wetlands and streams. The purpose of the exclusion fence is to exclude construction machinery or spoil from accidental incursion to the natural wetlands and streams and to protect them from the effects of earthworks.

Advice Note: A day-glow barrier mesh or pigtail fence/wire or rope would be sufficient for this purpose. Streams shall be classified as per the AUP(OP) intermittent and permanent definitions (Chapter J), and wetlands in accordance with Ministry for the Environment (MfE) wetland delineation protocols.

33. No work (other than as authorised by this consent) is permitted to be carried out within the area surrounded by the exclusion fence required under Condition 32, and no building or fill materials must be stored or placed within that area, either on a temporary or permanent basis.

8.0.14 Wetland Offset Plan

34. Prior to the commencement of earthworks on-site, the consent holder must prepare and submit to Council for certification, a final Wetland Offset Plan. The Wetland Offset Plan must be prepared with input from a suitably qualified ecologist, hydrologist and stormwater engineer. The Wetland Offset Plan must be in general accordance with the following documents approved under Condition 1:

(a) The Landscape Plans prepared by Greenwood Associates, dated December 2025; and

(b) The report prepared by WWLA, titled "Wetland and Culvert Assessment", dated December 2025; and

(c) The report prepared by Virdis, titled "Delmore Fast Track Application – Ecological Impact Assessment", dated December 2025.

The Wetland Offset Plan must include the following minimum details:

(d) Calculated accountancy for unavoidable wetland reclamation in accordance with the AUP(OP) Appendix 8;

(e) The location of the area(s) proposed for wetland creation;

(f) Works to ensure a wetland hydrology is created and maintained;

(g) Planting schedule, including species, density and grade;

(h) Legal protection (e.g., consent notice);

(i) A five-year maintenance and monitoring plan to ensure the wetland(s) and associated planting is successfully established; and

(j) Measures to be undertaken if the wetland(s) or planting(s) is not successful.

Advice note: The Wetland Offset Plan may be submitted in stages or sub-stages to align with the development staging.

35. The consent holder must implement the Wetland Offset Plan approved under Condition 34. All wetland

planting and landscaping must be implemented within the first planting season following completion of earthworks and wetland formation works in the relevant area, unless otherwise agreed in writing by Council.

Advice note: The wetlands will be completed in stages or sub-stages to align with the development staging.

36. Within three months following completion of the wetland creation and planting works, the consent holder must submit to Council written certification confirming that the wetlands have been constructed and planted in accordance with the certified Wetland Offset Plan.

37. The consent holder must maintain and monitor the wetland(s) and associated planting for a period of five years following completion of planting. Annual monitoring reports must be prepared by a SQEP and submitted to Council within three (3) months of each monitoring anniversary. Each report must, as a minimum:

    (a) Assess wetland hydrology, vegetation establishment, species composition and weed and pest presence;

    (b) Evaluate performance against the success criteria specified in the certified Wetland Offset Plan; and

    (c) Identify any remedial actions required.

8.0.15 Engineering Plan Approvals

38. All new public assets including roads, vehicle crossings, footpaths and street furniture must be designed to Auckland Transport's relevant Engineering Standards; or be in accordance with this consent and the reports and plans approved under Condition 1; or be in accordance with departures approved under the Standards at a later date.

39. Prior to the commencement of works for any relevant stage or sub-stage (excluding vegetation removal and/or earthworks) the consent holder shall submit complete engineering plans for all infrastructure proposed to be vested to Council for engineering plan approval.

Advice note: Landscaping associated with public roads will be considered for engineering plan approval when the lots are created and land is to be vested at the time of subdivision.

40. All new water supply and wastewater infrastructure that is proposed to connect to the public network, or be vested to the water utility provider either now or in the future must be designed and constructed in accordance with the current Water and Wastewater Code of Practice for Land Development and Subdivision (Code of Practice). Where the private water supply or wastewater network is proposed to be connected to, or vested in, the public network at any time in the future, the consent holder will be required to obtain Engineering Plan Approval at that time.

41. The consent holder must design and construct all private water supply and wastewater infrastructure to ensure that, if a connection to the public water supply or wastewater network is established in the future, the connection and associated infrastructure will not adversely affect the capacity, integrity, operation, or safety of the public network.

Advice Notes:

(a) As at the date of this consent, no agreement has been reached with the water/wastewater network utility provider regarding the acceptance for vesting of any water or

wastewater infrastructure associated with the subdivision and development. Any infrastructure proposed to vest is subject to the current Watercare Water and Wastewater Code of Practice for Land Development and Subdivision (Code of Practice), standards, operational requirements, and acceptance of the relevant network utility provider.

42. *For the avoidance of doubt, nothing in this consent requires the network utility provider(s) to accept vesting of any infrastructure or to approve any connections to the public water and/or wastewater network under the Water Supply and Wastewater Network Bylaw 2015 now or in the future.*

During Construction Conditions

43. The consent holder must maintain and implement the Construction Management Plan (CMP), Construction Traffic Management Plan (CTMP), Construction Air Quality Management Plan (CAQMP), Construction Noise and Vibration Management Plan (CNVMP), Chemical Treatment Management Plan (ChTMP), Erosion and Sediment Control Plan (ESCP), the Tree Management Plan (TMP), and the Fauna Management Plan (FMP), throughout the entire earthworks and construction period within the Stage to which they relate. Any changes to a CMP, CTMP, CAQMP, TMP, ChTMP, CNVMP, FMP or ESCP must be submitted to Council for certification.

44. All earthworks and construction works associated with the implementation of this resource consent shall be carried out:

(a) Between the hours of 7:30am and 18:00pm, Monday to Saturday; and

(b) Shall not occur on Sunday's and public holidays; but

The restriction on hours of works shall not apply to low noise generating activities, such as site set up or staff meetings, which may occur outside of these hours.

8.0.16 Construction Noise and Vibration

45. Noise arising from earthworks and construction works on-site shall not exceed the following limits when measured or assessed at any building on any other site that is occupied during the works in accordance with the requirements of NZS6803:1999, where affected party approval has not been obtained.

Address	Activity	
	Earthworks during Stage 1E	*All other times*
59 Russell Road	75 dB LAeq	Noise limits in Standard E25.6.27
All other properties	Noise limits in Standard E25.6.27	Noise limits in Standard E25.6.27

46. If vibration levels from earthworks or construction works exceeding 2mm/s are predicted or measured, in any axis when measured in the corner of the floor of the storey of interest for multi-storey buildings (if applicable), or within 500mm of ground level at the foundation of a single storey building, the consent holder must ensure the vibration will not exceed 5 mm/s and must consult with the relevant occupants to:

(a) Discuss the nature of the work and the anticipated days and hours when the exceedances are likely to occur;

(b) Determine whether the exceedances could be timed or managed to reduce the effects on the receiver; and

(c) Provide in writing, no less than 3 days before to the work begins, details of the location and duration of the works, a phone number for complaints and the name of the site manager.

8.0.17 Geotechnical

47. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, a Settlement Monitoring Plan (SeMP) prepared by a SQEP, must be submitted to Council for certification. Any later proposed amendment of the SeMP must also be submitted to Council for certification.

48. The purpose of the SeMP is to set out the practices and procedures to be adopted to ensure compliance with the consent conditions regarding earthworks fill settlement monitoring and shall include, at a minimum, the following information:

(a) A monitoring location plan, showing the location and type and construction detail of all settlement monitoring points;

(b) Details of the monitoring frequency;

(c) All monitoring data, the identification of services susceptible to damage and all building/service condition surveys undertaken to date; and

(d) Details of criteria to confirm that fill induced settlements have sufficiently attenuated.

Settlement monitoring results must be presented in the Geotechnical Completion Report (refer Condition 46 and Condition 47).

49. The placement and compaction of fill material, construction of geogrid reinforced slopes, retaining walls and subsoil drainage works must be supervised by a SQEP. In supervising the works, the SQEP must ensure that they are constructed and otherwise completed in accordance with the recommendations contained within the Geotechnical Report approved under Condition 1, relevant engineering code of practice, and the detailed plans forming part of the application and approved under Condition 1.

50. Within 20 working days from the completion of earthworks, subsoil drainage and slope protection structures, a Geotechnical Completion Report (GCR) signed by the chartered geo-professional must be provided to the Council. The GCR must include (but not to be limited to):

(a) Earthworks operations (e.g. fill compaction, testing, inspections etc.);

(b) Results of settlement monitoring;

(c) Statement of professional opinion (as per schedule 2A of NZS4404:2010); and

(d) Certified as-built plans for the implemented earthworks and subsoil drainage.

51. The GCR must also provide justification on soil expansivity, subsoil site class, foundation requirements, confirming that the works have been completed in accordance with the approved construction methodology as required by Condition 26 and evidence of settlement monitoring as required by Condition 47 have been met. The GCR must include results of settlement monitoring and demonstration that sufficient settlement attenuation has occurred and be provided to the satisfaction of the Council.

52. All earthworks must be managed to ensure that they do not lead to any uncontrolled instability or collapse either affecting the site or adversely affecting any neighbouring properties. In the event that such collapse or instability does occur, it must immediately be rectified.

8.0.18 Earthworks

53. No earthworks on the site can be undertaken between 01 May and 30 September in any year, without a 'Request for winter works' approved by Council. All requests must be renewed annually prior to the approval expiring. All winter works will be re-assessed by the consent holder, as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by Council upon written notice to the consent holder.

54. No storage of machinery, hazardous substances, rubbish, construction stockpiling, or any refilling activity shall occur within the area demarcated in accordance with Condition 32, unless authorised by this consent.

55. The maximum area of exposed earth at any one time throughout the duration of the project when exercising this consent must be no greater than 30 hectares.

Advice note: The 30ha limit applies to "bulk" earthworks only and not to "post construction" subdivision earthworks.

56. Earthworks at the site must be progressively stabilised against erosion throughout the earthworks phases of the project and must be sequenced to minimise the discharge of contaminants to surface water in accordance with the certified ESCP.

Advice Note: Stabilisation measures may include:

- *The use of waterproof covers, geotextiles, or mulching;*
- *Top-soiling and grassing of otherwise bare areas of earth;*
- *Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.*

57. The operational effectiveness and efficiency of all erosion and sediment control measures shown on the Erosion and Sediment Control Plans required under Condition 15, must be maintained throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion. A record of any maintenance work must be kept and be supplied to the Council on request.

58. Earthworks must be managed to avoid deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance must roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

Advice Note: In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:

- *Provision of a stabilised entry and exit(s) point for vehicles*
- *Provision of wheel wash facilities*
- *Ceasing of vehicle movement until materials are removed*
- *Cleaning of road surfaces using street-sweepers*
- *Silt and sediment traps*
- *Catchpit protection*

59. Immediately upon abandonment or completion of earthworks on the subject site all areas of bare earth associated with the works must be permanently stabilised against erosion to the satisfaction of the Council.

Advice Note: Should any earthworks be completed or abandoned, bare areas of earth associated with the works must be permanently stabilised against erosion. Measures may include:

- *The use of mulching or natural fibre matting.*
- *Top-soiling, grassing and mulching of otherwise bare areas of earth.*
- *Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.*

8.0.19 Contaminated Soils

60. Following demolition and removal of the existing dwellings and other buildings (garages, sheds, barns etc.) existing within the site as at the date of grant of consent, surficial soil and debris (to the lesser of 300mm depth or top of natural insitu soils) across the footprint of each former structure, and a halo 2 metres wide on all sides around it, shall be either:

(a) Excavated and disposed offsite to a consented Class 1 landfill if physically/geotechnically unsuitable for reuse; or

(b) Tested by a suitably qualified and experienced contaminated land professional, as defined in the Users' Guide to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, 2012, to confirm its suitability for reuse onsite or disposal to alternative offsite facilities. All sampling and testing must be undertaken in accordance with the Contaminated Land Management Guidelines No.5: Site Investigation and Analysis of Soils (Ministry for the Environment, revised 2021).

61. In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works within a 2-metre halo of the contamination, notify Auckland Council, and engage a suitably qualified and experienced contaminated land professional to assess the situation (including possible sampling and testing) and decide on the best option for managing the material.

8.0.20 Archaeology

62. Should any Māori archaeological sites be encountered during earthworks and construction works, Te Kawarau a Māki, Ngāti Manuhiri, Ngaati Whanaunga, te Runanga o Ngāti Whatua must be contacted by the consent holder no later than 15 working days after the discovery.

8.0.21 On-Site Wastewater Servicing

Advice Note: The on-site wastewater servicing conditions (63~~60 – 67~~70) are not applicable if the development connects to the public wastewater network.

63. The consent holder must prepare a Wastewater Management Plan (WMP). The WMP must be submitted to Council for certification at least 20 working days prior to the commissioning of the wastewater system. The purpose of the WMP is to manage and reduce risks to the natural environment and to people from hazardous substances stored for wastewater purposes. The WMP must be in general accordance with the draft WMP approved under Condition 1. It must include, but not be limited to:

(a) Identification of the specific activities conducted on the site;

(b) Identification of potential contaminants associated with these activities, including a Hazardous Substance Inventory and associated Material Safety Data Sheets;

(c) Methods used to contain identified contaminants and prevent them contacting stormwater runoff as far as practicable, and methods to manage environmental risks from site activities;

(d) A Spill Response Plan (which includes the provision that all spills over 20 litres, or any spill or environmentally hazardous substances that has entered the stormwater system, a waterbody or has contacted unsealed ground, must be reported immediately to the Auckland Council's 24- Hour Pollution Hotline (09-377-3107)). If untreated wastewater is to be taken off-site, the Spill Response Plan must include management measures to disinfect small spills or drops that may occur during filling (such as the use of sodium hypochlorite spray);

(e) Accurate site drainage plan(s) showing the location of all site catchpits, containment systems, treatment devices and the discharge point(s) of the site stormwater system;

(f) An appropriate auditing programme to ensure site performance with all components of the WMP;

(g) Methods for providing and recording staff training;

(h) Details of processes governing review and updating of the WMP; and

(i) An Operation and Maintenance Plan for the WWTP.

64. The consent holder must construct the proposed turning head and wastewater filling station in accordance with the roading drawings prepared by McKenzie & Co, titled "Wastewater Treated Disposal & Truck Access" as referenced under Condition 1.

65. An acoustic fence must be constructed along the southern boundary of Lot 203 in accordance with the noise assessment titled "Noise Assessment - Delmore Residential Development, Wainui" prepared by SLR and dated December 2025.

The purpose of the acoustic fence is to ensure compliance from the wastewater filling station with the applicable noise standards under the Auckland Unitary Plan, as referenced below.

Time Period	Noise Level
Monday to Saturday (7:00am to 10:00pm)	50dB LA_{eq}
Sunday (9:00am to 6:00pm)	
All other times	40dB LA_{eq}
	75dB LAF_{MAX}

66. The WWTP and pump station must be designed to comply with the applicable noise standards under the Auckland Unitary Plan as referenced in Condition 62.

67. The load out area for the wastewater filling station must be designed to drain to a single catchpit. The area must be designed to either pump out or drain the catchpit back to the sewer network, or empty it via vacuum truck, if it becomes contaminated by a spill.

68. The consent holder must undertake regular visual inspections of the unsealed section of Russell Road between the proposed turning head and Upper Orewa Road. If it is identified that a high proportion of fine (dust-generating) material is present, the consent holder must replenish the surface layer with

gravel.

Advice note: The purpose of this condition is to manage dust effects as a result of the additional truck movements on Russell Road.

69. The consent holder must monitor the proposed turning head off Russell Road for soil tracking and must undertake remedial action to remove soil if required.

70. The consent holder must implement the landscape design at the Water and Wastewater Treatment Lot (Lot 5002) in general accordance with the landscaping plans approved under Condition 1.

71. In the event that an eventual connection is able to be made to the public wastewater network, disposal of untreated wastewater by way of off-site tankering can be undertaken. At least 20 working days prior to any off-site tankering of untreated wastewater occurring, the consent holder must submit a Wastewater Tankering Management Plan to Council. At a minimum, the Wastewater Tankering Management Plan shall include the following:

(a) The number of dwellings that the tankering will service;

(b) The expected duration that the dwellings will be serviced by off-site tankering;

(c) The number and volume of on-site tanks required to accommodate the necessary wastewater volumes;

(d) A maintenance plan for the on-site tanks and any other associated on-site plant;

(e) An odour management plan; and

(f) A traffic management plan for tanker movements associated with removing untreated wastewater from site. The traffic management plan must also include measures to minimise dust from the increase of trucks on Russell Road.

(g) Written confirmation that the off-site disposal of the untreated wastewater will be accepted by a facility with sufficient capacity to accept the anticipated volumes.

Advice note: At the time of granting this resource consent, Watercare Services Limited has confirmed that none of its facilities will accept any tankered wastewater from the development.

8.0.22 On-site Water Treatment

Advice Note: The on-site water treatment condition (69) is not applicable if the development connects to the public wastewater network.

72. The consent holder must construct and commission the on-site water treatment infrastructure in general accordance with the "Delmore Water and Wastewater Treatment Plant Design Report" prepared by Apex and approved under Condition 1.

73. Groundwater for domestic supply shall be taken and treated in accordance with the relevant conditions of the groundwater take consent referenced under consent number WAT60456696.

8.0.23 Decommissioning of On-Site Wastewater Servicing and On-Site Water Treatment

74. Where, at any time in the future, a connection to the public water supply and/or wastewater network

is proposed, and the network utility operator has confirmed in writing that there is sufficient capacity in the network to enable connection, and that it is willing to accept the connection in principle, the consent holder must:

(a) within 20 working days of receiving that written confirmation, submit a draft Decommissioning Plan to the Council and/ the water and/or wastewater utility provider for approval; and

(b) obtain certification of the Decommissioning Plan prior to any connection to the public network occurring; and

(c) implement the Decommissioning Plan as certified.

75. The Decommissioning Plan must include:

(a) The design and steps for disconnection of the WWTP and WTP from the local water supply and wastewater reticulation network.

(b) The design and steps for the connection of the local wastewater reticulation network to the public network.

(c) The decommissioning, making safe and removal of all infrastructure comprising associated with the WWTP and WTP.

(d) the proper and complete remediation of the site, (including the treatment and removal of any contamination caused arising from the operation of by the WWTP and WTP) (the "site" for the purposes of this condition shall include the land where the WWTP / WTP is located and any other land affected by operation of the Property and any other part of the Land affected by the WWTP and WTP.

(e) A programme and timetable for all decommissioning and connection works.

(f) Written approval from the water utility provider that there is sufficient capacity in the network that the development can be connected.

Advice notes:

As at the date of this consent, no agreement has been reached with the water/wastewater network utility provider regarding the acceptance for vesting of any water or wastewater infrastructure associated with the subdivision and development. Any infrastructure proposed to vest is subject to the current Watercare Water and Wastewater Code of Practice for Land Development and Subdivision (Code of Practice), standards, operational requirements, and acceptance of the relevant network utility provider.

For the avoidance of doubt, nothing in this consent requires the network utility provider to accept vesting of any infrastructure or to approve any connections to the public water and/or wastewater network under the Water Supply and Wastewater Network Bylaw 2015 now or in the future.

(g) Stormwater

76. Prior to the occupation of dwellings, the consent holder must design and install the private on-site stormwater management devices for all residential lots and JOALs in accordance with Council's standards. These must ensure that the stormwater runoff from the site is managed to meet SMAF1 requirements.

77. The stormwater management device or system must be installed or built generally in accordance with the design specifications provided in the documents referred to in Condition 1 by a suitably qualified service provider.

78. Within three months of the practical completion of the works for the related dwelling, the consent holder must provide the following to the council:

(a) Written evidence in the form of a validation report that the stormwater management device or system was installed or built generally in accordance with the design specifications provided in the documents referred to in Condition 1, and by a suitably qualified service provider; and

(b) As-built plans of the stormwater management device or system, certified (signed) by a suitably qualified service provider as a true record of the stormwater management system.

(a) Landscape Plans

79. Prior to the completion of earthworks onsite, the consent holder must prepare a finalised set of detailed landscape design drawings and supporting written documentation which have been prepared by a landscape architect or SQEP in relation to landscape matters associated with the roads to vest and drainage reserves. This information must be submitted to Council for certification.

80. The submitted information must be consistent with the consented landscape concept plan(s) referenced in Condition 1 and, at a minimum, must include:

(a) Landscape design drawings, specifications and maintenance requirements including annotated planting plans, plant schedule, pavement plan, furniture plan, as applicable to the final design; and

(b) Evidence that Te Kawarau ā Maki, Ngaati Whanaunga, Ngāti Manuhiri, and te Runanga o Ngāti Whātua have been consulted regarding provision of cultural markers or similar within a road or drainage reserves, and details of any agreed marker.

Advice note: The information may be submitted in a staged manner as relevant to the concurrently authorised subdivision staging (refer to Condition 82).

81. Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of neighbourhood parks must be low height (1.2m) and at least 50% visually permeable.

82. Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of any drainage reserves must be either low height (1.2m) or at least 50% visually permeable (maximum height 1.8m). If located above a retaining wall, a maximum 1.2m fence with 50% visual permeability must be provided. Landscape planting may be implemented on the private lot and must be maintained to ensure 50% visual permeability.

(a) Implementation and Maintenance Plan

83. The consent holder must prepare and submit to Council for certification, a final Implementation and Maintenance Plan for proposed Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922, as well as all existing protected consent notice areas on private residential lots. The Plan must include as a minimum:

(a) The details and timing of when re-vegetation planting will be undertaken for Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922 and protected consent notice areas on private residential lots;

(b) A programme and specification for ongoing eradication of pest plants and control of pest animals;

(c) Methods for ensuring maintenance in perpetuity;

(d) Delegation of responsibilities between the consent holder and the Residential Society, as follows:

- The consent holder is responsible for the establishment and maintenance of all new planting as detailed within the Landscape Plans referenced under Condition 1. until 80% canopy closure has occurred and a minimum survival rate of the plants being 90% of the original density

through the entire planting area(s) has been achieved over a minimum 5 year defects liability period commencing on the date that the section 224(c) certificate is issued.

- Once all new planting is established, the Residential Society is responsible for the ongoing maintenance and ongoing eradication of pest plants and animals.

Advice note: Pest plant eradication means, that there are no mature, fruiting and / or flowering individuals of weed species present within the covenant area and any weed species present are dead. In addition, there must be no areas where weed species are smothering and / or out competing native vegetation including suppressing the natural regeneration processes. Pest animal control means meeting Council's minimum requirements and national standard best practice methods for control of these species to an acceptable level.

84. The consent holder must submit an annual monitoring report to Council for all new revegetation areas on Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922, and for all existing bush covenant areas on private residential lots, to demonstrate compliance with the certified Implementation and Maintenance Plan. The Monitoring Report must include but is not limited to the following information:

(a) Identification of pest plant and pest animal presence and confirmation of control measures undertaken;

(b) Photographic records from fixed monitoring points demonstrating vegetation establishment and progression over time;

(c) Recommendations for remedial planting or maintenance actions where performance criteria are not being met; and

(d) An assessment of whether the required minimum 90% plant survival rate and progression toward 80% canopy closure has been achieved.

The monitoring report is no longer required when it can be demonstrated that the planting has successfully established in accordance with Condition 79(d).

(a) Implementation and Maintenance of Landscaping and Fencing

85. Prior to occupation of the respective dwellings, the consent holder must implement the on-lot landscape design in general accordance with the landscape plans approved under Condition 1.

86. Subdivision (s11)

a. General subdivision conditions applying to all stages

Under sections 108, 108AA and 220 of the RMA, this consent is subject to the following conditions:

(a) Consent Holder

87. This subdivision consent shall attach to Vineway Limited as the consent holder. The consent holder may transfer the whole or part of its interest in the consent to any other party, and must provide written notice of the transfer to Auckland Council.

Advice Note: This purpose of this condition is to expressly provide for the subdivision consent to attach to the applicant, in accordance with Section 134 of the Resource Management Act.

(a) Staging of Subdivision

88. The subdivision shall be undertaken in general accordance with the staging plans referenced in Condition 1.

Details relating to the stages are as follows:

Stage 1A

- Stage 1A-1: Lot 2000 (road to vest), Lot 1600-1601 (drainage reserve), Lot 1605 (utility reserve), Lots 1500-1503 (JOAL), Lot 5000-5004 (balance allotments) and Lot 1-18, 20-119, 470, 472-474 and 477-481 (residential allotments);
- Stage 1A-3: Lot 1504 (JOAL), Lot 1901 (balance allotment), and Lot 130-154 (residential allotments);
- Stage 1A-4: Lot 2001 (road to vest), Lot 1604 and 1616 (drainage reserves), Lot 1904 and 1905 (balance allotments), Lot 1505 – 1507 (JOAL), Lot 155-256 (residential allotments);
- Stage 1A-2: Lot 1508 (JOAL), Lot 120 – 129 (residential allotments), Lot 2002 (road to vest), and Lot 1602 (drainage reserve);

Stage 1B

- Stage 1B-1: Lot 2003 - 2004 (road to vest), Lot 1605-1606 (drainage reserve), Lot 1508, 1509, 1515 (JOAL), Lot 5005-5007 (balance allotments), Lot 257 – 299 and 471 (residential allotments);
- Stage 1B-2: Lot 2005-2006 (road to vest), Lot 1510, 1511 and 1513 (JOAL), Lot 1607-1608 (drainage reserve), Lot 1800 (land in lieu of reserve for the purpose of recreation), Lot 5008 (balance allotment), Lot 300 – 358, 371 - 409 (residential allotments);
- Stage 1B-3: Lot 2008 (road to vest) Lot 1514 and 1515 (JOAL), Lot 1609 (drainage reserve), Lot 1908 (balance allotment), Lot 410-467, 600-605 (residential allotments), Lot 5009 (balance allotment);

Stage 2

- Stage 2A-1: Lot 2100 (road to vest), Lot 1522, 1523, 1525 (JOALS), Lot 1621 and 1628 (drainage reserve), Lot 5010-5012 (balance allotment), Lot 606-769 (residential allotments);

- Stage 2C: Lot 2106, (road to vest), Lot 1627, 1629 (drainage reserve,) Lot 1543-1544 (JOAL), Lot 1239-1310, 1320-1353 (residential allotments);
- Stage 2B-3: Lot 2104 (road to vest), Lot 1622-1624 (drainage reserve), Lot 1537-1542 (JOAL), Lot Lot 6000 (commercial superlot), Lot 5015- 5017 and 5500 (balance allotments), Lot 5020 (land in lieu of reserve for the purpose of recreation), Lot 1031-1238 (residential allotments);
- Stage 2B-2: Lot 2105 (road to vest), 1920 (balance allotment), Lot 982-1023 (residential allotments);
- Stage 2B-1: Lot 2103 (road to vest), Lot 1621(drainage reserve), Lot 1534-1535 (JOAL), Lot 950-981 (residential allotments), Lot 5014 (balance allotment); and
- Stage 2A-2: Lot 2102 (road to vest), Lot 1620 and 1621 (drainage reserve), Lot 1527-1533 (JOAL), Lot 3000 and 1910 (balance lot containing protected vegetation), Lot 468-469, 771-951 (residential allotments).

Advice note: Stage 1A-2 involves subdivision of the WWTP lot (Lot 5002). This subdivision stage will not occur until such time that a connection can be made to the public wastewater system and the WWTP is not required.

89. Amendments to the subdivision staging identified in Condition 82 may be undertaken, provided that all necessary infrastructure required to service a stage (including roads, wastewater, water supply, stormwater, electricity and telecommunications) have been implemented.

Advice note: Amendments may involve completing the subdivision staging in a different sequence or may involve amendments to the size of the stage.

90. Where variations to staging in accordance with Condition 83 are proposed, the consent holder shall submit amended staging plans showing the variations to Auckland Council for certification. The consent holder shall also provide evidence that the stages can be serviced with all necessary infrastructure in accordance with Condition 83.

(a) Public Roads

91. The consent holder must construct all new public roads in accordance with the requirements of Auckland Transport as approved via engineering plan approval.

92. All roading ancillary facilities to be vested in Auckland Council must be constructed in accordance with the approved engineering plans.

93. All landscaping within the road reserve and drainage reserves must be implemented in accordance with the approved landscaping plans under Condition 1 and to comply with Auckland Council's latest specifications or relevant Code of Practice for green assets and landscaping.

94. An Engineering Completion Certificate certifying that all proposed roads and the ancillary structures on the roads to be vested in Auckland Council have been constructed in accordance with the approved engineering plans, must be provided in support of the section 224(c) application.

(a) Road Naming

95. The consent holder must provide and install road naming signs in accordance with Auckland Council standards for both public and private roads that serve six or more lots within the subdivision. The names

must be approved by Auckland Council.

Advice Note: The road naming approval must be obtained from the Local Board prior to the submission of the survey plan pursuant to Section 223 of the RMA. The road naming application should provide suggested street names (one preferred plus two alternative names) and must include evidence of consultation with Te Kawarau ā Maki, Ngaati Whanaunga, Ngāti Manuhiri, and te Runanga o Ngāti Whātua).

(a) Transport

Infrastructure Pre-requisites

96. Prior to section 224(c) certification for the first stage of the subdivision that is developed, the consent holder must provide evidence to Council that access to the site has been constructed and is operational.

97. Prior to the occupation of more than 1,325 dwellings across the Delmore site and Ara Hills sites, the intersection of Road 17 and Upper Orewa Road must be constructed as a single-lane roundabout and designed to achieve sight distances in accordance with Austroads Guide to Road Design Part 4B: Roundabouts Park 4B for 60km/h operating speeds.

98. Prior to the opening of the roundabout at Road 17 and Upper Orewa Road, as required by Condition 91, the consent holder must:

(a) Upgrade Upper Orewa Road between Road 17 and Wainui Road to provide minimum 1m sealed shoulders on both sides of the road.

(b) Upgrade the Upper Orewa Road / Wainui Road intersection to provide a right turn bay on Wainui Road and a left turn lane on Upper Orewa Road.

(c) Construct a temporary off-road footpath (minimum 1.8m in width and an all-weather surface) along Upper Orewa Road and Russell Road between the Road 17 / Upper Orewa Road intersection and the eastern boundary of the Delmore site.

Advice note: Condition 92(b) upgrades would not be required if the NoR6 road has been constructed through this intersection, or if upgrades have been undertaken by another party.

99. Once development reaches 1,425 dwellings, and prior to the occupation of more than 1,450 dwellings within the Delmore and Ara Hills sites, the consent holder must:

(a) Provide a written report to Council, prepared by a suitably qualified traffic engineer, setting out the following:

- Results of a survey outlining the level of traffic generated from the Delmore site using the Grand Drive interchange.
- Results of a survey outlining the level of traffic generated from the Delmore site using the Upper Orewa access (from Road 17).
- Survey and assessment of performance of the Grand Drive / SH1 interchange. This is to determine if the Level of Service (LOS) has reached "E" for any approach.
- If the performance level in Condition 93(a)(iii) is reached at the time of monitoring, an assessment of traffic effects must be provided, setting out the mitigation options, including physical changes at the Grand Drive interchange, travel and traffic demand management options.

(b) Construct the mitigation options as outlined in Condition 93(a)(iv), if recommended by the written

report.

Transport

100. The consent holder must provide new vehicle crossings to serve all residential lots. Vehicle crossings are to be constructed as per the Auckland Transport Standard GD017A-1B or (VX0103 as per the TDM working draft, 14/02/20).

101. Concrete pedestrian footpaths with a gradient steeper than 8% must provide high-friction surfacing.

102. A pedestrian visibility splay of 2m x 2.5m (2m along the property boundary) must be provided on both sides of all the proposed vehicle crossings. Any obstructions including boundary fencing and/or landscaping within the visibility splay areas must not exceed 900mm in height. If fencing is provided above the 900mm height stipulation, it must be at least 80% visually permeable. Landscaping in the visibility splay area must be trimmed and maintained in perpetuity to comply with the stipulated height by the consent holder.

103. All vehicle crossings must be located to ensure a 2m separation distance is achieved between each crossing, or alternatively a combined driveway (6m wide) may be provided.

104. Prior to wastewater removal being required on Russell Road, the consent holder must widen Russell Road as per tracking plans to accommodate wastewater collection vehicles.

105. Traffic calming measures shall be provided at 60m intervals on all local roads.

106. Shared accessways (JOALs) shall be designed as either one-way routes or with turning heads to enable waste and delivery vehicle to service all lots. This must be detailed on the roading plans at Engineering Plan Approval stage.

107. The following additional details must be provided on the roading plans at Engineering Plan Approval stage:

(a) Detail around the traffic measures proposed for cyclist crossings and pram crossings on side road intersections;

(b) Location and design of bus stops for any future bus routes;

(c) Vehicle tracking diagrams to demonstrate that the road layout, intersections, turning heads, cul-de-sacs, and vehicle crossings are designed to accommodate the appropriate design vehicles in accordance with Auckland Council's Code of Practice and the Transport Design Manual (TDM); and

(d) Evidence that Approach Sight Distance (ASD) is achieved at all intersections.

(e) Evidence that K-values of roads achieve the Austroads requirements.

(a) Lighting Plan

108. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder must submit a Lighting Plan for the JOALs servicing 10 or more dwellings and roads to vest, prepared by a suitably qualified Lighting Engineer, to Auckland Council. The purpose of this condition is to provide adequate lighting for the safety of people. The Lighting Plan must:

(a) Demonstrate compliance with the relevant standards in E24.6.1 Lighting of the Auckland Unitary Plan (Operative in Part); and

(b) Include proposed locations, lux levels and types of lighting (i.e. manufacturer's specifications once a lighting style has been determined) and any light support structures.

109. The Lighting Plan must be implemented as part of the subdivision. The JOAL lighting must be maintained by the Residential Society required to be established under Condition 113 thereafter.

(a) Geotechnical

110. The consent holder must construct the earthworks, geogrid reinforced soils slopes, retaining walls and subsoil drainage in accordance with the recommendations of the Riley Consultants Ltd Geotechnical Investigation Report approved under Condition 1 to ensure the site is stable and suitable for development.

111. A Geotechnical Completion Report (GCR) from a suitably qualified and experienced chartered geo-professional must be prepared and submitted to Council to confirm that all residential lots are stable and suitable for development when applying for a certificate under section 224(c) for a subdivision stage (or sub-stage). The GCR must include a Building Restriction Zone plan that identifies specific design zones and no-build zones. Development must be undertaken in accordance with the recommendations of the GCR.

The preceding paragraph must be registered as a consent notice on the records of title for all residential lots to ensure that it is complied with on a continuing basis. The specific name and date of the GCR provided must be referenced in the consent notice.

Advice note: Refer to Auckland Council Code of Practice 2023 (Chapter 2) which details expectations of a geotechnical completion report.

112. As-built details of installed counterfort drains shall be included within the Geotechnical Completion Report, together with records of counterfort drain commissioning observations and flushing.

Advice Note: The drain commissioning information will provide baseline data for the countefort drain operation and maintenance plan. The as-built drawings shall also include locations of the flushing ports and outlet structures.

113. Where counterfort drains are installed within a stage of the development, a counterfort drain operation and maintenance plan shall be provided as an attachment to the Geotechnical Completion Report, incorporating a staged maintenance approach. This shall include the observations to be made, their frequency and any associated actions.

(a) Flood Level Report

114. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall submit a Flood Report prepared by a SQEP to Auckland Council for certification. The report shall:

(a) Identify any residential lots that are affected by the 1 in 100-year overland flow path and any adjacent lots situated within 500mm vertical distance of the surface of the 1 in 100-year overland flow path; and

(b) Recommend minimum finished floor levels for any future habitable buildings on the affected lots, with an appropriate freeboard allowance above the predicted flood level.

Advice note: If the required FFL is inconsistent with the FFLs included within the Architectural Drawings, the

FFL under Condition 108 will take precedence.

(a) Private Stormwater Infrastructure

115. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall prepare an Operation and Maintenance Plan for all residential lots that include on-lot stormwater infrastructure, including raingardens and stormwater roof tanks.

116. The Operation and Maintenance Plan must be prepared and submitted to Auckland Council for certification. The Plan shall include but not be limited to:

(a) A description of the on-lot stormwater infrastructure, including its location, size, and function; and

(b) Procedures and frequency for inspection, maintenance, and cleaning of the stormwater infrastructure and associated components to ensure continued performance.

(a) Waste

117. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall prepare a Waste Management Plan for all residential lots that will not receive public kerbside collection services and will instead rely on private waste collection.

118. The Waste Management Plan shall be submitted to Auckland Council for certification and shall:

(a) Identify the private waste collection service(s) to be used;

(b) Detail how waste and recycling will be stored on-site in a manner that is safe, sanitary, and does not create a nuisance; and

(c) Identify the proposed waste collection point(s) and demonstrate that they are accessible, safe, and do not adversely affect traffic, pedestrian access, or neighbouring properties.

The certified Waste Management Plan must be implemented prior to the occupation of any residential dwelling on the lots and maintained thereafter by the Residential Society.

(a) Residential Society

119. Prior to the issue of a s224(c) certificate for the first subdivision stage, the consent holder must prepare the necessary documentation to create a society, body corporate, association or other body acceptable to the Council (hereafter referred to as the "Residential Society") for management of the Common Infrastructure identified below.

<u>Stage 1</u>

Common Infrastructure	Ownership and Management Responsibilities	Lots that must pay a levy to the Common Infrastructure
JOALs	JOALs are to be owned and managed in equal shares by all residential lots that access the JOAL, as identified within the approved Scheme Plan under Condition 1. This shall be a sub-group within the Residential Society.	• JOAL 1500: Lots 1 – 25, 472, 474 • JOAL 1501: Lots 26 – 31, 470, 477, 478 • JOAL 1502: Lots 56 – 96, 479 – 481 • JOAL 1503: Lots 97 - 119 • JOAL 1504: Lots 130 – 154 • JOAL 1505: Lots 243 – 256 • JOAL 1506: Lots 155 – 195

	The carriageway, lighting and all other infrastructure (e.g., any required stormwater devices) within the JOAL shall be operated, maintained and, when required, renewed by the relevant JOAL sub-group. All costs shall be borne by that JOAL sub-group. Where rubbish collection is to be via "private service" the JOAL responsibilities shall also include the ongoing retention of the private service contact.	• JOAL 1507: Lots 204 – 209 • JOAL 1508: Lots 127 – 129 • JOAL 1508: Lots 277 – 279 and 471 • JOAL 1509: 280 – 299 • JOAL 1510: Lots 309 – 320 • JOAL 1511: Lots 335 – 337 • JOAL 1513: Lots 371 – 376 • JOAL 1514: Lots 451 – 467, 600 – 605 • JOAL 1515: Lots 257 – 259 • JOAL 1515: Lots 410 – 414, 475, 690 •
Wastewater Treatment Plant (5002)	Lot 5002 shall be owned by the consent holder (or its subsidiary) and leased to the Residential Society, until an alternative wastewater solution is available. The WWTP shall be operated, maintained and when required, renewed and the wastewater discharge reconsented by the Residential Society. All costs shall be borne by the Residential Society. This shall be incorporated into the Constitution.	All residential lots within Stage 1.
Lot 5001 (Wastewater disposal field and existing consent notice area)	Lot 5001 shall be transferred to the Residential Society at the completion of Stage 1 of the development. The Residential Society must ensure the long-term protection of the ecological values of the bush area in accordance with the consent notice obligations. The Residential Society must monitor the wastewater irrigation lines in accordance with the consent conditions. This shall be incorporated into the Constitution.	All residential lots within Stage 1.
Lot 1901, 1904, 1905 and 1908.	Lots 1901, 1904, 1905 and 1908 are to be transferred to the Residential Society at the completion of Stage 1 of the development. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in	All residential lots within Stage 1.

	accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	
Bush covenant areas: Lots 14-17, 76-86, 106-127, 155-167, 204-209, 211-226, 228, 251-256, 243-254, 251-254, 260-268, 277-279, 303-307, 315-318, 352-359, and 471	The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 1.

Stage 2

Common Infrastructure	Ownership and Management Responsibilities	Lots that must pay a levy to the Common Infrastructure
JOALs	JOALs are to be owned and managed in equal shares by all residential lots that access the JOAL, as identified within the approved Scheme Plan under Condition 1. This shall be a sub-group within the Residential Society. The carriageway, lighting and all other infrastructure (e.g., any required stormwater devices) within the JOAL shall be operated, maintained and, when required, renewed by the relevant JOAL sub-group. All costs shall be borne by that JOAL sub-group. Where rubbish collection is to be via "private service" the JOAL responsibilities shall also include the ongoing retention of the private service contact.	• JOAL 1522: Lots 675 – 689 • JOAL 1523: Lots 711 – 751 • JOAL 1525: Lots 755, 756 and 764 – 769 • JOAL 1526: Lots 616 – 656 • JOAL 1529: Lots 853 – 858 • JOAL 1530: Lots 867 – 869 • JOAL 1531: Lots 888 – 892 • JOAL 1532: Lots 919 – 931 and 970 • JOAL 1533: Lots 948 – 951 • JOAL 1534: Lots 952 – 966 • JOAL 1535: Lots 971 – 981 • JOAL 1537: Lots 1060 – 1069 • JOAL 1538: Lots 1081 – 1086 • JOAL 1539: Lots 1097 – 1102 • JOAL 1540: Lots 1128 – 1137 • JOAL 1541: Lots 1161 – 1165 • JOAL 1542: Lots 1204 – 1211 and 1214 – 1217 • JOAL 1543: Lots 1278 – 1283 • JOAL 1544: Lots 1294 – 1300 and 1304 – 1310 • JOAL 1550: Lots 609, 610

Lot 1922, 1920 and 1910	Lots 1922, 1920 and 1910 are to be transferred to the Residential Society at the completion of Stage 2 of the development. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 2.
Bush covenant areas: Lots 610-615, 931-948, 952-958, 999-1023, 1031-1047, 1052-1055, 1057, 1058, 1060, 1069, 1070, 1215, 1216, 1218-1238, 1246-1250, 1401, 1270-1272 and 1274-1278	The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 2.
Wastewater Treatment Plant (5002)	Lot 5002 shall be owned by the consent holder (or its subsidiary) and leased to the Residential Society, until an alternative wastewater solution is available. The WWTP shall be operated, maintained and when required, renewed and the wastewater discharge reconsented by the Residential Society. All costs shall be borne by the Residential Society. This shall be incorporated into the Constitution.	All residential lots within Stage 1 and Stage 2.

120. Membership of the Residential Society shall be compulsory for all owners of lots within the development. This obligation shall be secured on the record title of each residential lot by way of consent notice and covenant in gross in favour of the Residential Society.

121. The consent holder shall provide written evidence to Council that the Residential Society Constitution includes the following items:

(a) The ownership and management responsibilities of the Residential Society, including the operation, maintenance, repair, ~~and~~ renewal, and reconsenting of the Common Infrastructure and associated water takes and wastewater discharges within the development;

(b) Mechanisms for the raising of funds from members to adequately finance the operation, maintenance, repair, ~~and~~ renewal, and reconsenting of the Common Infrastructure; ~~and~~

(c) Decision making and dispute resolution requirements; ~~.~~

(d) The obligation on the Residential Society to comply with all resource consents;

(e) Mechanisms for the raising of funds from members to adequately finance the future decommissioning of any on-site wastewater servicing, wastewater treatment plant, or on-site water take and treatment;

(f) Mechanisms for the raising of funds from members to adequately finance the infrastructure works required to enable future connections to the public water supply and wastewater networks; and

(g) Mechanisms for the raising of funds from members to adequately finance the payment of future Infrastructure Growth Charges that may be payable to the public water and/or wastewater utility provider.

Advice Note: Condition 115(e) (f) and (g) are only applicable if connections to the public water and wastewater systems are confirmed by the water and/or wastewater utility provider.

(a) Infrastructure Servicing

Advice note: Conditions 122~~116~~ and ~~117~~123 are only applicable if a connection can be made to the public water and wastewater systems.

122. The consent holder must, at no cost to the wastewater utility provider ~~make provision for a~~ design and construct connections to the ~~wastewater connection to be made to the~~ public wastewater reticulation network to serve all residential lots in accordance with the requirements of the wastewater utility service provider. Certification from the utility provider that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

123. The consent holder must, at no cost to the water utility provider design and construct connections to the ~~make provision for a~~ design and construct connections to the ~~water connection to be made to the~~ public water reticulation network to serve all residential lots in accordance with the requirements of the water supply utility service provider. Certification from the utility provider that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

Advice Notes (condition 119 & 120)

- *Acceptable forms of Evidence from the Utility Providers include a Certificate of Acceptance.*
- *Plans approved under resource consent do not constitute an Engineering Plan Approval and **must not be relied upon** for the purposes of constructing public reticulation works in the absence of that approval.*
- *Any person wishing to connect to the public water and/or wastewater network must also obtain approval to such connection under the Water Supply and Wastewater Network Bylaw 2015 (Bylaw). Under the Bylaw an application to connect to a network may be refused in specified circumstances, including where there is insufficient capacity in the network to accommodate the connection. Any alterations to the public wastewater reticulation network require Engineering Plan Approval. Additional approval is required from Watercare as part of the*

Engineering Plan Approval process.

- *Public connections are to be constructed in accordance with the Water and Wastewater Code of Practice for Land Development and Subdivision.*

124. The consent holder must design and construct connections to the public stormwater reticulation network to serve all residential lots in accordance with the McKenzie and Co Stormwater Report and Drawings approved under Condition 1 and meeting the requirements of the stormwater utility service provider. Certification from the utility provider that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

125. The consent holder must make provision for private water supply and wastewater connections to service all residential lots. Certification that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

Advice notes:

126. *Where private water supply and wastewater infrastructure is constructed to service the development, and a future connection to the public water supply or wastewater network may be sought, the consent holder is advised that such infrastructure should be designed, constructed, and operated, in accordance with the Water and Wastewater Code of Practice for Land Development and Subdivision, to facilitate any potential future connection.*

b. *For the avoidance of doubt, nothing in this consent requires the network utility operator to accept any infrastructure for vesting or to approve any connection to the public network.*

127. The consent holder must design and construct a stormwater outfall structure as a disposal point for stormwater runoff for all allotments that do not have a connection to the public stormwater reticulation system, generally in accordance with the McKenzie & Co Stormwater Report approved under Condition 1. Certification that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

128. The consent holder must make provision for telecommunications and electricity supply to all residential lots accordance with the requirements of the respective utility operators. Certification from the utility operator that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

129. Prior to the ~~occupation~~ construction of any dwellings within ~~Stage 2~~ any stage of the development, the consent holder must provide evidence to the Council that suitable provision has been made for the treatment and disposal of wastewater and treatment and supply of potable water.

~~*Advice note: Condition 122 and 123 is not applicable if a connection can be made to the public wastewater system*~~.

(a) Erosion and Sediment Control

130. Prior to the commencement of any Civil-Construction or Subdivision earthworks at the site, an Erosion and Sediment Control Plan, specific to that stage of subdivision, must be prepared in accordance with Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 3 (GD05), and submitted to the Council for written certification. Earthworks activity on that stage of the site must not commence until the Council has certified that that the ESCP satisfactorily meets the requirements of GD05. The plan must contain sufficient details to address the following matters:

(a) Specific erosion and sediment control measures for the earthworks (location, dimensions, capacity) including the location of any sediment retention ponds, decanting earth bunds, super silt fences, silt fences, clean and dirty water diversion bunds and stabilised construction entrances, in accordance with GD05;

(b) Supporting calculations and design drawings, as necessary;

(c) Details of construction methods;

(d) Monitoring and maintenance requirements;

(e) Catchment boundaries and contour information as necessary; and

(f) Details relating to the management of exposed areas (e.g. grassing, mulching).

a. Stage 1A

(a) Survey Plan Approval (s223) Condition – Stage 1A

131. The consent holder must submit a survey plan in accordance with the approved resource consent subdivision scheme plan approved under Condition 1 for Stage 1A. The survey plan must show all lots to vest to Auckland Council (including roads and reserves), all easements and amalgamation conditions, required by this subdivision consent.

Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.

132. The rights of way and all services easements labelled on the proposed scheme plans approved under Condition 1 must be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The consent holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title.

133. The survey plan must include easements in favour of Auckland Council for all overland flow paths that traverse private lots, in accordance with the requirements of the Stormwater Code of Practice (SW CoP).

134. The survey plan must include an easement in favour of Auckland Council for the public pathway on Lot 1905 to ensure public access is maintained in perpetuity.

135. Lots 2000 - 2002 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the vesting of the road.

136. Lots 1601-1604 and 1616on the scheme plans approved under Condition 1 must be vested to Auckland Council as land in lieu of reserve – for drainage purposes.

(a) Consent Notices

137. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

Bush covenant lots

138. Lots 14-17, 76-86, 106-127, 155-167, 204-209, 211-226, 228, 251-256, 243-254, 251-254 contain vegetation and freshwater features that are required to be maintained and protected in perpetuity.

This comprises the area to be protected as labelled 'bush covenant' on the approved scheme plans under Condition 1.

- No person must cut, damage, fell, willfully injure or destroy any part (including the roots) of any native vegetation present within this area, or conduct any excavation, earthworks, construction, or storage of material or debris within the canopy span of such vegetation without the prior written approval of Auckland Council.
- No person may do anything that would prejudice the health or ecological value of the area to be protected, their long-term viability and/or sustainability.
- The owners must ensure the vegetation and freshwater features are maintained in accordance with the Implementation and Maintenance Plan. This includes the eradication of all pest plants and the control of all pest animals within the areas protected.
- No person may place any building and/or structure within the covenant area.

Geotechnical Stability

139. Development on all residential lots must be undertaken in accordance with the recommendations of the Geotechnical Completion Report required by Condition 105.

Advice Note: The specific name and date of the Geotechnical Completion Report provided must be referenced in the consent notice.

Operation and Maintenance of Stormwater Infrastructure

140. The owners of all residential lots must comply with the certified Operation and Maintenance Plan relating to on-lot stormwater infrastructure, required by Condition 109.

Minimum Finished Floor Levels

141. For development on residential lots that are affected by the 1 in 100-year overland flow path, the means of conveying unobstructed overland flow must be provided and maintained. There must be no obstruction of the overland flow with any fencing, object, impermeable landscaping, building, or structure.

142. Development on residential lots that are affected by the 1 in 100-year overland flow path and any adjacent lots situated within 500mm vertical distance of the surface of the 1 in 100-year overland flow path must be undertaken in accordance with the recommendations of the Flood Level Report required by Condition 108.

Certification from a SQEP shall be provided to Council, prior to the issue of a Code Compliance Certificate, confirming that the finished floor level complies with this condition.

Residential Society

143. The owners of all residential lots must belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.

a. Stage 1B

(a) Survey Plan Approval (s223) Condition – Stage 1B

144. The consent holder must submit a survey plan in accordance with the approved resource consent subdivision scheme plan approved under Condition 1 for Stage 1B. The survey plan must show all lots to vest to Auckland Council (including roads and reserves), all easements and amalgamation conditions, required by this subdivision consent.

Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.

145. The rights of way and all services easements labelled on the proposed scheme plans approved under Condition 1 must be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The consent holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title.

146. The survey plan must include easements in favour of Auckland Council for all overland flow paths that traverse private lots, in accordance with the requirements of the Stormwater Code of Practice (SW CoP).

147. Lots 2003, 2005 and 2008 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the vesting of the road.

148. Lots 1605, 1606 and 1609 on the scheme plans approved under Condition 1 must be vested to Auckland Council as land in lieu of reserve – for drainage purposes.

149. Lot 1800 shall be transferred to Auckland Council as land in lieu of reserve (for the purpose of recreation) if by the time of application for the survey plan for Stage 1B to be approved under section 223 the consent holder has entered into an agreement with Auckland Council for the sale and purchase of Lot 1800.

150. If no agreement is in place in accordance with Condition 141 by the time of application for the survey plan for Stage 1B-2 to be approved under section 223, then Lot 1800 shall be developed into residential lots in accordance with the following plans:

- Scheme plan titled “Alternative Plan for Lots 359 – 370, 1512 Being Subdivision of Lot 1800 DP XXXXXX Stage 1B-1”, dated 18 December 2025.
- Architectural plans prepared by Terra Studio titled “A-S1-1-87, A-S1-1-88, A-S1-1-89, A-S1-1-90”

151. Lot 1800 must be free of easements and encumbrances and with no utility devices or structures on the land or on any of its road frontages or berms, unless agreed in writing with Auckland Council.

(a) Consent Notices

152. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council’s solicitor and registered at the consent holders’ expense.

153. If additional lots are included as a result of Condition 142, the consent holder must register the below consent notices on the record of title, where relevant.

154. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

Bush covenant lots

155. Lots 260-268, 277-279, 303-307, 315-318, 352-359, and471 contain vegetation and freshwater features that are required to be maintained and protected in perpetuity. This comprises the area to be protected as labelled 'bush covenant' on the approved scheme plans under Condition 1.

- No person must cut, damage, fell, willfully injure or destroy any part (including the roots) of any native vegetation present within this area, or conduct any excavation, earthworks, construction, or storage of material or debris within the canopy span of such vegetation without the prior written approval of Auckland Council.
- No person may do anything that would prejudice the health or ecological value of the area to be protected, their long-term viability and/or sustainability.
- The owners must ensure the vegetation and freshwater features are maintained in accordance with the Implementation and Maintenance Plan. This includes the eradication of all pest plants and the control of all pest animals within the areas protected.
- No person may place any building and/or structure within the covenant area.

Geotechnical Stability

156. Development on all residential lots must be undertaken in accordance with the recommendations of the Geotechnical Completion Report required by Condition 105 above.

Advice Note: The specific name and date of the Geotechnical Completion Report provided must be referenced in the consent notice.

Operation and Maintenance of Stormwater Infrastructure

157. The owners of all residential lots must comply with the certified Operation and Maintenance Plan relating to on-lot stormwater infrastructure.

Minimum Finished Floor Levels

158. Development on lots that contain or are located adjacent to Overland Flow Paths (as identified on the survey plan) must be undertaken in accordance with the recommendations of the Flood Level Report required by Condition 108.

Certification from a SQEP shall be provided to Council, prior to the issue of a Code Compliance Certificate, confirming that the finished floor level complies with this condition.

Residential Society

159. The owners of all residential lots must belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.

a. Stage 2

(a) Survey Plan Approval (s223) Condition – Stage 2

160. The consent holder must submit a survey plan in accordance with the approved resource consent subdivision scheme plan approved under Condition 1 for Stage 2. The survey plan must show all lots to vest to Auckland Council (including roads and reserves), all easements and amalgamation conditions, required by this subdivision consent.

Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.

161. The rights of way and all services easements labelled on the proposed scheme plans approved under Condition 1 must be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The consent holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title.

162. The survey plan must include easements in favour of Auckland Council for all overland flow paths that traverse private lots, in accordance with the requirements of the Stormwater Code of Practice (SW CoP).

163. The final survey plan for Stage 2 must include an easement in favour of Auckland Council for the public pathways identified on Lot 3000 to ensure public access is maintained in perpetuity.

164. Lot 5020 shall be transferred to Auckland Council as land in lieu of reserve (for recreation purposes) if by the time of application for the survey plan for Stage 2B-3 to be approved under section 223 the consent holder has entered into an agreement with Auckland Council for sale and purchase of Lot 5020.

165. If no agreement is in place in accordance with Condition 156 by the time of application for the survey plan for Stage 2B-3 to be approved under section 223, then Lot 5020 will transfer to the Residential Society and the management and maintenance of the reserve shall be included as part of the Residential Society obligations as outlined in 113.

166. Lots 2100, 2102-2106 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the vesting of the road.

167. Lots 161-620, 1621, 1623, 1624, 1627 and 1629 on the scheme plans approved under Condition 1 must be vested to Auckland Council as land in lieu of reserve – for drainage purposes.

(a) Consent Notices

168. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

Bush covenant lots

169. Lots 610-615, 931-948, 952-958, 999-1023, 1031-1047, 1052-1055, 1057, 1058, 1060, 1069, 1070, 1215, 1216, 1218-1238, 1246-1250, 1401, 1270-1272 and 1274-1278 contain vegetation and freshwater features that are required to be maintained and protected in perpetuity. This comprises the area to be protected as labelled 'bush covenant' on the approved scheme plans under Condition 1.

- No person must cut, damage, fell, willfully injure or destroy any part (including the roots) of any native vegetation present within this area, or conduct any excavation, earthworks, construction, or storage of material or debris within the canopy span of such vegetation without the prior written approval of Auckland Council.
- No person may do anything that would prejudice the health or ecological value of the area to be protected, their long-term viability and/or sustainability.
- The owners must ensure the vegetation and freshwater features are maintained in accordance with the Implementation and Maintenance Plan. This includes the eradication of all pest plants and the control of all pest animals within the areas protected.
- No person may place any building and/or structure within the covenant area.

Geotechnical Stability

170. Development on all residential lots must be undertaken in accordance with the recommendations of the Geotechnical Completion Report required by Condition 105.

Advice Note: The specific name and date of the Geotechnical Completion Report provided must be referenced in the consent notice.

Operation and Maintenance of Stormwater Infrastructure

171. The owners of all residential lots must comply with the certified Operation and Maintenance Plan relating to on-lot stormwater infrastructure, required by Condition 109.

Minimum Finished Floor Levels

172. Development on lots that contain or are located adjacent to Overland Flow Paths (as identified on the survey plan) must be undertaken in accordance with the recommendations of the Flood Level Report required by Condition 108.

Certification from a SQEP shall be provided to Council, prior to the issue of a Code Compliance Certificate, confirming that the finished floor level complies with this condition.

Residential Society

173. The owners of all residential lots shall belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.

174. Streamworks Conditions (s13)

Pre-commencement

(a) Streamworks Management Plan to be Provided

175. At least 20 working days prior to the commencement of any works within wetlands or streams, a Stream Works Management Plan (SWMP), must be submitted to Auckland Council for certification. The purpose of the SWMP is to provide a finalised streamworks methodology and management measures that enable effects of streamworks to be managed during construction in accordance with best practice.

The SWMP must include as a minimum but is not limited to:

(a) A plan showing the specific areas where streamworks are to occur;

(b) Management measures to demonstrate how erosion and sediment controls will avoid sediment or sediment laden water entering the stream in accordance with best practice;

(c) Management of contaminants to water (e.g. hydrocarbons, construction materials);

(d) An explanation of how and measures to ensure maintenance of fish passage during and after the streamworks is achieved;

(e) Methodology for diverting upstream flows during the streamworks, including how sufficient flow will be maintained at all times below the site of the works to maintain in-stream biota, and the location and nature of any temporary diversion structures;

(f) A detailed methodology for the installation of permanent structure(s); and

(g) Details of final streambed remediation or stabilisation upon completion of stream works.

176. Any changes to the SWMP must be submitted to Auckland Council with supporting information demonstrating that the changes to the SWMP incorporate best practice methodologies for managing effects from the streamworks and that the adverse effects from the streamworks remain the same or less.

177. The methodology for the installation of the short-term surface water diversions must be in general accordance with the Earthworks Report prepared by McKenzie & Co referenced under Condition 1 and dated December 2025.

178. Prior to the commencement of any streamworks (including reclamation of ponds), a Native Fish Capture and Relocation Plan (NFCRP) must be submitted to the Council for certification. The NFCRP must be prepared by a suitably qualified and experienced Freshwater Ecologist and must include the following detail;

(a) Methodologies to capture fish within the impact stream, or justification there is no habitat for native fish present at the time of construction;

(b) Hand search of the base sediments of the stream bed and banks for native fish that may have burrowed into the soils;

(c) Fishing effort;

(d) Details of the relocation site;

(e) Storage and transport measures including prevention of predation and death during capture;

(f) Euthanasia methods for diseased or pest species;

(g) Confirmation on the habitat availability of the relocation site to support fish at the time of streamworks; and

(h) An accidental discovery protocol for aquatic fauna which require specialised handling and relocation effort that is not otherwise covered in the standard methodologies (i.e. regionally threatened species as per the Conservation Status of Freshwater Fishes in Tāmaki Makaurau / Auckland). This includes a protocol to implement the following actions:

- Immediately cease streamworks (including dewatering) upon accidental discovery of any unexpected aquatic fauna and notify the Council.
- Ensure aquatic fauna are left in a suitable environment where they will be unharmed while the NFCRP is updated.
- Update the NFCRP to address handling and relocation of the unexpected aquatic fauna to be submitted to Council for re-certification.
- Only re-commence the capture and relocation upon re-certification of the NFCRP.

Work in progress conditions

179. All streamworks must be undertaken in accordance with the SWMP required by Condition 166. All required control measures and methodologies must be in place prior to the streamworks commencing and be maintained for the duration of the streamworks activity.

180. Native fish capture and relocation must be undertaken in accordance with the certified NFCRP, and must only be undertaken by a suitably qualified and experienced freshwater ecologist. The freshwater ecologist must also be onsite during the dewatering process to ensure that any remaining native fish that is not caught during de-fishing are salvaged.

181. The temporary diversion cut must be designed to provide stable stream bed conditions to avoid scouring and erosion both upstream and downstream of the diversion and any other instability of any land or water body.

182. During periods of flow greater than the capacity of any stream diversion certified under condition 166 above, a stabilised flow path up to the 100-year flood event must be provided to ensure no scour or erosion occurs and so that flows can pass safely around or through the area of works with minimum nuisance and damage and with minimal sediment generation or discharge.

Post-Construction Conditions

183. Within 20 working days following completion of the installation of the structure, the consent holder must provide certified (signed) as-built plans that confirm that the structure has been constructed in accordance with the approved plans to Auckland Council.

Advice Note: The consent holder must engage at their own expense a suitably qualified professional engineer to prepare and certify these plans.

184. If any of the routine monitoring or visual inspections identify that provision for fish passage has been reduced, or the culverts are damaged, the consent holder must undertake maintenance, or remediation works as soon as practicable to remedy the issues identified.

185. Within 20 working days following completion of works associated with the new road culvert crossings,

the consent holder must submit to Council the information required by regulations 62 and 63 of the National Environmental Standard for Freshwater (2020).

186. Within 20 working days following completion of works associated with the new road culvert crossings, the consent holder must submit to Council a Fish Passage Monitoring and Maintenance Plan (FPMMP). The FPMMP must specify the ongoing maintenance measures of the culvert structures to ensure fish passage is maintained and must include the following:

(a) Fish passage must be maintained through the culvert structure, and monitoring, maintenance and remediation measures must be undertaken in general accordance with the FPMMP;

(b) If any monitoring or visual inspections identify that provision for fish passage has been reduced, or the culvert structure is damaged, the Consent Holder must undertake maintenance or remediation works as soon as practicable to remedy the issues identified;

(c) The consent holder must maintain a record of all monitoring and maintenance works undertaken on the culvert structure including photos and evidence of any maintenance works undertaken. If requested, the consent holder must provide this record to the Council within 10 working days of the date of request.

187. Water Permit for Dewatering and Diversion of Groundwater (s14)

Notice of Commencement of Excavation

188. The Council must be advised in writing at least ten working days prior to the date of the commencement of excavation for the relevant sub-stage of development.

Advice note: For the purpose of compliance with conditions of consent, "the Council" refers to the council monitoring inspector unless otherwise specified. To identify your allocated officer please email monitoring@aucklandcouncil.govt.nz.

Design and Construction

189. The design and construction of the excavations must be undertaken in accordance with the recommendations and analysis contained within the Geotechnical Report approved under Condition 1.

Damage Avoidance

190. All excavation, dewatering systems, retaining structures and works associated with the diversion or taking of groundwater, must be designed, constructed and maintained so as to avoid damage to land, buildings, structures and services on the site or adjacent properties, unless otherwise agreed in writing with the asset owner.

191. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, a Groundwater and Settlement Monitoring and Contingency Plan (GSMCP) prepared by a SQEP, must be submitted to Council for certification. Any later proposed amendment of the GSMCP must also be submitted to Council for certification. The purpose of the GSMCP is to set out the practices and procedures to be adopted to ensure compliance with the consent conditions and shall include, at a minimum, the following information:

(a) A monitoring location plan, showing the location and type of all monitoring stations including groundwater monitoring bores, ground, building, inclinometer and retaining wall deformation pins;

(b) Details of any buildings/structures that require detailed pre-condition surveys, groundwater and ground surface monitoring frequency (in accordance with Schedule B, Schedule C and Schedule D in Attachment 2 of the conditions);

(c) All monitoring data, the identification of services susceptible to damage and all building/service condition surveys undertaken to date;

(d) A bar chart or a schedule, showing the timing and frequency of condition surveys, visual inspections and all other monitoring required by this consent, and a sample monitoring report template (monitoring reports are to be provided at 2-monthly intervals);

(e) Completed Schedule A for alert and alarm level triggers (refer Attachment 2 of the conditions), including reasons if changes are proposed, for example, as a result of recommendations in the building condition surveys or data obtained from pre-dewatering monitoring; and

(f) Details of contingency actions to be implemented if alert or alarm levels are exceeded.

192. All construction, dewatering, monitoring and contingency actions shall be carried out in accordance with the approved GSMCP. No bulk excavation (that may affect groundwater levels) or other dewatering activities shall commence until the GSMCP is certified by the Council.

193. All excavation, dewatering, retaining structures and works associated with diversion or taking of groundwater, shall be designed, constructed and maintained so as to avoid damage to buildings, structures and services on the site or adjacent properties, unless otherwise agreed in writing with the asset owner.

Pre-Excavation Services Condition Survey

194. Prior to the commencement of excavation, a photographic condition survey (recording evidence of existing observable damage) of any structures within the influence zone of the proposed excavation, must be undertaken by a SQEP and a written report must be prepared and reviewed by the SQEP responsible for overviewing the monitoring.

Advice note: This condition does not apply to any service where written evidence is provided to Council that the owner of that service has confirmed they do not require a condition survey.

195. Prior to the commencement of excavation, a condition survey of the potentially affected stormwater services must be undertaken in consultation with the relevant service provider.

Advice note: This condition does not apply to any service where written evidence is provided to the Council that the owner of that service has confirmed they do not require a condition survey.

External Visual Inspections during Dewatering

196. External visual inspections of the surrounding ground and neighbouring structures within the influence zone of any excavation must be undertaken for the purpose of detecting any new external damage or deterioration of existing external damage. Inspections must be carried out weekly during active excavation, and then monthly until completion of the dewatering. A photographic record must be kept, including time and date, of each inspection and all observations made during the inspection, and must be of a quality that is fit for purpose. The results of the external visual inspections and an assessment of the results must be reviewed by the SQEP responsible for overviewing the monitoring.

Advice note: This condition does not apply to any land, building or structure where written evidence is provided to the Council confirming that the owner of the land, building or structure does not require visual inspections to be carried out.

Monitoring

197. Groundwater monitoring must be undertaken as shown in the approved GSMCP. The monitoring frequency may be changed if approved by the Council. Any change must be specified in the GSMCP.

198. Ground surface and building deformation monitoring stations must be established as required by the GSMCP. The monitoring frequency may be changed, if approved by the Council. The consent holder must request termination of ground surface settlement and building settlement monitoring from Council, supported with a letter of justification for the termination, prepared by a SQEP.

199. Retaining wall deflection stations and inclinometers (where deemed appropriate) for the measurement of lateral wall movement, must be installed along the top of retaining walls where groundwater is anticipated to be encountered.

200. Monitoring of the retaining wall deflection stations and inclinometers must be undertaken and

recorded in accordance with the GSMCP and must be carried out using precise levelling, or by string lines between markers. The monitoring frequency may be changed, if approved by the Council, through the GSMCP.

Alert and Alarm Level Actions

201. The activity must not cause any settlement or movement greater than the alarm level thresholds specified in the GSMCP (required by Condition 181).

202. In the event of any alert level being exceeded, the consent holder must:

(a) Notify the Council within 24 hours;

(b) Re-measure all monitoring stations within 50m of the affected monitoring locations to confirm the extent of apparent movement;

(c) Ensure the data is reviewed, and advice provided, by a SQEP, on the need for mitigation measures or other actions necessary to avoid further deformation. Where mitigation measures or other actions are recommended, those measures must be implemented;

(d) Submit a written report, prepared by the SQEP responsible for overviewing the monitoring, to the Council within ten working days of alert level exceedance. The report must provide an analysis of all monitoring data (including wall deflection) relating to the exceedance, actions taken to date to address the issue, recommendations for additional monitoring (i.e. the need for increased frequency or repeat condition survey(s) of building or structures), and recommendations for future remedial actions necessary to prevent alarm levels being exceeded.

(e) Measure and record all monitoring stations within 50m of the location of any alert level exceedance every two days until such time that the written report referred to above has been submitted to the Council.

203. In the event of any alarm level being exceeded at any ground deformation pin, retaining wall deflection pin or inclinometer, the consent holder must:

(a) Immediately halt construction activity, including excavation, dewatering, or any other works that may result in increased deformation, unless halting the activity is considered by a SQEP to be likely to be more harmful (in terms of effects on the environment) than continuing to carry out the activity.

(b) Notify the Council within 24 hours of the alarm level exceedance being detected and provide details of the measurements taken.

(c) Undertake a condition survey (this could comprise either a detailed condition survey or an external visual inspection at the discretion of the SQEP responsible for overviewing the monitoring) by a SQEP or suitably qualified building surveyor (SQBS) of any building or structure located adjacent to any monitoring station where the alarm level has been exceeded.

(d) Take advice from the author of the alert level exceedance report (if there was one) on actions required to avoid, remedy or mitigate adverse effects on ground, buildings or structures that may occur as a result of the exceedance.

(e) Not resume construction activities (or any associated activities), halted in accordance with paragraph (a) above, until any mitigation measures (recommended in accordance with paragraphs (d) above) have been implemented to the satisfaction of a SQEP.

(f) Submit a written report, prepared by the SQEP responsible for overviewing the monitoring, to the

Council, on the results of the condition survey(s), the mitigation measures implemented and any remedial works and/or agreements with affected parties within 10 working days of re-commencement of works.

Completion of Dewatering - Building, Structure and Services Condition Surveys

204. Between six and twelve months after completion of construction phase dewatering, a detailed condition survey of all previously surveyed stormwater services must be undertaken by a SQEP, and a written report must be prepared. The report must be reviewed by the SQEP responsible for overviewing the monitoring and then submitted to Council, within one month of completion of the survey.

The condition survey report must make specific comment on those matters identified in the pre-excavation condition survey. It must also identify any new damage that has occurred since the pre-dewatering condition survey was undertaken and provide an assessment of the likely cause of any such damage.

Advice note: This condition does not apply to any Services where written evidence is provided to Council confirming that the owner of that building, structure, or Service does not require a condition survey to be undertaken.

Additional Surveys

205. Additional condition surveys of any building, structure, or service within the area defined by the extent of groundwater drawdown or ground movement, must be undertaken, if requested by the Council, for the purpose of investigating any damage potentially caused by ground movement resulting from dewatering or retaining wall deflection. A written report of the results of the survey must be prepared and/or reviewed by the SQEP responsible for overviewing the monitoring. The report must be submitted to the Council.

206. The requirement for any such additional condition survey will cease six months after the Completion of Dewatering, unless ground settlement is observed during the Dewatering period. In such circumstances the period where additional condition surveys may be required will be extended until monitoring shows that movement has stabilised and the risk of damage to buildings, structures and services as a result of the dewatering is no longer present.

Access to Third Party Property

207. Where any monitoring, inspection or condition survey in this consent requires access to property/ies owned by a third party, and access is declined or subject to what the consent holder considers to be unreasonable terms, the consent holder must provide a report to the Council prepared by a SQEP identifying an alternative monitoring programme. The report must describe how the monitoring will provide sufficient early detection of deformation to enable measures to be implemented to prevent damage to buildings, structures or services. Written approval from the Council must be obtained before an alternative monitoring option is implemented.

Contingency Actions

208. If the consent holder becomes aware of any damage to buildings, structures or services potentially caused wholly, or in part, by the exercise of this consent, the consent holder must:

(a) Notify the Council and the asset owner within two working days of the consent holder becoming aware of the damage.

(b) Provide a report prepared by a SQEP (engaged by the Consent Holder at their cost) that describes

the damage; identifies the cause of the damage; identifies methods to remedy and/or mitigate the damage that has been caused; identifies the potential for further damage to occur and describes actions that must be taken to avoid further damage.

(c) Provide a copy of the report prepared under (b) above, to the Council and the asset owner within ten working days of notification under (a) above.

Advice Note: It is anticipated the Consent Holder will seek the permission of the damaged asset to access the property and asset to enable the inspection/investigation. It is understood that if access is denied the report will be of limited extent.

Building, Structure, and Services Surveys and Inspections

209. A copy of all condition surveys and photographic records required by this consent must be provided to the Council upon request.

Notice of Completion

210. The Council must be advised in writing within ten working days of when the construction phase dewatering has been completed for the relevant sub-stage of development.

211. Stormwater Discharge Permit (s15)

(a) Minor modifications

212. In the event that any minor modifications to the stormwater management works are required, that will not result in an application under section 127 of the RMA, the following information must be provided:

(a) Plans and drawings outlining the details of the modifications; and

(b) Supporting information that details how the proposal does not affect the capacity or performance of the stormwater management system.

All information must be submitted to Auckland Council, prior to implementation.

(a) Raingardens

213. The detailed design of all proposed raingardens shall be carried out in accordance with Auckland Council's GD01 – Guidance Document for Stormwater Management Devices in the Auckland Region and Auckland Council's Stormwater Code of Practice (Version 4).

214. The raingardens shall be designed to:

(a) Provide water quality treatment in accordance with the requirements of GD01;

(b) Achieve stormwater retention and detention volumes as required to meet the hydrology mitigation requirements for the development; and

(c) Maintain the design intent as presented in the application, including integration into the streetscape or landscape design where relevant.

Evidence demonstrating compliance with these requirements shall be submitted to and approved by Auckland Council prior to lodgement of Engineering Plan Approval.

(a) Operation and Maintenance Plan

215. An Operation and Maintenance Plan (OMP) for all stormwater management devices proposed to be vested in Council shall be submitted to Auckland Council Healthy Waters Operations Team for certification at the time of Engineering Plan Approval. The OMP must comply with Healthy Waters Operation and Maintenance Plan Template.

(a) Post-Construction Conditions

216. As-Built certification and plans of the stormwater management works, which are certified (signed) by a chartered professional engineer as a true record of the stormwater management devices, must be provided to Auckland Council within 20 working days of the completion of the stormwater management works.

217. The As-Built plans must display the entirety of the stormwater management system, and must include:

(a) The surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the discharge structure, with co-ordinates expressed in terms of NZTM and LINZ datum;

(b) The location, dimensions and levels of any overland flow paths including cross sections and long sections;

(c) Plans and cross sections of all stormwater management devices, including confirmation of the water quality volume, storage volumes and levels of any outflow control structure; and

(d) documentation of any discrepancies between the design plans and the As-Built plans if modified in accordance with Condition 201.

7.0 Wastewater Discharge Permit (s15)

Advice Note: The Wastewater Discharge Permit applies to treated wastewater being discharged on the site. They are not applicable if the development connects to the public wastewater network, or untreated wastewater is taken off-site.

218. The WWTP shall be designed and constructed in general accordance with the "Delmore Wastewater Treatment Plant Design Report" prepared by Apex and approved under Condition 1 and must be designed in accordance with the Water and Wastewater Code of Practice for Land Development and Subdivision.

219. Conditions 209 - 244 must be complied with on a continuing basis whilst the WWTP is in operation.

(a) Wastewater Treatment Plant

220. The site must be operated and managed in accordance with the Wastewater Management Plan (WMP) approved under Condition 1 while the WWTP is operational. During this period:

(a) The WMP must be reviewed and updated after 12 months from the date of commissioning of the WWTP, to ensure all components of the WMP are still relevant;

(b) The WMP must be kept on site and accessible at all times;

(c) The Hazardous Substance Inventory, associated Material Safety Data Sheets, and Spill Response Plan must be kept up to date and maintained onsite at all times;

(d) Suitable spill kits must be made available onsite at all times; and

(e) The consent holder must report all spills over 20 litres, or any discharge of environmentally hazardous substances, including wastewater to the environment, to Auckland Council within 24 hours of the spill occurring.

(a) Monitoring

221. Prior to the exercise of this wastewater discharge permit, the consent holder shall install a flow meter or flow meters to record the daily volume of wastewater discharged to each of the discharge locations.

222. A record of the volume of wastewater discharged daily at each of the discharge locations shall be kept by the consent holder at all times. The consent holder shall forward the record for the previous year to Auckland Council upon request.

223. The land infiltration trench and irrigation fields shall be monitored and maintained by a suitably qualified individual to ensure it continues to perform as intended.

224. Maintenance of the land infiltration trench and irrigation fields shall be carried out at a minimum of 3 monthly and a record of any maintenance carried out shall be kept on site and available for review upon request by the council. At a minimum, maintenance shall include:

- Flushing of irrigation lines;
- Check that any sequencing valves are operating as intended;
- A walkover of the irrigation fields to check for ponding, runoff, or broken lines;
- Inspection of the land infiltration trench for weeds or other potential sources of blockages; and

- Check for odour.

All maintenance procedures shall be listed in the Wastewater Management Plan and/or Operations and Maintenance Plan.

(a) Volume

225. During the summer period (December to February) the daily average volume of treated wastewater discharged on site must not exceed a total of 101.5m^3/day (as a 3 month rolling average from December to February), made up of an average of:

(a) 38.5m^3/day to the land infiltration trench; and

(b) 63m^3/day to land irrigation.

The remainder of the treated wastewater must be trucked off-site to be disposed of at an appropriate facility.

226. Outside the summer period (March to November), the daily average volume of treated wastewater discharged on site to the irrigation field (or the land infiltration trench, or a combination of both), must not exceed 257m^3/day (as a 9 month rolling average from March to November).

(a) Treated Wastewater

227. Outside of the summer period (March to November), as measured immediately prior to discharge to the land infiltration trench, the treated wastewater discharged to the land infiltration trench must comply with the following daily mass loading limits:

Parameters	12-month median daily equivalent
Total Nitrogen [mg/L]	0.22
Ammoniacal Nitrogen (mg/L)	0.065
cBOD5 [mg/L]	0.44
Total Suspended Solids [mg/L]	0.87
Total Phosphorus [mg/L]	0.015
Escherichia-coli [CFU/100mL]	<4.0
Enterococci [cfu/100mL]	<4.0

Advice note: For the purposes of this condition (March through November), to determine compliance with the consent limits, the daily total volume of treated wastewater discharged to the Land Infiltration Trench shall be taken from a totalised value as provided by the flow meter and as recorded from midnight to midnight in line with the requirements of Condition 210.

The concentration of the parameters detailed in the table above used to calculate mass loadings shall be as sampled and tested in accordance with Condition 226 by a suitably qualified and experienced person/individual/professional and tested by an IANZ accredited laboratory.

The basis for calculation shall be as follows:
Daily mass loading (kg/d) = (Totalised Daily flow (m3/d) x 1,000) x (Parameter Concentration (mg/L) / 1,000,000)

228. Inside of the summer period (December to February), as measured immediately prior to discharge to the land infiltration trench, the treated wastewater discharged to the land infiltration trench must comply with the following daily mass loading limits.

Parameters	12-month median daily equivalent
Total Nitrogen [mg/L]	0.038
Ammoniacal Nitrogen (mg/L)	0.012
cBOD5 [mg/L]	0.08
Total Suspended Solids [mg/L]	0.15
Total Phosphorus [mg/L]	0.0027
Escherichia-coli [CFU/100mL]	<4.0
Enterococci [cfu/100mL]	<4.0

Advice note: For the purposes of this condition, to determine compliance with the consent limits, the daily total volume of treated wastewater discharged to the Land Infiltration Trench shall be taken from a totalised value as provided by the flow meter and as recorded from midnight to midnight in line with the requirements of Condition 210.

The concentration of the parameters detailed in the table above used to calculate mass loadings shall be as sampled and tested in accordance with Condition 226 by a suitably qualified and experienced person/individual/professional and tested by an IANZ accredited laboratory.

The basis for calculation shall be as follows:
Daily mass loading (kg/d) = (Totalised Daily flow (m3/d) x 1,000) x (Parameter Concentration (mg/L) / 1,000,000).

229. Should three consecutive samples return results above the median mass load limits for the parameters detailed in Condition 216 or Condition 217 (depending on the time of the year), the consent holder shall notify Auckland Council within 5 working days. The consent holder must then conduct an investigation into the cause, supported by a report to be supplied to Auckland Council. The report shall outline the actions being undertaken to address and remedy the cause of the exceedance and detail whether further monitoring is required.

230. The UV dose must be greater than 16mWs/cm2 95% of the time, while discharging.

231. Chlorine must not exceed 3 mg/L as Free Available Chlorine at the point of discharge to land irrigation.

Advice note: Condition 220 relates solely to land irrigation, Condition 234 applies to the infiltration trench.

(a) Treated Wastewater Monitoring

232. Prior to the exercise of this consent, the consent holder must establish adequate facility and access for wastewater quality sampling of the treated wastewater before the wastewater discharges to the land application area.

233. The consent holder must continuously monitor treated wastewater discharge flows and volume, with data linked to the wastewater treatment plant SCADA system.

234. The consent holder must ensure and be able to demonstrate that a UV dose of a minimum of 16mWs/cm^2 is delivered by the UV disinfection facility 95% of the time (calculated on the basis of a 15-minute average, while discharging) over each calendar month.

235. The consent holder must take 24-hour flow proportioned samples of the treated wastewater on a fortnightly basis from the treated wastewater compliance monitoring point and analyse for the parameters set out below.

Parameters	Unit
Total Nitrogen	(mg/L)
Ammoniacal Nitrogen	(mg/L)
Nitrate Nitrogen	(mg/L)
Nitrite Nitrogen	(mg/L)
Soluble cBOD5	(mg/L)
Total Suspended Solids	(mg/L)
Dissolved Reactive Phosphorus	(mg/L)
Total Phosphorus	(mg/L)
Escherichia-coli	(cfu/100mL)
Enterococci	(cfu/100mL)
Temperature	°C
Electrical Conductivity	□S/cm
Total Residual Chlorine	(mg/L)
pH	-

236. No more than 12 samples out of any 24 consecutive fortnightly samples shall exceed the specified limit.

237. The treated wastewater compliance monitoring point shall be at a location within the treatment plant compound, immediately following the final wastewater treatment plant step. All wastewater quality analyses must be undertaken by an IANZ accredited or equivalent laboratory. All methods used must be appropriate for the wastewater analyses undertaken.

(a) Discharge to Irrigation Field

238. The irrigation fields shall be designed in general accordance with the *"Delmore Water and Wastewater Treatment Plant Design Report*" (dated December 2025, by Apex).

239. No treated water shall be applied to land within 40 metres of any bore used for abstraction of water for human consumption.

240. The total nutrient loading into the irrigation field must not exceed the following application rates:

Nutrient	Loading

Total Nitrogen	220kg/Ha.year
Total Phosphorous	80 kg/Ha.year
Biological Oxygen Demand	600kg/Ha.day

241. The maximum loading rate to the irrigation fields shall not exceed 3mm/day.

242. Irrigation at the disposal must not result in ponding or runoff.

243. A buffer zone of a minimum of 15 metres must be maintained between the discharge of wastewater in the irrigation field and any surface water body.

244. The consent holder must submit the detailed design of the irrigation fields to Auckland Council before installation. The detailed design must include, at a minimum:

(a) A final layout of the overall irrigation fields and irrigation zones;

(b) A layout showing buffer distances from watercourses, buildings, bores and other features requiring buffer separation from the irrigation drip lines; and

(c) Details of the irrigation system design, including dripline type, emitter type, emitter spacing and lateral spacing.

(a) Discharge to Land Infiltration Trench

245. No chlorine dosing must take place into the discharge to the land infiltration trench.

246. The discharge trench must be fenced off and signposted to discourage access to the area.

247. The infiltration trench shall be monitored and maintained by a SQEP to ensure it continues to perform as intended. A record of any maintenance carried out shall be kept on site and available for review upon request by the council.

(a) Performance Monitoring

248. Within one month of the first exercise of this wastewater discharge permit, the consent holder must supply Auckland Council with a Producer Statement/Certificate of Compliance from a SQEP, certifying that the Wastewater Treatment Plant, irrigation fields and land contact infiltration trench have been constructed as required by this consent.

(a) Receiving Environment Monitoring

Monitoring Locations

249. The consent holder must undertake surface water quality monitoring, and ecological surveys as described in Conditions 239 - 242 at the general locations within the unnamed tributary of the Orewa River, as follows:

(a) A control site, 'US', situated approximately 100m upstream from the land contact infiltration trench discharge.

(b) An impact site, 'DS-1', situated approximately 50m downstream from the land contact infiltration trench discharge.

(c) A second impact site, 'DS-2', situated approximately 50m downstream of the main channel's

confluence with a tributary.

Surface Water Quality Monitoring

250. Surface water quality sampling must be undertaken:

(a) For a period of at least 12 months prior to commencement of discharge, at quarterly intervals, to establish baseline conditions and seasonal variability.

(b) Following the commencement of the discharge, at quarterly intervals.

(c) Once the development has been operating at design capacity for a minimum of two years, the sampling frequency may be reduced to once every three years, in consultation with Council, provided monitoring demonstrates no significant discharge-related reduction in surface water quality and no incidents having been reported under Condition 218.

251. All surface water quality samples must be tested for the following parameters:

(a) pH

(b) Total suspended solids

(c) Total ammoniacal nitrogen

(d) Nitrate-nitrogen

(e) Total nitrogen

(f) Dissolved reactive phosphorous

(g) Total phosphorous

(h) Escherichia coli

(i) Enterococci

(j) Soluble carbonaceous five-day biochemical oxygen demand ($cBOD_5$)

All sample analyses must be undertaken by an IANZ accredited or equivalent laboratory.

Ecological Monitoring

252. Ecological surveys must be undertaken:

(a) Once, prior to the commencement of the discharge, during summer (between December and February).

(b) Annually, following the commencement of the discharge, during summer (between December and February).

(c) Once the development has been operating at design capacity for a minimum of two years, the sampling frequency may be reduced to once every three years, in consultation with the Consent Authority, provided monitoring demonstrates no significant discharge-related deterioration in ecological condition and no incidents having been reported under Condition 218.

253. Each ecological survey must include:

(a) A qualitative assessment of physical habitat characteristics.

(b) Collection and analysis of macroinvertebrate samples.

(c) Overnight fish trapping.

Incident Reporting

254. Where surface water quality sampling and/or ecological surveys identify a deterioration in water quality and/or ecological health that is attributable to the WWTP discharge, the consent holder shall:

(a) Immediately investigate the cause and extent of the deterioration.

(b) Provide a report to the Council within 20 working days of becoming aware of the deterioration, including recommended actions.

(c) Implement any remedial measures required to address discharge related effects.

Monitoring Report

255. The consent holder must prepare an Annual Environmental Monitoring Report (AEMR) to be submitted to Council by each anniversary of consent commencement. The AEMR must include:

(a) All monitoring results required by Conditions 239 - 242.

(b) A comparison of monitoring results against baseline conditions (including seasonal variability) and relevant guideline values.

(c) An assessment as to whether any observed changes are attributable to the WWTP discharge, including any reporting required under Condition 243.

256. Air Discharge Permit (s15)
Advice Note: The Air Discharge Conditions are not applicable if the development connects to the public wastewater network.

(a) Odour Management Plan

257. The consent holder must prepare and submit to Auckland Council a Final OMP for certification. The OMP must incorporate a series of monitoring, management and operational procedures, methodologies and contingency plans, and together shall accurately record all information required to comply with the conditions of this consent.

258. The OMP must be in general accordance with the Draft OMP provided under Condition 1 and must include the following:

(a) Identification of all point sources for discharges of contaminants into air, including a map and schematic diagram showing the location of each source;

(b) Procedures to minimise discharges of contaminants into air (including odour), including details of the inspection, maintenance, monitoring and contingency procedures in place for the wastewater treatment plant and the trucking of untreated wastewater off-site;

(c) The operating parameters of odour control equipment and the frequency and scope of the regular checks to be performed on emissions control equipment; including testing of the carbon bed saturation;

(d) Procedures for the monitoring of odour, including details of inspection procedures, recording requirements and contingency measures;

(e) The identification of staff responsibilities; and

(f) The procedures for the receipt, recording and handling of air quality complaints received.

259. The OMP must be reviewed on an annual basis and any subsequent changes to the certified OMP must be submitted to the council for certification prior to implementation. The council will advise the Consent Holder in writing if any aspects of the OMP are considered to be inconsistent with achieving the provisions of this consent.

Advice Note: The council acknowledges that the OMP is intended to provide flexibility both for the consent holder and the council for the management of the air discharges. Accordingly, the OMP will be reviewed over time. Any reviews should be in accordance with the stated objectives of the management plan and limited to the scope of this consent.

(a) Air Discharges Limits

260. All processes associated with the management of wastewater must be operated, maintained, supervised, monitored and controlled in accordance with the OMP in accordance with Condition 245 - 246 to ensure that all emissions authorised by this consent are maintained at the minimum practicable level.

261. Discharges of contaminants into air from the site must not cause:

(a) Odour that is noxious, dangerous, offensive or objectionable effect beyond the boundary of the Site, in the opinion of an enforcement officer.

(b) Visible emissions (other than water vapour/steam or heat haze) that cause a dangerous,

offensive or objectionable effect, in the opinion of an enforcement officer.

Advice Note: Air discharge limits

Condition 249 is to be assessed by suitably trained council enforcement officers in accordance with the procedures outlined in the Good Practice Guides for Odour (Ministry for the Environment, 2016), including consideration of the FIDOL factors (frequency, intensity, duration, offensiveness and location) for amenity effects (dust, odour and visible emissions).

(a) Untreated Wastewater to be Taken Off-Site

262. The consent holder must design and construct an odour control system for air that is displaced from the tankers during filling. The odour control system must be designed so that the discharge will not cause odour that is noxious, dangerous, offensive or objectionable to any residential dwellings.

263. The consent holder must design and construct an odour control system for vented emissions from the holding tank. The odour control system must be designed so that the discharge will not cause odour that is noxious, dangerous, offensive or objectionable to any residential dwellings.

264. Within one month of the installation of the odour control systems, the Consent Holder must provide to the Council a report from an appropriately qualified person, which verifies that the design and installation of the odour control system has been undertaken in accordance with Conditions 250 and 251.

(a) Wastewater Treatment Plant

265. Air discharges from solids screening and storage and sludge dewatering and storage must be extracted to an emission control system (including an activated carbon scrubber) and discharged from a stack at least 3m above ground level or the apex height of the nearest building within 20 metres, without obstruction of the vertical discharge of air.

266. Within one month of the WWTP commencing treatment, the Consent Holder must provide to the Council a report from a SQEP, which verifies that the design and installation of the WWTP and odour control system (including the odour extraction and treatment system) has been undertaken in accordance with Condition 253.

(a) Monitoring and Reporting Conditions

267. Within 3 months of exercising this resource consent, The consent holder must:

(a) Operate and maintain a weather station on the site to measure and record the air temperature, wind direction and wind velocity on a continuous basis (at no less than 10-minute intervals). The weather data must be retained for at least the duration of the resource consent.

(b) Weather data of any period must be provided to Auckland Council within 5 days of a request.

(c) The weather station must be located on the site in a location which, as far as is practicable, is unaffected by surrounding structures or vegetation or other features for the purpose of ensuring the most accurate measurements as practicable on the site.

(d) The weather station must be installed and operated in accordance with AS/NZS 3580.14:2014 (Methods for sampling and analysis of ambient air - Meteorological monitoring for ambient air quality monitoring applications).

268. The Council must be notified as soon as practicable in the event of any significant discharge to air, which

results or has the potential to result in a breach of air quality conditions or adverse effects on the environment. The following information must be supplied:

(a) Details of the nature of the discharge including any wind conditions as recorded under condition 255 during the incident timeframe.

(b) An explanation of the cause of the incident.

(c) Details of remediation action taken.

Advice Note: Significant discharges to be notified to council in accordance with this condition include abnormal discharges arising from unexpected failures of the WWTP (including emission control systems). An email to monitoring@aucklandcouncil.govt.nz should be sent detailing the nature of the issue and what contingency measures are to be implemented to minimise potential air quality effects.

269. All air quality complaints that are received must be recorded and if requested by Council, provided to Council within one working day of the complaint. The recorded complaint details must include:

(a) The date, time, location and nature of the complaint.

(b) The name, phone number and address of the complainant, unless the complainant elects not to supply these details.

(c) Weather conditions, including wind speed and direction, at time of the complaint.

(d) Any remedial actions undertaken.

270. Archaeological Authority

271. All works must be undertaken in accordance with the Archaeological Management Plan (AMP) prepared by Clough and Associates titled "Delmore Proposed Residential Development, Upper Ōrewa, Auckland" dated December 2025 (AMP). Any changes to the AMP require the prior written agreement of Heritage New Zealand Pouhere Taonga.

272. A copy of the AMP (and any updates to these documents) shall be provided to Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga.

273. Any activity undertaken at the site under the archaeological authority must conform to accepted archaeological practice.

274. Within 12 months of the completion of the on-site archaeological work, the authority holder shall ensure that a final report, completed to the satisfaction of Heritage New Zealand Pouhere Taonga and following the Archaeological Report Guideline (AGS12 2023), is submitted to Heritage New Zealand Pouhere Taonga for inclusion in the Heritage New Zealand Pouhere Taonga Archaeological Reports Digital Library.

(a) One hard copy and one digital copy of the final report are to be sent to the Heritage New Zealand Pouhere Taonga Senior Archaeologist.

(b) Digital copies of the final report must also be sent to: the NZAA Central Filekeeper, Auckland Museum, Auckland Council, and Tangata Whenua.

275. Prior to any works commencing, the authority holder must ensure that all contractors working on the project are briefed on site by the approved person, who may appoint a SQEP to carry out the briefing on their behalf, on:

(a) The possibility of encountering archaeological evidence;

(b) How to identify possible archaeological sites during works;

(c) The archaeological work required by the conditions of this authority; and

(d) Contractors responsibilities with regard to notification of the discovery of archaeological evidence to ensure that the authority conditions are complied with.

276. Prior to the start of any on-site archaeological work, the authority holder must ensure that Heritage New Zealand Pouhere Taonga is advised of the date when work will begin. This advice must be provided at least two (2) working days before work starts. The authority holder must also ensure that Heritage New Zealand Pouhere Taonga is advised of the completion of the on-site archaeological work, within five (5) working days of completion.

277. All earthworks that may affect any archaeological sites must be monitored by the approved person who may appoint a person to carry out the monitoring on their behalf.

278. In addition to any tikanga agreed to between the authority holder and Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga provided with the authority application, the following shall apply:

(a) If any kōiwi (human remains) are encountered, all work should cease within 5 metres of the discovery. The Heritage New Zealand Pouhere Taonga Senior Archaeologist, New Zealand Police and [name of Tangata Whenua] must be advised immediately in accordance with Guidelines for Kōiwi Tangata/Human Remains (AGS8 2010) and no further work in the area may take place until future actions have been agreed by all parties;

(b) Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga shall be informed if any possible taonga or Māori/Moriori artefacts are identified to enable appropriate tikanga to be undertaken, so long as all statutory requirements under the Heritage New Zealand Pouhere Taonga Act 2014 and the Protected Objects Act 1975 are met;

(c) Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga shall be provided with a copy of any reports completed as a result of the archaeological work associated with this authority and be given an opportunity to discuss it with the s45 approved person if required.

279. Annually, from the date of issue of this authority, Site Record Forms are to be updated or submitted to the NZAA Site Recording Scheme, and the authority holder must submit to the Heritage New Zealand Pouhere Taonga Senior Archaeologist and Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga a written report containing a summary of the progress of the project.

Attachment 1 – Table of Plans and Reports

Report title and reference	Author	Rev	Dated
Ecological Impact Assessment	Viridis	N/A	18/12/2025
Arboricultural Assessment	Peers Brown Miller	1	19/12/2025
Draft Stormwater Management Plan	McKenzie & Co	C	2/07/2025
Preliminary Site Investigation	Williamson Water and Land Advisory	4	16/12/2025
Geotechnical Report	Riley Consultants	1.0	19/12/2025
Geotechnical Supplementary Memo	Riley Consultants	N/A	19/12/2025
Geomorphic Risk Assessment	Morphum	N/A	20/11/2025
Geomorphic Risk Assessment Supplementary Memo	Morphum		19/12/2025
Archaeological Assessment	Clough & Associates Ltd	N/A	12/2025
Landscape Assessment Report	Greenwood Associates	0	18/12/2025
Water, Wastewater and Utilities Report	McKenzie & Co	G	22/12/2025
Stormwater Report	McKenzie & Co	H	22/12/2025
Earthworks Report and Drawings	McKenzie & Co	F	15/12/2025
Roading and Access Report	McKenzie & Co	H	15/12/2025
Noise Assessment	SLR	1.0	18/12/2025
Urban Design Assessment	Barker & Associates	N/A	19/12/2025
Upper Orewa Concept Structure Plan	Barker & Associates	N/A	12/2025
Integrated Transportation Assessment	Commute	N/A	22/12/2025
Flood Assessment Report	McKenzie & Co	D	18/12/2025
Water and Wastewater Design Report	Apex Water Limited	-	
Wastewater Disposal Memorandum	Vineway Limited	N/A	18/12/2025
Wastewater Discharge Assessment	Viridis	N/A	19/12/2025
Air Discharge Assessment	AirMatters	6	19/12/2025
Hazardous Substances Assessment	Williamson Water and Land Advisory	N/A	16/12/2025
Hydrology Assessment	Williamson Water and Land Advisory	2	18/12/2025

Architectural Plans			
Architectural Drawings	Terra Studios	B	-
Landscape Plans			
Landscape Plans	Greenwood Associates	-	19/12/2025
Planting Implementation and Maintenance Plan	Greenwood Associates	-	18/12/2025
Engineering Plans			
Stage 1 Raingarden Plans	McKenzie & Co	E	22/12/2025
Stage 1 Earthworks Drawings	McKenzie & Co	L	22/12/2025
Stage 1 Site Clearing	McKenzie & Co	H	22/12/2025
Stage 1 Erosion and Sediment Control	McKenzie & Co	E	22/12/2025
Stage 2AB Earthworks Drawings	McKenzie & Co	I	22/12/2025
Stage 2CDE Earthworks Drawings	McKenzie & Co	M	22/12/2025
Stage 1 Roading Drawings	McKenzie & Co	G	22/12/2025
Stage 2 Roading Drawings	McKenzie & Co	G	22/12/2025
Stage 1 Stormwater Drawings	McKenzie & Co	F	22/12/2025
Stage 2AB Stormwater Drawings	McKenzie & Co	F	22/12/2025
Stage 2AB Site Clearing	Mckenzie & Co	F	22/12/2025
Stage 2AB Sediment Erosion	McKenzie & Co	E	22/12/2025
Stage 2CDE Stormwater Drawings	McKenzie & Co	D	22/12/2025
Stage 2 CDE Site Clearing	McKenzie & Co	F	22/12/2025
Stage 2 CDE Sediment Erosion	McKenzie & Co	D	22/12/2025
Stage 1 Wastewater, Water & Utilities Drawings	McKenzie & Co	B	22/12/2025
Stage 2 Wastewater, Water & Utilities Drawings	McKenzie & Co	B	22/12/2025
Scheme Plans			
Stage 1 Scheme Plan	McKenzie & Co	I	22/12/2025
Stage 2 Scheme Plan	McKenzie & Co	G	22/12/2025

Attachment 2: Inputs to the Groundwater and Settlement Monitoring and Contingency Plan

Schedule A: Alarm and Alert Levels			
Movement		**Trigger Thresholds (+/-)**	
		Alarm	**Alert**
a)	Differential vertical settlement between any two Ground Surface Deformation Stations (the **Differential Ground Surface Settlement Alarm or Alert Level**):	TBC	TBC
b)	Total vertical settlement from the pre-excavation baseline level at any Ground Surface Deformation Station (the **Total Ground Surface Settlement Alarm or Alert Level**):	TBC mm	TBC mm
c)	Differential vertical settlement between any two adjacent Building Deformation Stations (the **Differential Building Settlement Alarm or Alert Level**)	TBC	TBC
d)	Total vertical settlement from the pre-excavation baseline level at any Building Deformation Station (the **Total Building Settlement Alarm or Alert Level**)	TBC mm	TBC mm
e)	Total lateral deflection from the pre-excavation baseline level at any retaining wall deflection station (the **Retaining Wall Deflection Alarm or Alert Level**):	TBC mm	TBC mm

Schedule B: Groundwater Monitoring Frequency					
Bore Name	**Location**		**Groundwater level monitoring frequency (to an accuracy of 10 mm)**		
	Easting (mE)	Northing (mN)	From bore construction until one month before Commencement of Construction Phase Dewatering	Two weeks before Commencement of Construction Phase Dewatering to Completion of Construction Phase Dewatering	From Completion of Construction Phase Dewatering until 3 months later
GWBH	TBC	TBC	Weekly (for at least two weeks)	Weekly	Monthly

Schedule C: Ground Surface and Building Monitoring			
Monitoring Station and type*	**Frequency**		
	Pre-Commencement of Excavation	**Commencement to Completion of Excavation**	**Post- Completion of Excavation**
Ground: TBC	Twice to a horizontal and vertical accuracy of +/-2 mm (achieved by precise levelling)	Weekly	Monthly for 6 months
Buildings: TBC	Twice to a horizontal and vertical accuracy of +/-2 mm (achieved by precise levelling)	Weekly	Monthly for 6 months

Schedule D: Retaining Wall Monitoring Frequency				
Frequency				
Pre-Commencement of Excavation	**Commencement of Excavation to one month after Completion of Excavation**		**From Completion of Excavation until 3 months later**	
Pre-Commencement of Dewatering	**Retaining Wall Deflection Stations**	**Inclinometers**	**Retaining Wall Deflection Stations**	**Inclinometers**
N/A - can only be installed after installation and immediately prior to excavation commencing	Once for every 2 metres depth (on average) of excavation, and, in any case, at a minimum of once weekly.	Once for every 2 metres depth (on average) of excavation, and, in any case, at a minimum of once fortnightly.	Fortnightly	Monthly

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 19:

Stormwater & Geomorphology

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Stormwater (Regulatory) & Geomorphology

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Martin Meyer – Senior Stormwater Specialist & Danny Klimetz – Healthy Waters Geomorphic Specialist
Qualifications & Relevant Experience:	I hold the qualifications of: Bachelor of Science in Environmental Science and Physical Geography, Post Graduate Diploma in Science & Technology and have 8 years of experience within three waters. I have prepared expert evidence and technical assessments for resource consent applications and fast-track applications.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	25.03.2026

3.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- *Assessment of Environmental Effects and Statutory Analysis*, prepared by Barker & Associates Limited, dated 23.12.2025
- *Stage 1 Scheme Plans* prepared by McKenzie & Co, dated 2.07.2025
- *Stage 2 Scheme Plans* prepared by McKenzie & Co, dated 17.12.2025
- *Ecological Impact Assessment* prepared by Viridis, dated 18.12.2025
- *Geotechnical Report* prepared by Riley Consultants Limited, dated 19.12.2025
- *Geomorphic Supplementary Report* prepared by Riley Consultants Limited, dated 19.12.2025
- *Geomorphic Assessment* prepared by Morphum Environmental, dated 20.11.2025
- *Delmore Development - Geomorphic Response Memo* prepared by Morphum Environmental, dated 19.12.2025
- *Hydrology Assessment* prepared by Williamson Water & Land Advisory, dated 18.12.2025
- *Stormwater Infrastructure* prepared by McKenzie & Co, dated 19.12.2025
- *Stormwater Peer Review* prepared by Woods, dated 19.12.2025
- Stormwater Drawings prepared by McKenzie & Co, dated 10.12.2025
- *Stormwater Management Plan,* prepared by McKenzie & Co, dated 18.12.2025
- *Flood Assessment Report*, prepared by McKenzie & Co, dated 18.12.2025
- *Proposed Consent Conditions*

4.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

AUP(OP)

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 has also identified activity E8.4.1(A11), I do not recommend the use of this activity, as the above E8.4.1(A10) activity will be sufficient to cover the entire private diversion and discharge.

Due to the nature of the development occurring in rural zoned land, a private consent is required. The applicant has expressed they will meet the requirements of the NDC.

E9 Stormwater Quality – High contaminant generating carparks and high use roads

The applicant proposes a high use road greater than 5,000m^2, I agree this is a **controlled activity** under E9.4.1(A7).

NES-F

The applicant is triggering the diversion and discharge for the purpose of urban development changes in hydrological function within 100m of natural inland wetlands. I agree with their assessment of being **restricted discretionary activity** under regulation 45C (4) and 45C(5).

5.0 Specialist Assessment

The proposal 'Delmore' is a comprehensively planned urban development of up to 1,213 residential lots, a commercial super-lot, a residential super-lot, parks, roading (including an arterial road 'NoR6') and an on-site wastewater treatment plant, and water supply and treatment (where public supplies are not available due to capacity constraints).

Existing Environment

A 109.18ha rural site located in Ōrewa at 88, 130 and 132 Upper Orewa Road and 53A, 53B and 55 Russell Road, zoned 'future urban', the site is currently rolling farmland, with some natural and exotic vegetation including natural inland wetlands. The site has 39 streams that ultimately discharge into the Ōrewa River.

The site currently has a number of farm crossings and culverts, and of the 36 natural inland wetlands identified all are stated as 'degraded through historical and current agricultural practices'. The site also contains a Significant Ecological Area (SEA) and the site has three consent notices, for bush and riparian vegetation protection, and wetland and planting area maintenance.

Assessment of Effects

The site will undergo development of impervious areas, the coverage has been modelled where Lots are assumed to have 60% impervious area, Roads 70% and JOALs 90%, the catchment specific impervious areas are individually described within the Flood Assessment Report with modelling undertaken for 'maximum probable development'. These changes in impervious area will significantly alter the stormwater diversion and discharge of the site and require mitigation and management for both quality and quantity related matters.

Water Quality

Contaminants of concern from urban development may impact the receiving environment. The applicant has identified contaminants of concern, and treatment for these contaminant generating areas.

The stormwater management plan states that all impervious areas will have treatment using devices designed in accordance with GD01 for the appropriate contaminants. This includes 75% total suspended solid treatment. Further it states that generation of contaminants will be prevented as far as practicable using low contaminant generating materials.

Impervious area	Contaminants of concern	BPO
Roofs,	Copper, Zinc	Lot contaminant generating areas.
Driveways	Sediments, gross pollutants, metals, oils and grease, hydrocarbons, temperature	Catchpit with Sump, on-site Raingarden
Public roads	Sediments, gross pollutants, metals, oils and grease, hydrocarbons, temperature	Catchpit with Sump, Communal Raingarden
Private Joals	Sediments, gross pollutants, metals, oils and grease, hydrocarbons	Catchpit with Sump, Communal Raingarden

Table 5 of the SMP, stating potential contaminants and their treatment

The high use road 'NoR6' will be considered a high use road, and required to meet the controlled activity standards of E9.4.1(A7). To comply with these standards runoff from this high use road must be treated by stormwater management device(s) that meet GD01.

All impervious areas are to be treated with GD01 devices per the SMP. The road is therefore expected to comply with these standards.

Residential lots will either connect to a piped network (with communal treatment devices), or approximately 200 lots adjacent to streams will discharge via t-bar dispersal devices (after retention/detention tanks located within their lot)

Water Quantity

The creation of impervious areas present an issue in peak flow entering the receiving environment, whereby a lower time of concentration occurs for stormwater on the site. To mitigate this the applicant proposes moderating flows through communal raingarden devices, retention (5mm)/detention (95th percentile) tanks.

These mitigation devices will provide attenuation of flows, (further attenuation within the stream is expected through throttling of culverts, refer to Healthy Waters memo), the diversions and discharge are expected to create hydrological regime change to a number of natural inland wetlands, and an area of 1,085m^2 is proposed to be reclaimed. A hydrological report was undertaken that specifies the hydrological effects of culverts on the wetlands. The culverts as identified within the flood assessment report are throttling flows in a variety of rainfall events which will lead to increased flooding depths immediately above culverts, altering the hydrology of the surrounding environment. Effects are expected on the wetlands impacted from the change in hydrological regime, which is considered a restricted discretionary activity under 45C(4) and 45C(5) of the NES-F, the reports identify that the effects will not be significant, ecological impact assessment has identified the existing wetlands as low and moderate ecological value, and is looking to provide a total of 3,258m^2 of new wetlands to offset the impact in particular to the reclaimed wetlands (a net gain of 2,173m^2). A mechanism is proposed to achieve appropriately offset ecological values through a condition 'wetland offset plan'. Refer to the Ecologist memo for further information on the wetland impacts and recommended condition amendments.

Please refer to memos from engineering/AT(stormwater) and Healthy Waters for flood matters, overland flow paths, and pipe capacities.

Effects from changes on water quantity in a stream receiving environment may include geomorphic responses. Geomorphic matters have been addressed by Council's Geomorphological Specialist. Refer to Appendix A of this memorandum for the Geomorphic Review Assessment.

Operation and Maintenance of the proposed stormwater management system is required for continued mitigation of the water quantity and water quality effects of the additional impervious areas proposed.

While t-bar dispersal devices are commonly used for rural discharges, the use of many t-bars on moderate to high gradient stream banks, with thin proposed lot sizes (compared to typical rural sites) is not typical, and the cumulative effects of these may impact the receiving environment. The t-bars are proposed to meet standards for erosion/scouring and the geomorphic risk assessment includes a recommendation for vegetation below the devices to further aid dispersal and reduce the risk of scour/erosion. The geotechnical report further discusses that geotechnical experts should be involved in their installation. It is noted that a geomorphic/geotechnical risk may exist due to loading of these banks from stormwater due to the high density of t-bar devices (this risk is outside the scope of this assessment).

The applicant has stated the maintenance of these t-bars is proposed to be a consent notice for individual lot owners, approximately 200 are proposed within the development. A 'body corporate' or resident association (as proposed to manage shared stormwater management devices) while not conditioned should be considered to ensure and manage these large number of private lot devices critical to the stormwater management for the site functioning as intended by the design. Poor maintenance over a large number of attenuating and dispersal devices located in close proximity to one another may increase risk of scouring and erosion of the stream banks (and other issues raised above outside the scope of this assessment).

The reticulated stormwater management system, communal raingardens and drainage reserves are proposed to be vested and has been sized for 10% AEP events (refer to DE and HW memos for analysis on flooding and pipe capacities).

Communal raingardens designed per GD01 are proposed for vestment, refer to Healthy Waters memo.

I have undertaken a site visit during the previous iteration of the Delmore proposal.

6.0 Section 67 Information Gap

S67 information gaps have been identified by Council's Geomorphological Specialist and are included within Appendix A of this memo.

7.0 Recommendation

I support this proposal where the proposed amendments to the conditions below are accepted.

8.0 Proposed Conditions

I have reviewed and approve of the conditions within the lodged proposed conditions document. However these conditions do not fully address the stormwater management in particular in the management of private stormwater assets. The following amendment/additional conditions are necessary.

Condition 119, the stormwater management of the private lots should under the stormwater discharge permit, it is recommended that an additional condition. It is recommended rather than Condition 119, a 'stormwater management works' condition, listed under the stormwater permit. A description of the table is provided.

1. 'Stormwater Management Works'
   Note this is a description of the stormwater management works condition table recommended:
   Specify each treatment device, outfalls, raingardens proposed that are to be included within this 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. Two tables could be created to aid in simplifying the consent, one with the proposed vested devices, and the others to remain private (stormwater tanks, t-bar dispersal devices)

Amendments to conditions 109 and 110 are recommended to specify the operation and maintenance plan requirements per standard requirements. These conditions are recommended to be under the Stormwater Discharge Consent and not under the Land Use Consent. See the 'operation and maintenance plan' condition below.

Additionally the enactment of 149 and 163 to require the operation and maintenance plan should be further amended and be provided for under the stormwater discharge consent. The following operation and maintenance conditions (2 – 9) are recommended under the Stormwater Discharge Permit including the incorporation of conditions requiring maintenance records to be held.

2. 'Operation and Maintenance Plan'
   An Operation and Maintenance Plan must be provided to and certified by the council **five (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 or alterations to the Operation and Maintenance Plan must be submitted to the the council for confirmation, in writing prior to implementation.

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 and must be provided to the council on request.

6. 'Contents of maintenance record'

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

7. '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 DIS######].

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

204. This condition is recommend to be amended or an additional specifications of operation and maintenance plan are recommended. Refer to Healthy Waters memo for their comments and specific wording for their recommended changes to this condition.

Appendix A: Geomorphological Specialist Assessment

From:	Danny Klimetz, Principal Waterways Planning, Healthy Waters and Flood Resilience, Auckland Council
Qualifications & Relevant Experience:	I hold qualifications of: Bachelor of Science in Geological Engineering and have 22 years of specialist experience in Fluvial Geomorphology.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses, and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Date:	26.03.2026

Geomorphological specialist comments are provided to aid the Panel in determining whether the diversion and discharge of stormwater will cause or increase scouring or erosion at the point of discharge or downstream. In terms works which may impact overland flow, the comments are provided to aid the Panel in determining the extent to which scouring and erosion will be managed, and the extent to which the proposal will avoid, remedy, or mitigate effects on stream ecology.

Section 67 Information Gaps

A. Geomorphic Assessment Scope and Methodology

A1.

The Rapid Geomorphic Erosion Assessment (Morphum, 2025) identifies widespread active adjustment across the network, including 9 reaches scoring Considerable Instability and 22 scoring Moderate Instability. The RGEA is an appropriate screening tool. However, it is of my professional opinion that its findings warranted escalation to a more detailed quantitative assessment before definitive conclusions were drawn on setback adequacy, the absence of instream works, and the adequacy of T-bar spreaders as appropriate mitigation.

- Where quantitative or scenario-based follow-up assessment undertaken in response to the RGEA findings, and where is it documented?
- Both Morphum assessments state that this was not quantitative modelling. On what evidential basis are the definitive conclusions regarding setbacks, instream works, and T-bar adequacy derived from an observation-only screening assessment, where instability and risk is so clearly laid out?

A2.

The geomorphic assessment documents an actively adjusting gully system with "estimated" 1-2 m of further bed lowering anticipated across most reaches before bedrock is encountered, common knickpoints migrating upstream, widening by mass wasting, and toe undercutting that is likely to trigger slope instability. Despite this, the assessment concludes no instream works are required and 10 m setbacks are generally adequate.

- Please demonstrate how the conclusion that '10 m setbacks are adequate' follows from the documented geomorphic conditions, specifically accounting for the anticipated vertical adjustment trajectory and associated slope destabilisation, not lateral migration alone.

A3.

Lateral risk in confined gully systems is assessed primarily as planform migration. The RGEA data, site photos, and reach notes document sections of streams already in Stage IV widening, mass wasting slumps, undercut toes, and existing slope instability. In confined systems, lateral adjustment occurs predominantly through gully-wall instability, not meander migration. The assumption of low lateral risk is not defensible on the evidence presented.

- Please provide a revised assessment of lateral adjustment potential that specifically addresses gully-wall instability and mass wasting mechanisms, and its implications for the proposed riparian setbacks and proposed outlet discharge proposals. This should account for long-term incisional processes and toe undercutting, with saturated banks.

B. Setback Adequacy and Riparian Margins

B1.

Riparian setbacks of 10 m are proposed for most reaches. No analysis has been provided demonstrating how a 10 m horizontal setback accommodates future geomorphic adjustment over a 50-100 year planning horizon, including anticipated bed lowering of 1-2 m, progressive bank steepening, and associated slope destabilisation. Setbacks appear to be assumption-based rather than derived from geomorphic analysis.

- For each actively adjusting and potentially actively adjusting reach, please provide a reach-specific justification for the proposed setback that accounts for the full anticipated adjustment trajectory, including vertical adjustment and its lateral consequences.

B2.

Where layout constraints prevent an increase in setback, the engineering response must be explicitly designed and costed for the full anticipated geomorphic adjustment, not current channel conditions. The application does not demonstrate that proposed retaining structures are designed to this standard.

- Where proposed lots or structures cannot be set back to accommodate anticipated channel adjustment, please confirm that all stream-margin retaining and geotechnical structures are designed for the full anticipated bed lowering and bank steepening trajectory, including scour depth assumptions, and that this is documented in the geotechnical design.

C. Post-Development Hydrology and Geomorphic Response

C1.

The geomorphic assessment acknowledges that development will alter the stream hydrograph, increasing flow peaks and efficiency of delivery. No analysis is provided of how post-development hydrology, including increased imperviousness, altered flow duration and frequency, and more efficient stormwater conveyance, will interact with the active geomorphic processes documented across the network.

- Please provide an assessment of how post-development hydrological changes will affect the rate and extent of channel incision, knickpoint migration, and bank widening across the network.

C2.

The hydraulic model (McKenzie & Co, drawings 3725-0-4506 and 3725-0-4507) shows post-development 50% AEP velocities at monitored locations. These figures were not considered or referenced in the Morphum Geomorphic Assessment or Geomorphic Response Memo, despite forming part of the same application package. Key findings include:

Location D: velocity increases from 0.79 to 1.10 m/s (+39%), crossing the critical erosion threshold for moderately consolidated clay at the 50% AEP.

Location E: velocity increases from 0.10 to 0.69 m/s (+590%), a near-sevenfold increase at the 50% AEP, shifting a previously depositional reach into active erosion at near-annual recurrence.

Locations A and F also show post-development velocity increases.

Location I records 1.97 m/s in both pre- and post-development scenarios, persistently above the erosion threshold with no mitigation proposed.

The SMP (section 9.9) states that the geomorphic assessment confirms the stormwater strategy will not adversely affect geomorphic risk. The hydraulic model data contradicts this conclusion.

- Please explain how this internal inconsistency in the application documentation has been resolved.

C3.

At the 10% AEP, post-development velocities show reductions of approximately 10 to 26 percent at several locations. This is noted. However, even with these reductions, velocities at multiple locations remain above the critical erosion thresholds for the silt/clay channel materials documented across the network. The application does not demonstrate that the network is designed to accommodate the geomorphic forces generated by flows at and below the 10% AEP.

- Please demonstrate that the stormwater network design accounts for the geomorphic forces generated by the full range of flows from the 10% AEP downwards, whether through increased channel resistance, adequate setbacks for adjustment, or both.

C4.

The hydraulic model provides peak velocity snapshots at the 50% AEP and 10% AEP. No long-term gauged flow record exists for this catchment, and no flow frequency or duration analysis has been provided. Channel morphological adjustment is governed by the frequency and cumulative duration of flows exceeding the erosion threshold, not by peak velocity or depths at selected AEP events alone.

Without this analysis, the claim that the stormwater strategy maintains geomorphic equivalence cannot be evaluated.

- In the absence of a gauged flow record, what approach has been used to assess how frequently and for how long erosive threshold conditions are exceeded at key reaches under post-development conditions?
- If this analysis cannot be produced, please confirm that the precautionary principle has been applied in the design response, specifically through increased setbacks or enhanced channel resistance at reaches where post-development velocities exceed or approach erosion thresholds.

D. Stormwater Management, Culverts, and Geomorphic Interaction

D1.

The pre-application meeting of 27 November 2025 included a request for flows and velocities through culverts to be included on plans and assessed geomorphically. This was to assist the Streamworks specialists' assessment. Velocity figures have been added to culvert drawings (series 3725-1-4800). Adding velocity numbers to drawings is not the same as a geomorphic assessment of those velocities.

- Please provide a geomorphic risk assessment of the culvert velocity data, addressing whether those velocities are consistent with channel stability at those locations and whether the culvert design is appropriate given the geomorphic trajectory of the receiving reaches.

D2.

The installation of road culverts across multiple reaches will create a long-term operational requirement to remove large woody debris (LWD) from channels upstream of crossing structures to maintain conveyance capacity. LWD is the primary natural mechanism by which small steep streams in this setting dissipate flow energy, store sediment, and stabilise bed and bank materials. Its systematic removal accelerates bed incision, the dominant geomorphic process already documented across this network. This feedback is not addressed in any of the application documentation.

- Please provide a large woody debris management plan addressing how LWD within the riparian buffer will be managed to retain geomorphic function alongside culvert maintenance obligations.

D3.

The geomorphic assessment assumes no instream works will be undertaken. Despite this, the application documents active headcuts, culvert scour, mass wasting, rapid incision, outer-bend erosion, and toe undercutting across multiple reaches. The blanket exclusion of instream works as an option is inconsistent with the conditions described.

- Please confirm whether targeted instream stabilisation works are proposed or available as a response to ongoing geomorphic adjustment, and if not, on what basis they have been excluded given the conditions documented.

E. Geotechnical Structures: Design, Ownership, and Liability

E1.

The groundwater monitoring programme covers approximately two months (November to December 2024), capturing early summer conditions only. The GIR identifies saturated groundwater conditions as

the primary driver of existing instability across the site. Wet season peak groundwater conditions, typically occurring late winter to spring in Auckland, have not been captured.

- Please confirm if additional groundwater monitoring has been undertaken to capture wet season conditions, and how this informs the groundwater model underpinning the stability analyses.

E2.

Geotechnical measures address slope stability at specific cross-sections. They do not control ongoing channel evolution, prevent knickpoint retreat, manage progressive gully expansion, or account for downstream consequences of altered sediment supply and bed levels. The stability analyses confirm that factors of safety are met within the development area under the assumed adjustment parameters. They do not demonstrate that the geomorphic trajectory of the network has been arrested or that conditions will remain stable beyond the 50-year design window.

- Please demonstrate how the proposed geotechnical measures address ongoing channel evolution across the network, not only localised slope stability at the specific cross-sections analysed.

E3.

The ownership, maintenance, and liability framework for stream-margin retaining and geotechnical structures has not been resolved. These structures are proposed along actively incising channel margins where ongoing scour is anticipated. The stability designs are concept-level, with further amendments expected during detailed design and confirmed on-site during construction. Future landowners and Council should not inherit maintenance obligations or liability for structures whose consent-level design is explicitly described as preliminary.

- Please provide a draft consent condition confirming that all retaining and geotechnical structures along stream margins remain in private ownership and will not be vested to Council.
- Please confirm the proposed arrangement for ongoing inspection, maintenance, and renewal of all stream-margin structures over their design life, including who is responsible and how costs are met.
- Please confirm what recourse exists if a structure fails due to stream toe erosion within the design life of the development.

F. Wetland Channelisation Risk

F1.

The geomorphic assessment identifies that multiple wetlands may rapidly convert to incised channels if upstream incision or knickpoint migration reaches them. No timeline or likelihood assessment is provided, no assessment of sediment release or downstream effects is made, and no mitigation or design response is recommended beyond monitoring.

- Please provide an assessment of the likelihood and indicative timeframe for knickpoint migration to reach wetland systems at each at-risk location under post-development conditions.
- Please specify the monitoring programme for wetland channelisation risk, including indicators, frequency, responsible party, intervention triggers, and the funded remediation pathway if channelisation is detected.

G. Property Documentation and LIM Notations

G1.

The geomorphic risks documented across this site, including ongoing channel incision, knickpoint migration, gully-wall instability, and associated slope adjustment, are expected to continue and affect properties adjacent to the stream network over their design life. Future landowners should be informed of these risks and of their maintenance obligations at the time of purchase.

- Please confirm what language will be recorded on the property file and any Land Information Memorandum (LIM) for all lots within or adjacent to the riparian margin:

Proposed Conditions

Proposed conditions or specific comments on draft conditions have not been provided as the matters raised need resolved by the applicant team first.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 20:

Healthy Waters

Delmore Fast Track Application

To: Auckland Council – Healthy Waters

From: Lachlan Van der Meij – McKenzie & Co (MKC)

Date: 17 April 2026

Re: Healthy Waters Response Memorandum

1.0 Technical Specialist Memo – Healthy Waters and Flood Resilience

From:	Hillary Johnston – Healthy Waters Fast-Track Lead
Qualifications & Relevant Experience:	I hold the qualification of Bachelor of Science in Environmental Science and Geography and have 12 years of experience in regulatory stormwater assessments. I am a Certified Environmental Practitioner, a full member of the Environmental Institute of Australia and New Zealand, a member of WaterNZ, and an associate member of Engineering New Zealand. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation, and fast-track applications, and have appeared as an expert witness for Council before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23 April 2026

2.0 Original Specialist Review Memo

HWFR original Specialist Review Memo outlined the following information gaps:

Operation and Maintenance – Legal Access

To resolve concerns regarding legal access to stormwater management devices for operation and maintenance purposes, revised scheme plans are required that locate the devices and all its ancillary elements, including the maintenance access, to be located within the Lieu of Reserve – for Drainage Purposes. In the absence of these changes HWFR may not be able to support acceptance of the

stormwater assets for vesting in public ownership.

Overland Flow Paths – Development

To address concerns relating to the conveyance and protection of OLFPs, further information is required to demonstrate that all proposed OLFP that will traverse private lots will comply with Council's flood hazard safety criteria, including confirmation that depths, velocities and hazard ratings are acceptable for the relevant design events.

Revised scheme plans must also be provided clearly identifying the location and extent of all OLFPs, together with the proposed easements, covenants, consent notices or other legal mechanisms required to secure their function in perpetuity in accordance with the SWCoP, and to ensure the flow paths remain unobstructed and are not compromised by future development or land use.

Overland Flow Paths – Culverts

To address concerns relating to potential culvert blockage and subsequent overland flow, further information is required to demonstrate how flooding and secondary flows would behave in the event of culvert blockage. This should include an assessment of the relevant blockage scenarios in accordance with SWCoP, supported by appropriate flood modelling, showing the ponding extents upstream of the culverts and confirming flood flows can be safely conveyed without resulting in inundation of future buildings.

Land in Lieu of Reserve – for Drainage Purposes

Revised scheme plans are required to clearly delineate the extent of land proposed to be vested for drainage purposes, demonstrating that the land is limited to that reasonably necessary to accommodate the public stormwater devices and associated access, and excludes disproportionate areas of adjacent stream corridors and riparian batters.

In addition, where land is proposed to be vested or transferred to Council, conditions have been recommended that require the Applicant to enter into a sale and purchase agreement with Council for the relevant land no later than the time of application for approval of the survey plans under Section 223 of the RMA. This is necessary to confirm Council's agreement in principle to the acquisition and to ensure that vesting outcomes are resolved prior to subdivision approval.

Flood Risk Assessment – Habitable Floors

The flood model and the Flood Risk Assessment are required to be updated to ensure that the assessments are based on the peak flood levels under the existing NZTA culvert full blockage scenario. In addition, the Flood Risk assessment must reflect the consented landform and finished levels of the Ara Hills development. This is necessary to confirm that flood hazard risk is not increased to the existing consented built environment under the assessed blockage scenario, and to determine whether any additional mitigation measures are required to achieve this outcome, including, but not limited to, the provision of a secondary relief inlet to the existing NZTA culvert.

1% AEP Attenuation – Culverts

The Applicant must clarify whether 1% AEP attenuation is proposed for this application. In case attenuation is proposed, then the Applicant must provide updated conditions of consent that will ensure the outcomes are achieved in perpetuity, including any necessary corresponding specific design requirements and legal mechanisms.

3.0 Updated Response to Applicant's Memo

HWFR have reviewed the Applicant's Response and have provided comments within Table 1.2 below. Items that have been considered to be addressed have been greyed out within the table. In brief, we

outline the following remaining information gaps:

Operation and Maintenance – Legal Access

The changes to the raingardens to ensure all maintenance can be provided via public access are supported by HWFR.

However, HWFR notes that acceptable ground slopes within Lieu of Reserve – for Drainage Purposes land have not been presented. To illustrate, the updated plans 3725-1-4300 and 375-2-4300 are now showing retaining walls and 1 in 1 batter slopes located within Lieu of Reserve – for Drainage Purposes land, some of which are supporting the proposed public stormwater management devices. Similarly, the ability to safely track maintenance vehicles remains unclear as no access gradients are shown on plans, and it appears that limited space has been provided to accommodate turning of maintenance vehicles notably for RG03 but also for RG02, RG06 and RG25.

Should the Panel grant the consent, HWFR would not accept the transfer of land to public ownership and would not be vesting the stormwater management devices and the connecting upstream stormwater network as public infrastructure, where the Council stormwater infrastructure and land requirements cannot be addressed at Engineering Plan approval stage.

Land in Lieu of Reserve – for Drainage Purposes

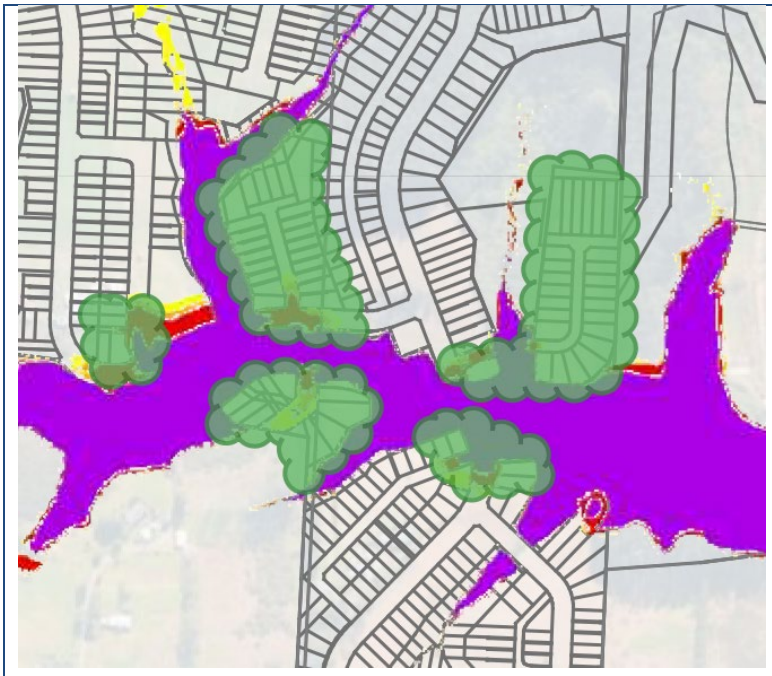
HWFR appreciates the overall reduction in area for the proposed drainage reserves, however there are still areas proposed to be transferred to public ownership which are not acceptable. These include:

- Land (including riparian margins) which is not required to support the device and its function, or accommodate its ancillary elements (including maintenance access, spillways and outfalls).
- Structures (including walls and earth reinforced batters) which are supporting surrounding private land and public roads.

HWFR notes that resource consents cannot obligate the Council to accept or vest land for stormwater management, even at no capital cost, due to the associated financial implications of ongoing maintenance cost in perpetuity. Delegated approval from HWFR must be obtained before land can be transferred or vested. This is consistent with the Manaaki Tāmaki Makaurau: Auckland Open Space, Sport and Recreation Strategy.

Flood Risk Assessment – Habitable Floors

The updated model scenarios have shown that under the NZTA culvert blockage scenario the proposed public roads will be inundated up to approximately 2.5m. This means that several proposed lots cannot safely evacuate under such scenario – these have been highlighted in green in image below.



As the proposed development internal culverts are much larger than the existing NZTA motorway culvert this blockage scenario is considered likely and would result in culvert inundation of over 15m. Unblocking the culvert following such event is expected to be challenging, which means that the subject lots may be affected for a prolonged period.

To ensure safe egress is accommodated for the proposed development, HWFR requests a new condition to be included in the consent that requires the provision of a relief inlet riser or alternative mitigation measures to minimise the risk of NZTA culvert blockages. This condition is proposed in addition to the Culvert Management and Monitoring Conditions 23-25.

4.0 Outstanding Issues

HWFR have reviewed the Applicant's Response and have provided comments within Table 1.2 below. There are remaining information gaps relating to:

Response to Further Information Requests / Technical Comments

- *Operation and Maintenance – Legal Access*
- *Land in Lieu of Reserve – for Drainage Purposes*
- *Flood Risk Assessment – Habitable Floors*

HWFR have also reviewed the Applicant's Response to amendments and additions to the proposed conditions of consent and have provided comments within Table 1.3 below. Disagreement remains relating to the following conditions relating to the following information requests.

Response to Recommended / Amended Conditions

- *Land in Lieu of Reserve – for Drainage Purposes:* Condition 123, 136, 140, 159
- *Land in Lieu of Reserve – for Drainage Purposes* (relating to Bond specifically): 204A, 204B
- *Flood Risk Assessment – Habitable Floors* (relating to NZTA culvert): NEW condition proposed

5.0 Conclusion

Overall, based on the information provided, we consider there is a strong basis for supporting the Application subject to resolution of the S67 items included above, and subject to the recommended amendments and additions to the proposed conditions of consent.

HWFR remains available to work through the remaining issues and proposed conditions with the Applicant's Agents.

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Healthy Waters) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

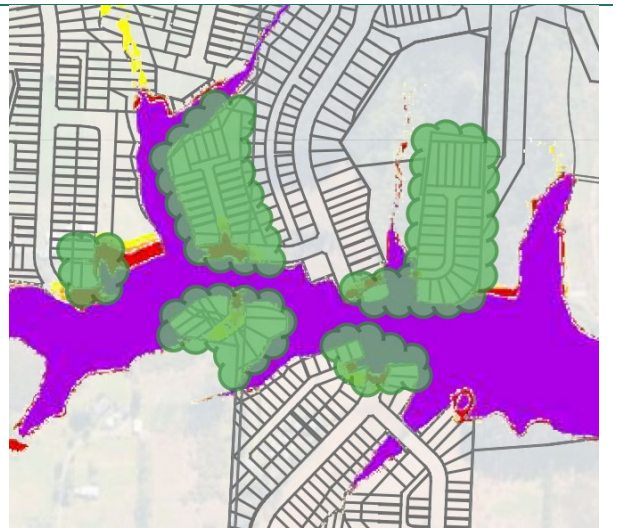
1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Comment
Operation and Maintenance – Legal Access To resolve concerns regarding legal access to stormwater management devices for operation and maintenance purposes, revised scheme plans are required that locate the devices and all its ancillary elements, including the maintenance access, to be located within the Lieu of Reserve – for Drainage Purposes. In the absence of these changes HWFR may not be able to support acceptance of the stormwater assets for vesting in public ownership.	The following raingardens have been updated to ensure all maintenance can be provided via public access: • 03 • 05 • 11 • 23 • 25 This will be shown on the scheme plans to be provided to Council on 20 April.	This change is supported by HWFR. However, HWFR notes that acceptable ground slopes within Lieu of Reserve – for Drainage Purposes land have not been presented. For example, the updated plans 3725-1-4300 and 375-2-4300 now show retaining walls and 1 in 1 batter slopes located within Lieu of Reserve – for Drainage Purposes areas, some of which are supporting the proposed public stormwater management devices. Similarly, the ability to safely track maintenance vehicles remains unclear as no access gradients are shown on plans, and it appears that limited space has been provided to accommodate turning of

		maintenance vehicles notably for RG03 but also for RG02, RG06 and RG25. Should the Panel grant the consent, HWFR would not accept the transfer of land to public ownership and would not accept vesting of the stormwater management devices, and the connecting upstream stormwater network as public infrastructure, where the Council stormwater infrastructure and land requirements cannot be addressed at Engineering Plan approval stage.
Overland Flow Paths – Development To address concerns relating to the conveyance and protection of OLFPs, further information is required to demonstrate that all proposed OLFP that will traverse private lots will comply with Council's flood hazard safety criteria, including confirmation that depths, velocities and hazard ratings are acceptable for the relevant design events.	A memo addressing the OLFP's across the site and focusing on these concerns has been prepared and amended to this response.	Accepted. The updated assessment in conjunction with the proposed conditions of consent is considered adequate to demonstrate that the flood hazard risk to buildings as associated with OLFPs can be managed to meet the Council flood hazard safety criteria subject to Engineering Plan approval.
Overland Flow Paths – Culverts To address concerns relating to potential culvert blockage and subsequent overland flow, further information is required to demonstrate how flooding and secondary flows would behave in the event of culvert blockage. This should include an assessment of the relevant blockage scenarios in accordance with SWCoP, supported by appropriate flood modelling, showing the ponding extents upstream of the culverts and confirming	A culvert blockage scenario in line with the SWCoP requirements has been modelled and included in the documentation. Please see drawing 3725-0-4540 attached. This demonstrates that all lots are free of flooding and freeboard requirements of the SWCoP are achieved.	Accepted. The updated assessment in conjunction with the proposed conditions of consent is considered adequate to demonstrate that the flood hazard risk to buildings as associated with internal development culvert blockages can be managed to meet the Council flood hazard safety criteria subject to Engineering Plan approval.

flood flows can be safely conveyed without resulting in inundation of future buildings.		
Land in Lieu of Reserve – for Drainage Purposes Revised scheme plans are required to clearly delineate the extent of land proposed to be vested for drainage purposes, demonstrating that the land is limited to that reasonably necessary to accommodate the public stormwater devices and associated access, and excludes disproportionate areas of adjacent stream corridors and riparian batters. In addition, where land is proposed to be vested or transferred to Council, conditions have been recommended that require the Applicant to enter into a sale and purchase agreement with Council for the relevant land no later than the time of application for approval of the survey plans under Section 223 of the RMA. This is necessary to confirm Council's agreement in principle to the acquisition and to ensure that vesting outcomes are resolved prior to subdivision approval.	Scheme plans have been updated to reduce the area of the proposed drainage reserves to adhere to this request. Where appropriate access to the stream has been maintained along the edge of the devices to ensure that any potential future alteration doesn't have access issues.	HWFR appreciates the overall reduction in area, however there are still disproportionate areas proposed to be transferred to public ownership which are not acceptable. These include: • Land (including riparian margins) which is not required to support the device and its function, or accommodate its ancillary elements (including maintenance access, spillways and outfalls). • Structures (including walls and earth reinforced batters) which are supporting surrounding private land and public roads. HWFR notes that resource consents cannot obligate the Council to accept or vest land for stormwater management, even at no capital cost, due to the associated financial implications of ongoing maintenance cost in perpetuity. Delegated approval from HWFR must be obtained before land can be transferred or vested. This is consistent with the Manaaki Tāmaki Makaurau: Auckland Open Space, Sport and Recreation Strategy.
Flood Risk Assessment – Habitable Floors The flood model and the Flood Risk Assessment are required to be updated to ensure that the assessments are based on the peak flood levels under the existing NZTA culvert full blockage	The models that run the scenarios where NZTA culvert is fully blocked (predevelopment and MPD) have been extended to ensure the peak flood depth is captured. The full extent of the Ara Hills	The updated model scenarios have shown that under the NZTA culvert blockage scenario the proposed public roads will be inundated up to approximately 2.5m. This means that several proposed lots cannot safely evacuate under such

scenario. In addition, the Flood Risk assessment must reflect the consented landform and finished levels of the Ara Hills development. This is necessary to confirm that flood hazard risk is not increased to the existing consented built environment under the assessed blockage scenario, and to determine whether any additional mitigation measures are required to achieve this outcome, including, but not limited to, the provision of a secondary relief inlet to the existing NZTA culvert.	final consented landform has also been included in these models. Flood levels for each scenario have been updated on the cross section drawing 3725-1-4815 and it shows all existing and proposed lots west of the NZTA culvert are above the maximum flood level.	scenario – these have been highlighted in green in image below. As the proposed development internal culverts are much larger than the existing NZTA motorway culvert this blockage scenario is considered likely and would result in culvert inundation of over 15m. Unblocking the culvert following such event is expected to be challenging, which means that the subject lots may be affected for a prolonged period. To ensure safe egress is accommodated for the proposed development, HWFR requests for a new condition to be included in the consent that requires the provision of a relief inlet riser or alternative mitigation measures to minimise the risk of NZTA culvert blockages. This condition is proposed in addition to the Culvert Management and Monitoring Conditions 23-25.

		 *Note: A new condition provided in Table 1.3*
1% AEP Attenuation – Culverts The Applicant must clarify whether 1% AEP attenuation is proposed for this application. In case attenuation is proposed, then the Applicant must provide updated conditions of consent that will ensure the outcomes are achieved in perpetuity, including any necessary corresponding specific design requirements and legal mechanisms.	Attenuation of the 1% AEP peak flow is achieved through temporary storage of stormwater upstream of the proposed public culverts, with flows discharged at a controlled rate through the culvert infrastructure. An updated stormwater compliance table is provided confirming for each culvert: the 1% AEP peak inflow, peak outflow, peak water level (HGL), headwater depth, and afflux relative to existing conditions. Pre- and post-development peak flows are also provided to demonstrate that attenuation outcomes are achieved. The applicant accepts a condition in principle and is currently considering potential wording.	Pending updated stormwater compliance table and condition wording from Applicant.

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged conditions (Appendix 44 to the AEE)	Applicant Response	Council Specialist Comment
118. The consent holder must design and construct connections to the ~~public~~ reticulated stormwater ~~reticulation~~ network ~~to serve all residential~~ lots in accordance with the McKenzie and Co Stormwater Report and Drawings approved under Condition 1. Where connection to a public stormwater network is proposed, the connection must be designed and constructed to meet ~~and meeting~~ the requirements of the stormwater utility service provider. Certification from the utility provider that any approved public stormwater connection ~~works~~ have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).	This condition has been accepted and is included within the updated condition set.	Accepted. No further comments.
123. The consent holder must submit a survey plan in general accordance with ~~the approved resource consent~~ subdivision scheme plan approved under Condition 1 for Stage 1A. The survey plan must show all lots that have been agreed by Auckland Council to be vested ~~to Auckland Council~~ (including roads and reserves), all easements and amalgamation conditions, required by this subdivision consent. Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.	The proposed approach is not consistent with conditions applied to nearby developments of similar scale and nature (such as Milldale). It is common practice for stormwater drainage reserves to be vested. The drainage reserves are not limited to private JOAL drainage.	The new conditions and the changes to proposed conditions are required and necessary to ensure that the land being transferred to Council is consistent with the Manaaki Tāmaki Makaurau: Auckland Open Space, Sport and Recreation Strategy. The current proposal has not demonstrated that it complies with the document's relevant Policies and will result in excessive ongoing maintenance

136. The consent holder must submit a survey plan in general accordance with the approved resource consent subdivision scheme plan approved under Condition 1 for Stage 1B. The survey plan must show all lots that have been agreed by Auckland Council to be vested ~~to Auckland Council~~ (including roads and reserves), all easements and amalgamation conditions, required by this subdivision consent. Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.	They form an integral part of the stormwater network, including the conveyance, treatment, and attenuation of runoff from roads to vest in Auckland Transport. As such, these reserves provide a public stormwater function and support infrastructure that will ultimately form part of the public network. It is not appropriate for stormwater infrastructure that services public roads to be owned and maintained privately.	costs in perpetuity. This includes but not limited to: • Land that is not required to accommodate the operation and ongoing maintenance of stormwater management devices • Retaining walls (including earth reinforced walls) and batters supporting surrounding private land and public roads HWFR would not accept the transfer of land to public ownership and would not accept vesting of stormwater management devices, and connecting upstream stormwater network as public infrastructure, where the relevant Council requirements cannot be met.
204A. Lots 1601-1604 and 1616 on the scheme plans approved under Condition 1 ~~must~~ shall be ~~vested~~ transferred to Auckland Council as land in lieu of reserve – for drainage purposes if by the time of application for the survey plan for Stage 1A to be approved under Section 223, the Consent Holder has entered into an agreement with Auckland Council for the sale and purchase of those lots. If no agreement is in place by the time of application for the survey plan for Stage 1A to be approved under section 223, Lots 1601–1604 and 1616 and associated stormwater management devices shall remain in private ownership. An appropriate legal mechanism must be established to ensure ongoing operation and maintenance of the stormwater management devices in accordance with their intended design.		
140. Lots 1605, 1606 and 1609 on the scheme plans approved under Condition 1 ~~must~~ shall be ~~vested~~ transferred to Auckland Council as land in lieu of reserve – for drainage purposes if by the time of application for the survey plan for Stage 1B to be approved under Section 223, the Consent Holder has entered into		

an agreement with Auckland Council for the sale and purchase of those lots. If no agreement is in place by the time of application for the survey plan for Stage 1A to be approved under section 223, Lots 1605, 1606 and 1609 and associated stormwater management devices shall remain in private ownership. An appropriate legal mechanism must be established to ensure ongoing operation and maintenance of the stormwater management devices in accordance with their intended design.		
159. Lots 161-620, 1621, 1623, 1624, 1627 and 1629 on the scheme plans approved under Condition 1 ~~must~~ shall be ~~vested~~ transferred to Auckland Council as land in lieu of reserve – for drainage purposes if by the time of application for the survey plan for Stage 2 to be approved under Section 223, the Consent Holder has entered into an agreement with Auckland Council for the sale and purchase of those lots. If no agreement is in place by the time of application for the survey plan for Stage 1A to be approved under section 223, Lots 161-620, 1621, 1623, 1624, 1627 and 1629 and associated stormwater management devices shall remain in private ownership. An appropriate legal mechanism must be established to ensure ongoing operation and maintenance of the stormwater management devices in accordance with their intended design.		
Operation and Maintenance ~~Plan~~ 204. An Operation and Maintenance Plan (OMP) for all stormwater management devices proposed to be vested in Council shall be submitted to Auckland Council Healthy Waters Operations Team for certification at the time of Engineering Plan	This amendment is accepted.	Accepted. No further comments.

Approval. The OMP must comply with Healthy Waters Operation and Maintenance Plan Template.		
204A. Where communal stormwater management devices are proposed be vested to Council, the consent holder must maintain the devices in accordance with the following requirements: a. The Consent Holder must maintain the communal stormwater management devices until the earlier of either: i. 80% of the building sites within the subdivision discharging to the devices have been developed, or; ii. For a period of five (5) years from the date of the final section 224(c) RMA certificate for the subdivision. b. The consent holder must remove any sediment from the communal device that has resulted from development activities within the subdivision, if required by the Council, prior to acceptance of the device(s) by Council for ongoing maintenance. c. At the time of transfer of any stormwater management device, all planted areas associated with the stormwater management devices must achieve a minimum plant survival rate of 95%. d. A bond must be provided at the time of application for the section 224(c) certificate to ensure the ongoing maintenance of the communal stormwater management devices until transfer of any stormwater management devices to Council for ongoing maintenance.	The applicant accepts a bond condition in principle and is currently reviewing the wording of these conditions. An update will be provided to Council once available.	Pending updates from Applicant.
204B. Prior to the issue of the section 224(c) certificate under the RMA, the consent holder must provide a bond to the Council in accordance with Section 222 of the RMA to ensure the performance of the communal devices. The bond must:		Pending updates from Applicant.

a. Be provided in the form of a cash deposit, a bank bond guaranteed by a New Zealand-registered bank, or another form of security (e.g., an encumbrance) as agreed with the Council. b. Be documented and executed by the Council's solicitor. All legal and administrative costs associated with preparation, execution, variation, administration, or release of the bond must be met by the consent holder. c. Be released once the relevant condition(s) have been satisfied and all associated Council costs have been paid. Advice Notes: The Council may use the bond to restore the communal stormwater device(s) to comply with Auckland Council's GD01 standards if the consent holder fails to meet the condition requirements. The final bond amount will be confirmed and agreed by Council prior to Engineering Plan Approval. It will be calculated based on a per-square-metre rate of communal device area, with the rate to be determined at that time. The bond value will be adjusted for inflation using the Reserve Bank inflation calculator or another method agreed with Council.		
		To ensure safe egress is accommodated for the proposed development, HWFR requests for a new condition to be included in the consent that requires the provision of a relief inlet riser or alternative mitigation measures to minimise the risk of NZTA culvert blockages. NEW CONDITION

		X. NZTA Culvert Prior to section 224(c) certification for Stage 1A-1, Stage 1A-2, Stage 1A-3, Stage 1A-4, and Stage 1B-2, the consent holder must, to the satisfaction of Council, design and install the following on the NZTA culvert: 1. a relief inlet riser; OR 2. an alternative debris control structure. *Advice Note:* *The consent holder is advised to consult with NZTA prior to undertaking any works on the culvert. All necessary approvals, permits, or other authorisations required by NZTA must be obtained directly from NZTA.*

List of Attachments:

Mckenzie & Co Drawing series 3725-1-100

Mckenzie & Co Drawing series 3725-2-141

Mckenzie & Co Drawing series 3725-1-4300

Mckenzie & Co Drawing series 3725-2-4300

Mckenzie & Co Drawing 3725-0-4540

Mckenzie & Co Drawing series 3725-1-4800

Mckenzie & Co Drawing 3725-1-4815

Mckenzie & Co Stormwater Report

Mckenzie & Co Flooding Report

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 21:

Auckland Transport

Specialist Response Template – Fast-track Approvals Act 2024 Substantive Application

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Auckland Transport

To:	Dylan Pope – Lead Planner & Carly Hinde – Principal Project Lead.
From:	Nadine Perera - Principal Planner, Strategic Development Partnerships.
Qualifications & Relevant Experience:	I am a Principal Planner in the Strategic Development Partnerships Team within the Built Environment and Place Directorate of Auckland Transport (AT). My responsibilities involve providing expertise to enable alignment of transport and landuse with a particular focus on transport infrastructure provision within developing areas of Auckland. My role includes leading AT's response to development and fast-track applications, primarily within the North and West of Auckland. I have been at AT since January 2023. Prior to this I held positions with various private consultancies including Lands and Survey, Axis Consultants Limited, Burton Consultants (now part of 4Sight Consultants), Plan4It, and Harrison Grierson. In these positions my primary focus, for over 30 years, encompasses land development, policy, and planning in Auckland. My experience includes extensive involvement in preparing and assessing development proposals against the various district, regional and Regional Policy Statement provisions contained within the Auckland Unitary Plan Operative in part. I have also held planning positions with the New Zealand Defence Force and North Shore City Council prior to its amalgamation into Auckland Council. I hold a Bachelor of Arts Degree in Geography from Te Herenga Waka - Victoria University of Wellington, a Bachelor of Planning Degree from Waipapa Taumata Rau – University of Auckland and a Diploma in Business Studies from Te Kunenga Ki Purehuroa – Massey University. I have been a full member of the New Zealand Planning Institute since 1996. I have prepared expert evidence for resource consent applications, fast-track applications, proposed district and regional plans, and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I

with the Code of Conduct:	also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	*Nadine Perera*
Date:	29 April 2026

3.0 Executive Summary / Principal Issues

Auckland Transport (AT) considers that, based on the information currently available, the Project does not yet demonstrate that its adverse transport impacts can be appropriately avoided, remedied, or mitigated. Significant elements of the transport network required to support the development remain unresolved, and key information necessary to assess the adequacy of the proposed transport outcomes has not been provided.

The additional information requested of the applicant through the council engagement process—particularly relating to transport infrastructure design and delivery, stormwater interfaces and culvert design, bus operational requirements, paper road formation, road-stopping implications, and the integration of the development with both the remaining paper road and the Ara Hills network—is essential for AT to determine whether the transport impacts of the Project can be managed to an acceptable level. Much of this information cannot be addressed through consent conditions alone and may require substantive design changes.

In the absence of this information, AT cannot confirm that the transport infrastructure required to support the development will be delivered in a manner that aligns with Council's funding and investment priorities. Should essential infrastructure not be provided by the developer, the cost burden and associated service level implications would fall to Council and future residents—an outcome that is considered unacceptable.

While the Project is out of sequence with the Future Development Strategy (FDS), the FDS does allow for consideration of unanticipated or out-of-sequence development where it does not adversely impact Council's funding and investment priorities. At this stage, AT is unable to conclude that these requirements are met.

Accordingly, AT **opposes the Project at this time**. However, subject to the applicant providing the required further information and redesign where necessary, and the subsequent incorporation of mitigation measures and development thresholds via appropriately worded conditions, and an agreement between the applicant and Council being put in place for the applicant to deliver and fund the Grand Drive link there remains potential for the outstanding transport matters to be addressed.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

4.1 FAST TRACK APPROVALS APPLICATION – EPA WEBSITE

- Delmore Assessment of Environmental Effects Report

Architectural

- Appendix 9 – Architectural Drawings Site Plans
- Appendix 9.1 – Architectural Memo Auckland Transport Response x2

Scheme Plans

- Appendix 10 – Stage 1 Scheme Plans
- Appendix 10 Stage 2 Scheme Plans

Transportation and Water Management

- Appendix 24.1 – Auckland Transport Response
- Appendix 24 – Integrated Transport Assessment
- Appendix 25 - Roading and Access Report
- Appendix 26 – Roading Drawings Stage 1
- Appendix 26 - Roading Drawings Stage 2
- Appendix 27 – Water, Wastewater and Utilities Report
- Appendix 28 – Water, Wastewater and Utilities Drawings
- Appendix 32.1 – Stormwater Peer Review
- Appendix 32 – Stormwater Report
- Appendix 44 - Proposed Conditions
- Appendix 45 - Indicative Timeline
- Appendix 48 – Paper Road Strategy.

4.2 ADDITIONAL INFORMATION SUPPLIED BY THE APPLICANT TO COUNCIL AND FORWARDED TO AT

16 April 2026 – Transport

- Auckland Transport Response Memo received 16 April 2026
- Attachment 2 – Russell Road Upper Ōrewa Road Upgrade
- Attachment 3 – Long Section Road 2

17 April 2026 - Stormwater

- AT Stormwater Response Memorandum (Applicant Comment on AT Stormwater Response Memorandum-appended),
- McKenzie & Co Drawings 3725-0-4500 and 3725-0-4540, Drawing Set series 3725-0-4610, Drawing series 3725-1-4800,
- McKenzie and Co Flooding Report,

- McKenzie Stormwater report,
- McKenzie and Co Technical Memo – Internal OLFP Analysis.

20 April 2026

- Updated Drawing Set
    - Appendix 10A – Stage 1 Scheme Plans
    - Appendix 10B – Stage 2 Scheme Plans
    - Appendix 26A – Stage 1 Roading and Access Drawings
    - Appendix 26B – Stage 2 roading and Access Drawings
    - Appendix 33 – Stormwater Drawings Part 1, 2, 3, 4, 5 and 6
- Updated Conditions

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

OVERALL SUMMARY OF AUCKLAND TRANSPORT (AT) POSITION

6.1 THE PROJECT

Vineway Limited ('the applicant') seeks approval under the Fast-Track Approvals Act 2024 ('FTAA') to construct a comprehensively planned mixed use urban development across 109.18 hectares of land at 88, 130 and 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road, Ōrewa. The development is intended to be known as 'Delmore' and is a listed project in Schedule 2 of the FTAA. The Project will deliver:

- Up to 1,213 residential lots, comprising a mixture of dwelling types;
- Roading and transport infrastructure, including a significant portion of the arterial road known as the AT Designation 14108 (New connection between Milldale and Grand Drive);
- An on-site wastewater treatment plant, and on-site water supply and treatment (in the event that connection to the public networks cannot be provided due to capacity constraints); and
- Paper road stopping under the Local Government Act 1974.

6.2 LOCATION CONTEXT

The Project adjoins the existing Ara Hills Development to the east and is in close proximity to the Milldale Development to the south, being constructed in stages. The Project involves transport upgrades to the area.

The land is zoned as Future Urban and is currently included in Auckland Council's Future Development Strategy 2023 (FDS) as being ready for urbanisation after 2050. Accordingly, the Project seeks consent for the development of this land out of sequence with the FDS.

6.3 TRANSPORT INFRASTRUCTURE DELIVERY

The Project involves several transport network upgrades including partial delivery of AT Designation 14108 (New connection between Milldale and Grand Drive) that bisects the site as an arterial, a further collector route from Grand Drive through to Upper Ōrewa Road, and various upgrades to surrounding transport infrastructure.

Specifically, the Project involves full build out of the arterial road for a portion of the 14108 designation; an alternative collector road route to be used until the remainder of the designation is built (the southern part connecting to Upper Ōrewa Road); active mode linkages within and beyond the site; consideration of bus operation design requirements; and various downstream intersection and roading upgrades. The provision of this intended transport network infrastructure is to some extent an improvement from the original fast-track application and the provision is supported by AT to enable the development. The inclusion within the Project of further transport network mitigation works and development thresholds through a redesign of aspects of the proposal and consent conditions goes some way to addressing the adverse impacts relating to transport.

However, there remains a transport infrastructure deficit in both delivery and funding in relation to the provision of access to the site. The Project does not involve the portion of Designation 14108 linking the project site to the recently delivered portion of Grand Drive in the north that is part of the Ara Hills development. This part of the designation comprises legally vested road together with a portion in private ownership with the constructed portion terminating prior to the project site boundary. Without the delivery of the arterial connector link to Grand Drive (the link) which forms part of designation 14108 there is no practical or physical access to the site from Grand Drive. The applicants Integrated Traffic Assessment (ITA) (refer applicant lodged Appendix 4) notes this deficiency and suggests that an interim road could provide the connection to Grand Drive. The interim road is not consistent with the indicative design for designation 14108 or the portion of the designation within the site that is being delivered by the Project. In any case given that the interim road is not part of the Project, additional resource consents will need to be obtained by the applicant.

Given there is no certainty over the delivery of the link as additional resource consents need to be sought, AT would only be supportive of a condition seeking that the link is delivered prior to titles being issued if the arterial road being delivered is to be the intended indicative designation design and not an interim alternative. This indicative design is depicted on the project drawings although it does not form part of the current Project.

The designation provides for route protection only of a 2 lane arterial with a lapse period of 30 years. The indicative alignment with active modes on each side was lodged with Council as part of the statutory Notice of Requirement (NoR6) which was then confirmed as Designation 14108. The delivery (construction and land acquisition) of the arterial route protected by the designation is currently unfunded.

The link is necessary to provide access to the site and is the only access to Stage 1. Intended project staging from east to west is dependent on the link being in place prior to titles being issued for Stage 1. A condition was suggested by the applicant to this effect. AT through the engagement process sought amendments to the condition to ensure that the road to be delivered encompasses the indicative alignment. This was based on AT Subject Matter Expert (SME) Transport Infrastructure analysis (Appended and listed in section 10 of this response)

which has determined that the alternative alignment advised by the applicant is not workable and will have major transport impacts that cannot be mitigated.

The deficiences in the interim design as outlined in the PTM Memo comprise:

- It is not clear how the temporary road can be rebuilt with the permanent designation layout at a later date without closing it for a protracted period.
- Front and back berms have been removed. Potential effects; loss of amenity – discourages active modes as a travel choice. Absence of buffer between carriageway and cycleways/footpaths increases crash risk for pedestrians somewhat. Absence of buffer between the shared path and handrail on top of the retaining wall on the north side means that there is less usable space for cyclists resulting in a risk of handle bars or peddles getting caught on the barrier. Streetlight poles (and potentially other service poles or cabinets) will need to go in the footpath / shared path rather than the berm.
- 3m wide shared path replaces two-way separate offroad cycle path and separate footpath on the north side. Potential effects; increased risk of collision between cyclist and pedestrian. Some pedestrians may be less willing to use this path due to perceived risk of a collision with a cyclist. Note that a 3m wide shared path would need a departure from standards as it does not conform to the Auckland Transport's Transport Design Manual.
- Flush median removed. Potential effects; reduced separation between opposing traffic lanes means increased risk of head-on type crashes. Vehicles turning right into the vehicle crossing on the north side must wait in the westbound lane blocking it, resulting increased delays and increased rear-end crash risk.
- The drawings show a retaining wall on the north side which would become an Auckland Transport asset to maintain. A barrier able to restrain both errant vehicles (road safety barrier) as well as being able to prevent falling from heights Memorandum for pedestrians and cyclists will be needed but is not indicated on the drawing provided by the applicant.
- On the south side a batter slope is shown next to the footpath with gradients ranging from 1 in 3 to 1 in 1 (reinforced earth). This will need a similar barrier to the north side. It is not clear if the applicant has included space for the barrier.
- The drawings show a vehicle crossing which clashes with a proposed retaining wall for the temporary layout.

Information received to date is that the applicant will only now agree to the condition on the basis that ATs agrees to acquire the portion of land needed to construct the full road width.

There is no Council funding available for the delivery of the link to the site. Compulsory acquisition which would be undertaken on behalf of the applicant is subject to Public Works Act procedures. Any compulsory acquisition and subsequent construction pursuant to the Public Works Act would need to be 100% funded by the applicant. Whilst negotiations are ongoing there is currently no agreement in place for the Developer to deliver or fund the link. The Project lacks certainty over delivery and funding of construction works and land acquisition needed for the link. It also does not adequately document the works associated with the southern interface of the arterial road being delivered and the remaining portion of the designation through to Upper Ōrewa Road. The resultant adverse impacts on the transport network are significant. The proposal in its current form is considered to hinder the future delivery of Designation 14108. AT is unlikely to grant s176 approval for those project works needing to be carried out within the designation.

6.4 APPLICANT ENGAGEMENT PROCESS

Since the application was lodged and available for viewing on the Fast Track website Auckland Transport (AT) has through Auckland Council (AC) been part of an ongoing engagement process with the applicant.

ENGAGEMENT HAS INVOLVED THE FOLLOWING:

- **AT Subject Matter Experts (SME) reviewing** lodged technical transportation documents outlined in section 4.0 above.

- **AT Transport SME attending meetings** with the applicant on 13, 18 and 23 March 2026.

- **Receipt of an updated Auckland Transport Response Memo** from the applicant on 19 March 2026 containing:

    - Additional AT and applicant comment,
    - Matters, where there is agreement between AT and the applicant,
    - Matters where the applicant has confirmed they will provide additional information in relation to:
    - Integration of the site with the Ara Hills Development.
    - Updated roading drawings involving redesign of certain aspects of the Project's roading design and vehicle tracking information

- **Draft SME comment from AT** forwarded to AC on 27 March which AC then forwarded onto the applicant. This comment outlines:

    - That the additional information outlined in 6.4.3 above is yet to be provided by the applicant.
    - Key areas where additional information is needed to assess the adequacy of key transport outcomes and whether the transport impacts of the Project can be managed to an acceptable level. The additional information requested of the applicant relates to:
        - Transport infrastructure design,
        - Stormwater interfaces and culvert design,
        - Bus operational requirements,
        - Paper road formation and road-stopping implications, and
        - Integration of the development with both the remaining paper road and the Ara Hills network.
    - Amendments to certain conditions, and
    - Imposition of additional conditions (actual wording and subject areas where further conditions may be needed pending the availability of additional information).
    - AT's position is that, based on the information available at the time this previous response was prepared, the Project does not yet demonstrate that its adverse transport impacts can be appropriately avoided, remedied, or mitigated. Significant elements of the transport network required to support the development remain unresolved, and key information necessary to assess the adequacy of the proposed transport outcomes has not been provided.

- **Additional applicant technical transport infrastructure information** (detailed in section 4.2 above) including the Applicant Transport Response Memo was then received by AT on 16 April with updated drawings available for AT review on 20 April. This information covered some of the information deficits outlined in section 6.4.4 above. However, the applicant advised that additional information/analysis/drawings are to be forwarded by 11 May. This is after this response is to be forwarded to the Panel.

- **Ongoing Stormwater engagement with the applicant**. Detail of the specific additional information needing to be reviewed was requested from the applicant by AT's stormwater SME Sean Pearce of Awa Consultants on 14 April 2026 (Appended). Additional applicant stormwater information was then made available to AT on 17 April (appended), and a meeting was held with the applicant on 21 April. A further email from Mohammed Sahim of AT outlined additional information requirements necessary for culvert/dam assessments was sent to the applicant SME on 23 April (appended).

6.5 FURTHER MATTERS NEEDING TO BE ADDRESSED BY THE APPLICANT.

Significant technical information was not available for review prior to this response being completed. The Applicant has advised that further information is to be provided on May 11. This is after the statutory time frame for comment to be made to the EPA. It is not known if this additional information will be adequate to address outstanding transport infrastructure delivery and design issues.

The outstanding matters where additional information and drawing amendments should be provided by the applicant for AT's review involve:

- **Stormwater Management** and Culvert Design as outlined in the appended emails of Sean Pearce of Awa dated 14, April, 22 April, 23 April 2026, and the email of Mohammed Sahim of AT dated 23 April.
- **Transport Infrastructure** as outlined in the appended memos of:
    - Paul Schishka of PTM Consultants dated 28 April 2026 (PTM Memo)
    - Craig Richards of Beca dated 22 April 2026
    - Rob Mason of Beca dated 22 April 2026
    - Kang Hang (AT SME) dated 21 April 2026.
- **Integration of the Projects partial delivery of Designation 14108** and future designation works.
- **Bus-stop** requirements and indicative locations detailed on the applicant drawings to be amended as outlined the PTM memo. Noting there is slight amendments to the indicative locations outlined in the email and PowerPoint of Steve Wren of AT dated 17 March 2026 (appended).
- **Staging and Paper Roads / Road stopping**. The timetabling/staging of road vesting should ensure that alternate access along a vested or paper road is provided where portions of paper road are to be stopped and that adequate paper road widths are available for linkage of proposed road to remaining paper road corridors as outlined in the Email of Irene Tulloch of AT dated 23 April 2026. It is noted that road stopping approval occurs outside the resource consenting process however this issue should be considered by the applicant to ensure future changes to any approved consent, additional or new consents are not needed.
- **Integration of the site with the remaining Paper Road and Ara Hills Development**. This should include frontage upgrades to the paper road, including provision of an active mode path and potentially vehicular access.

- **Active Modes to Future School** there is no provision within the application material for active modes to enable future residents to access the intended school on Upper Ōrewa Road. This school is likely to encompass both a primary and secondary school and although the land is not yet designated planning is well advanced. Refer Ministry of Education Memorandum (appended) outlining information within the public realm.

6.5 CONDITION REVIEW

Section 9.0 of this response, specifically sections 9.1, 9.2 and 9.3 outline additional conditions needing to be imposed, amendments to conditions and areas where further conditions may be necessary once additional information outlined in sections 6.3, 6.4 and 6.5 of this response is provided. Section 9.4 outlines specific conditions supported by AT.

6.6 OVERALL AT RESPONSE

In the absence of all necessary information being provided and reviewed for acceptability and, based on the information currently available, AT does not consider that adverse transport impacts have been appropriately mitigated and is unable to support the Project at this time. The lack of provision of the transport infrastructure for which additional information is sought will, if not provided, negatively impact Council's funding and investment priorities. Where needed infrastructure is not provided by a developer, future residents may have a reduced level of service with funding gaps that may need to be met by Council. In such instances development is considered unacceptable.

Although the proposed development is out of sequence, the FDS does enable consideration of scenarios where unanticipated and/or out of sequence development is appropriate provided there is no impact on Council's funding and investment priorities. There is no Council funding and no agreement with the developer to construct the link to Grand Drive, This creates a major transport infrastructure deficit in delivery and funding.

The inclusion within the Project of further transport network mitigation and development thresholds through additional information and consent conditions may, subject to review and provided an agreement between the applicant and Council is put in place for delivery of the Grand Drive link, address outstanding adverse impacts relating to transport.

7.0 Section 67 Information Gap

At the time of writing this Memo I have identified the information gaps outlined in section 6.3, 6.4 and 6.5 above. These comprise:

- Stormwater Management and Culvert Design
- Transport Infrastructure including active mode provision
- Bus-stops
- Staging and Paper Roads / Road Stopping
- Integration of the Projects partial delivery of designation 14108 and future designation works

- Integration of the site with the remaining Paper Road and Ara Hills Development.
- Consent conditions.

7.1 WHY THIS INFORMATION IS ESSENTIAL

The inclusion within the Project of further transport network mitigation and development thresholds through the provision of additional information by the applicant and the imposition of additional and amended conditions may, subject to review, address outstanding adverse impacts relating to transport. To determine whether this is the case, further response from the Applicant is required.

The specialist Subject Matter Experts (SME) analysis of the Project has ascertained that in many instances the additional information sought relates to detail that is unable to be conditioned and may necessitate the need for redesign of some aspects of the proposal.

The applicant has advised that information that they have already agreed to provide to AT SME'S may result in design changes. In this respect AT SME's will need to assess the design amendments once received.

For stormwater and culvert design Sean Pence in the email of 22 April (appended) has advised that design of the culverts cannot be conditioned and must be assessed due to the need to consider natural hazards and risks to the environment pursuant to the Fast Track Act Part 2 and Schedule 5.

The lack of provision of the transport infrastructure for which additional information is sought will, if not provided, negatively impact Council's infrastructure and funding priorities if it falls to Council to make provision for the required upgrades. The lack of provision of information relating to stormwater management and culvert design means that AT SME's are unable to adequately assess natural hazard risk and consequential impacts. With regard to Designation 14108 the uncertainties associated with the form of the Project at its interfaces with Grand Drive and the link to Upper Ōrewa Road can be considered to hinder the future delivery of the Project where adjacent sites are consented as a result of the Project.

The additional information is needed to enable AT to give consideration to the mitigation of adverse transport impacts, risks to the environment from hazardous installations (stormwater culverts), the impact of the Project on Council's funding priorities, and the overall acceptability or otherwise of the Project.

8.0 Recommendation

AT is awaiting receipt of significant information for review. This information in many instances is unable to be conditioned and may necessitate the need for redesign of aspects of the proposal. It is noted that the applicant has agreed to provide some of the additional information already. In the absence of this information being provided and available for review to determine acceptability or otherwise, then based on the information currently available AT is **opposed** to the Project.

9.0 Proposed Conditions

9.1 NEW CONDITIONS TO BE IMPOSED

- **Acoustic Insulation**: It is noted that the applicant has advised that acoustic insulation can be provided for dwellings located adjacent the **AT designation 14108** arterial road and that wording of a suitable condition is to be provided by the applicant for AT's consideration. The imposition of a suitable condition is supported by AT.

- **Active Mode Bridge over Grand Drive Interchange**: A condition is sought in the PTM Memo. The following condition wording is proposed:

  Prior to section 224(c) certification for the first stage of the subdivision that is developed, the consent holder must provide evidence to Council that an active mode bridge connecting the Ara Hills Intersection to the signalized pedestrian crossing at Arran Drive has been constructed and is operational.

- **Active Mode Path to School.** A condition is sought in the PTM Memo. The following condition wording is proposed:

  The consent holder must, at their own expense, construct a temporary off-road footpath (minimum 1.8m in width and an all-weather surface) along Upper Ōrewa Road between the intersection with Russell Road and the Ministry of Education site in Upper Ōrewa Road. This condition will become inoperable if the Ministry of Education site is not designated for use as a school site within two years of consent being granted.

- **Road 10 Turning Head**: A condition is sought in the PTM Memo. The following condition wording is proposed:

  Before any dwellings adjacent to Road 10 are occupied the consent holder must, at their own expense, construct a vehicle turning head at the south end of Road 10 in accordance with the Auckland Council Code of Practice for Subdivision and Development Chapter 3 Transport.

9.2 Conditions to be Amended (condition numbering as set out in the applicant updated condition document appended).

- **Condition 98: AT designation 14108 Connection to Grand Drive.** As referenced in the PTM Memo amend condition 98 to read:

  *Prior to section 224(c) certification for the first stage of the subdivision that is developed, the consent holder must provide evidence to Council that access **from the Grand Drive Interchange** to the site **in the form of a two- lane arterial with active modes on each side** has been constructed and is operational.*

- Condition 99: As referenced in The PTM Memo amend condition 99 to read:

Prior to the occupation of more than **573** ~~1325~~ dwellings in the Delmore site, Roads 5 and 17 must be constructed and operational and the intersection of Road 17 and Upper Ōrewa Road must be constructed as a single-lane roundabout and designed to achieve sight distances in accordance with Austroads Guide to Road Design Part 4B: Roundabouts Part 4B for 60km/h operating speeds.

- **Condition 101: Development Trigger**. As referenced in the PTM Memo amend Condition 101 to be replaced with the following:

1) Once the Road 17 / Upper Ōrewa Road roundabout is operational, the Consent Holder must undertake traffic surveys and undertake additional assessment at the earlier of:
   a) 12 months following the opening of the roundabout; or
   b) Prior to the occupation of 1,450 dwellings.
2) The traffic surveys must be undertaken at the State Highway 1 / Grand Drive motorway interchange by a suitably qualified traffic engineer and must include, as a minimum:
   a) Surveys undertaken over at least three separate weekdays, including both AM (6.00am to 9.00am) and PM (4.00pm to 7.00pm) peak periods, and excluding school and public holiday periods, including but not limited to the Christmas to New Years period. The surveys must be undertaken at least one week apart, and on different weekdays.
   b) Measurement and recording of traffic volumes and queue lengths for all movements / lanes on all approaches to both of the roundabouts which constitute the interchange. Queue lengths should be recorded every three minutes with the longest length queue observed for each lane in the three minute interval recorded.
3) Within 20 working days of completing the traffic surveys, the Consent Holder must provide to Council a Traffic Monitoring Report, prepared by a suitably qualified traffic engineer, that:
   a) Summarises the results of the traffic surveys;
   b) Includes an appendix with copies of all the data collected as part of the surveys; Memorandum
   c) Assesses whether the Grand Drive interchange or any approach to the Grand Drive interchange is operating at Level of Service E or worse.
4) Where the Traffic Monitoring Report identifies that the Grand Drive interchange is operating at Level of Service E or worse, the Consent Holder must:
   a) Prepare a detailed design for mitigation in the form of a new 200 metre only left turn lane on Grand Drive the eastern approach to the interchange.
   b) Consult with Waka Kotahi NZTA on the left turn lane design and undertake any changes to the design necessary to gain NZTA acceptance.
   c) (c) Submit the left turn lane design to Council for approval within 20 working days of submitting the Traffic Monitoring Report. The assessment must include written confirmation from Waka Kotahi NZTA that it has reviewed the proposed design and considers it acceptable.
5) The consent holder may propose alternative mitigation measures to the left turn lane but must provide detailed design drawings and assessment of the alternative mitigation prepared by a suitably qualified traffic engineer for the review of NZTA and Council. The left turn lane may be substituted but only upon mutual agreement, in writing, by the consent holder, Council, and NZTA.
6) The Consent Holder must, at their own expense, implement the left turn lane under condition 101(4), or other mitigation measures, mutually agreed to by the Consent Holder, NZTA, and Council under Condition 101(5) as soon as practicable, and no later than 6 months following Council approval, unless otherwise agreed in writing by Council.

7) Additional traffic surveys and assessment, in accordance with Conditions 101(2) to 101(3) must be undertaken by the applicant prior to the occupation of 1,600 and 1,750 dwellings. If the assessment undertaken under Condition 101(3) identifies that the Grand Drive interchange or any approach to the interchange is operating at level of service E or worse, the Consent Holder must carry out the design, consultation, and mitigation works described in Conditions 101(4), 101(5), and 101(6)."

- **Condition 102**: As referenced in the PTM Memo amend to read:

  The consent holder must provide new vehicle crossings to serve all residential lots. Vehicle crossings serving less than 10 dwellings are to be constructed **in accordance with the Auckland Council Code of Practice for Land Development and Subdivision Chapter 3 Transport** ~~**as per the Auckland Transport Standard GD017A-1B or (VX0103 as per the TDM working draft, 14/02/20**~~**.**

- **Condition 106**: As referenced in the PTM Memo amend to read:

  Prior to wastewater removal being required on Russell Road, the consent holder must **at their own expense** widen Russell Road **so that a there is sufficient space for a 19.5m long truck and trailer tanker to pass a 6.3m long van travelling in the opposite direction with a minimum of 0.5m clearance between the vehicles and between the edge of the vehicles and the edge of the carriageway. Road widening must also be undertaken at the intersection of Russell Road and Upper Ōrewa Road to ensure that a 19.5m long truck and trailer tanker can turn left from Russell Road onto Upper Ōrewa Road without crossing into the northbound traffic lane on Upper Ōrewa Road. This work must be in accordance with the Auckland Council Code of Practice for Land Development and Subdivision Development Chapter 3 Transport** ~~as per tracking plans to accommodate wastewater collection vehicle~~

- **Condition 107**: As referenced in the PTM Memo amend to read:

  Traffic calming measures shall be provided at 60m intervals on all local roads, **or in other such locations as approved by Auckland Council, and in accordance with the Auckland Council Code of Practice for Land Development and Subdivision Chapter 3 Transport.**

- **AT designation 14108 Termination Point**: The applicant proposes a new condition. AT suggests an addition as outlined in the PTM Memo so that the condition is to read:

  A temporary turning head **with pedestrian path through to Upper Ōrewa Road** must be constructed at the termination point of the **AT designation 14108** arterial road within Stage 1 of the site in accordance with the Auckland Council Code of Practice for Land Development and Subdivision Chapter 3 Transport.

  ~~Advice Note: This should be in a form of a temporary asphalt turning head for vehicles only.~~

9.3 Additional Conditions / Amendments

Additional conditions / amendments may be needed once the additional information has been provided by the applicant and reviewed by AT. Likely additional condition subject matter includes:

- **Stormwater Management:** refer email of Sean Perce of Awa

- **Integration of the Projects partial delivery of designation 14108** and future designation works
- **Transport Infrastructure Matters** as outlined in the PTM Memo including:
    - **On and off-site road widening**.
    - **Pedestrian Access** from the turning head of **AT designation 14108** to Upper Ōrewa Road as outlined in the PTM Memo. A condition may not be needed if this is detailed on the drawings.
    - **Road 1 Cross Section and vehicle tracking**: to be the same as Roads 5 and 17 as outlined in the PTM Memo. A condition can only be imposed once the Project has been redesigned as it necessitates a wider road corridor width.
    - **Vehicle Tracking** to ensure compliance with condition 113 that sufficient road is vested to ensure compliance with the Auckland Code of Practice for Land Development and Subdivision Chapter 3 Transport and the requirements of condition 113
- **Vesting of the designated land** being part of proposed lot 5010 which includes the permanent road corridor for the portion of AT designation 14108 that lies on the subject land that is not being delivered as detailed in the PTM Memo**.**

9.4 Conditions supported by AT and set out in the updated condition document

The following conditions proposed by the Applicant are supported: 100(a)(b)(c)(d), 104, 110, 112, 135.

10.0 Supporting Documents

- **Stormwater Management and Culvert Design** as outlined in the appended emails of:
    - Sean Pearce of Awa dated 14, April, 22 April, and 23 April 2026.
    - Mohammed Sahim of AT dated 23 April.
- **Transport Infrastructure** as outlined in the appended responses of:
    - Paul Schishka of PTM Consultants dated 28 April 2026 (PTM Memo),
    - Craig Richards of Beca email dated 22 April 2026,
    - Rob Mason of Beca email dated 22 April 2026,
    - Kang Hang (AT SME) email dated 21 April 2026,
- **Bus-stop** requirements and indicative locations detailed on the applicant drawings to be amended as outlined in the PTM Memo. Noting there is slight amendments to the indicative locations outlined in the attached email and PowerPoint of Steve Wren of AT dated 17 March 2026.
- **Staging and Paper Roads / Road stopping**. As outlined in the email of Irene Tulloch of AT dated 23 April 2026.
- **Ministry of Education Memorandum** by Chris Horne of Incite dated 16 April 2026.
- **Applicant Documents:**
    - Amended Conditions
    - Comment on AT Stormwater Response Memorandum

Nadine Perera (AT)

From: Sean Pearce <sean.pearce@awa.kiwi>
Sent: Tuesday, 14 April 2026 14:02
To: shakti@fsconsulting.co.nz
Cc: Nadine Perera (AT); Mohammed Sahim (AT)
Subject: Delmore Fast Track Stormwater Matters

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Hi Shakti,

AT's stormwater comments on the Delmore Fast Track identified that while the Stormwater Report stated the culverts were designed to comply with the Stormwater Code of Practice, the calculations provided in Appendix B indicated otherwise. As a result, AT have requested further information on the culverts to ensure that they are designed to be compliant with the requirements of the Stormwater Code of Practice.
Flowstate Consulting have since confirmed that many of the culverts will be classified as Dams under the Building Act 2004 or the Building (Dam Safety) Regulations 2022.

To provide direction on what information is necessary for this Fast Track Application, this has been raised with AT's Principal Stormwater Engineer who has confirmed that the culverts cannot be conditioned, and full assessments of the culverts demonstrating compliance with the Stormwater Code of Practice, and therefore compliance with the Building Act 2004 and Building (Dam Safety) Regulations 2022 is required.

AT's Principal Stormwater Engineer is willing to meet with you and McKenzie & co to discuss this, which we can help to organise.

Kind Regards,

SEAN PEARCE
WATER INFRASTRUCTURE ENGINEER
a: Level 9, 4 Williamson Ave, Grey Lynn, Auckland 1021

Nadine Perera (AT)

From: Sean Pearce <sean.pearce@awa.kiwi>
Sent: Wednesday, 22 April 2026 11:25
To: Nadine Perera (AT)
Subject: RE: Delmore Stormwater

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Hi Nadine,

Based on my reading of the Fast-Track Act 2024 there are elements of the infrastructure proposed that can be conditioned. This includes:

1. the design of the roads;
2. road embankments; and
3. culvert collars.

This is because the design of these is unlikely to require a change in consent at later stages. However, the design of the culverts cannot be conditioned and must assessed for the following reasons:

1. The consent may need to be changed at later stages. For example, if the culverts (inadvertent dams) are not assessed in the Fast-Track consent (or other Resource Consents) and are later found to be unsafe, then the consent granted (via either the Fast-Track Approvals Act, or Resource Management Act) may need to be changed by the consent holder. This can lead to frustrations from consent holders, and as such is better avoided by assessing culverts and overland flow paths in earlier stages.
2. The Fast-Track Approvals Act 2024 has sections that require risks to be assessed and included as part of their Assessment of Environmental Effects, and therefore cannot be conditioned. These include, but are not limited to:
    a. Part 2 – Fast-track approvals process; 22 – Criteria for assessing referral application; (2)(a)(vii); For the purposes of subsection (1)(a), the minister may consider whether the project will support climate change adaptation, reduce risks arising from natural hazards, or support recovery from events caused by natural hazards.
    b. Schedule 5 – Approvals relating to Resource Management Act 1991; 6 – Information required to assess environmental effects; (1)(b); The assessment of an activity's effects on the environment under clause 5(4) must include the following information: if the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use.
    c. Schedule 5 – Approvals relating to Resource Management Act 1991; 7 – Matters to be covered in assessment of environmental effects; (g); The assessment of an activity's effects on the environment under clause 5(4) must cover the following matters: any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.

As the applicant has identified that 6 of the 12 proposed culverts will be inadvertent dams, and based on the above sections of the Fast-Track Act 2024; we believe that the applicant should investigate the risk of dam failure to demonstrate what hazardous conditions people may be exposed to.

During the meeting the applicant asked how many PIC assessments were required, noting that 6 of the 12 proposed will be inadvertent dams during a 1% AEP rainfall event. Mohammed requested that a single PIC assessment be provided; one that represents cascading failure of the dams. This is the most conservative type of assessment (in terms of over-estimating hazard), as it will assume that all inadvertent dams fail.

Kind Regards,

SEAN PEARCE
WATER INFRASTRUCTURE ENGINEER
a: Level 9, 4 Williamson Ave, Grey Lynn, Auckland 1021

From: Nadine Perera (AT) <Nadine.Perera@at.govt.nz>
Sent: Tuesday, 21 April 2026 1:56 pm
To: Sean Pearce <sean.pearce@awa.kiwi>
Subject: Delmore Stormwater

Hi Sean,

Further to this mornings meeting can you please provide detailed analysis as to why the provision of stormwater infrastructure can not be conditioned.

The developer SME's this morning stated that to have the information conditioned was a developer risk. But the management of stormwater is a council risk that is ongoing and is intensified once the developer has constructed the project. Once the project is finished the developer risk is at an end.

Kind Regards,

Nadine Perera | Principal Planner
Strategic Development Partnerships | Built Environment and Place
Auckland Transport
Level 4, 20 Viaduct Harbour Avenue, Auckland 1010

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Nadine Perera (AT)

From: Sean Pearce <sean.pearce@awa.kiwi>
Sent: Thursday, 23 April 2026 18:17
To: Nadine Perera (AT); Andy Irwin (AT); Traffic Engineering (AT); Rob.Mason@supportinggrowth.nz; Bethany Park (AT); Putri Kusumawardhani (AT); Katherine Dorofaeff (AT); Steve Wrenn (AT); Andrew McGill (AT); Paul Schischka; Jimin Hong (AT); Jubin Gautam (AT); Craig Richards; Irene Tulloch (AT); Tania Steen (AT); Alayna Fiatau (AT); Kang Han (AT); Traffic Engineering NorthWest (AT); Adrian Grant (AT); Saul Vingrys (AT)
Cc: Tessa Craig (AT); Hedre Dednam (AT)
Subject: RE: Delmore Fast Track #2 - EPA Panel Formal Request for Comment
Attachments: AT Stormwater Response Memorandum.docx

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Hi Nadine,

We have reviewed the applicant's response to our Stormwater items in the attached document, and their updated drawings. Please find our response below, combined for both reviews. We note that our response is not finalised as we are awaiting the applicant's response for the culverts, and that Carly is aware of this as per her email on Monday the 20th (at 5:02 pm).

Comment 1 (AT comment starting "Section 10.3..."):
- Response: Noted, this can be closed.

Comment 2 (AT comment starting "It appears that only the NZTA..."):
- Response: Please provide an assessment of the depth-velocity in the road. It is noted that several roads have the "very high hazard" classification in drawing 3725-0-4537.

Comment 3 (AT comment starting "It is not clear where the inflow notes..."):
- Response: It is noted that the annotations for the catchments appears to block the inflow nodes. Please clearly demonstrate where the inflow nodes for the subcatchments are located.

Comment 4 (AT comment starting "While the Flood Assessment..."):
- Response: Noted, this can be closed.

Comment 5 (AT comment starting "1. It is not clear what the Culvert Plans..."):
- Response: Noted, this can be closed.

Comment 6 (AT comment starting "3. It is not clear what the culvert dimensions..."):
- Response: Noted, this can be closed.

Comment 7 (AT comment starting "4. Section 10..."):
- Response: Item on hold pending dam assessment.

Comment 8 (AT comment starting "5. It appears that..."):
- Response: Item on hold pending dam assessment.

Comment 9 (AT comment starting "6. It is not clear..."):
- Response: Noted, this can be closed.

Comment 10 (AT comment starting "7. It is not clear if fish passage..."):
- Response: Noted, please demonstrate compliance with fish passage requirements.

Comment 11 (AT comment starting "8. It appears that not all culverts..."):
- Response: Noted, item can be closed.

Comment 12 (AT comment starting "9. It is not clear how many culverts..."):
- Response: Please provide access longsections, of the access and clarify what the width of the access tracks is.

Comment 13 (AT comment starting "10. OLFP..."): Response:

- Response: Please clarify if the TUFLOW model has been reviewed by Healthy Waters. It is noted that the previous OLFP assessment had sections of roads with depth-velocity products exceeding 0.4 m^2/s, however the new drawings and assessment do not report this. Please clarify why this has changed.

Comment 14 (AT comment starting "2. The OLFP section..."):

- Response: Please clarify if the TUFLOW model has been reviewed by Healthy Waters. It is noted that the previous OLFP assessment had sections of roads with depth-velocity

Comment 15 (AT comment starting "3. In the OLFP drawings..."):

- Response: Please clarify if the TUFLOW model has been reviewed by Healthy Waters.

Comment 16 (AT comment starting "4. There is currently no..."):

- Response: Please clarify if the TUFLOW model has been reviewed by Healthy Waters.

Kind Regards,

SEAN PEARCE
WATER INFRASTRUCTURE ENGINEER
a: Level 9, 4 Williamson Ave, Grey Lynn, Auckland 1021

From: Nadine Perera (AT) <Nadine.Perera@at.govt.nz>
Sent: Tuesday, 21 April 2026 10:52 am
To: Andy Irwin (AT) <Andy.Irwin@at.govt.nz>; Traffic Engineering (AT) <TrafficEngineering@at.govt.nz>; Rob.Mason@supportinggrowth.nz; Bethany Park (AT) <Bethany.Park@at.govt.nz>; Putri Kusumawardhani (AT) <Putri.Kusumawardhani@at.govt.nz>; Katherine Dorofaeff (AT) <Katherine.Dorofaeff@at.govt.nz>; Steve Wrenn (AT) <Steve.Wrenn@at.govt.nz>; Andrew McGill (AT) <Andrew.McGill@at.govt.nz>; Paul Schischka <Paul.Schischka@ptmconsultants.co.nz>; Jimin Hong (AT) <Jimin.Hong@at.govt.nz>; Jubin Gautam (AT) <Jubin.Gautam@at.govt.nz>; Craig Richards <craig.richards@beca.com>; Sean Pearce <sean.pearce@awa.kiwi>; Irene Tulloch (AT) <Irene.Tulloch@at.govt.nz>; Tania Steen (AT) <Tania.Steen@at.govt.nz>; Alayna Fiatau (AT) <Alayna.Fiatau@at.govt.nz>; Kang Han (AT) <Kang.Han@at.govt.nz>; Traffic Engineering NorthWest (AT) <TrafficEngineeringNorthWest@at.govt.nz>; Adrian Grant (AT) <Adrian.Grant@at.govt.nz>; Saul Vingrys (AT) <Saulius.Vingrys@at.govt.nz>
Cc: Tessa Craig (AT) <Tessa.Craig@at.govt.nz>; Hedre Dednam (AT) <Hedre.Dednam@at.govt.nz>
Subject: RE: Delmore Fast Track #2 - EPA Panel Formal Request for Comment

Good morning,

Updated drawings have been provided by the applicant. Please refer the following link emailed separately (attached).

Please note comment is needed by Friday 24 April

Kind Regards,

Nadine Perera | Principal Planner
Strategic Development Partnerships | Built Environment and Place
Auckland Transport

Nadine Perera (AT)

From: Mohammed Sahim (AT)
Sent: Thursday, 23 April 2026 12:52
To: Shakti Singh; Sean Pearce
Cc: pranilw@fsconsulting.co.nz; Nadine Perera (AT); James Kitchen
Subject: RE: Delmore Fast Track Dam Meeting

Importance: High

Hi Shakti,

Draft SoW for dam assessment refers. Please include comments as suggested on email below, is in blue colour and italics.

Please note, further technical details pertaining to inadvertent dams (road embankment) and culvert under new roads will be reviewed at EA.

Regards

Mohammed

From: Shakti Singh <shakti@fsconsulting.co.nz>
Sent: Wednesday, 22 April 2026 4:03 pm
To: Mohammed Sahim (AT) <Mohammed.Sahim@at.govt.nz>; Sean Pearce <sean.pearce@awa.kiwi>
Cc: pranilw@fsconsulting.co.nz; Nadine Perera (AT) <Nadine.Perera@at.govt.nz>; James Kitchen <james@mckenzieandco.co.nz>
Subject: Re: Delmore Fast Track Dam Meeting

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Hi Mohammed and Sean,

Thank you for meeting with us on Tuesday. As discussed, I have developed the scope of work for the dam assessment required for the fast-track application. Could you please review the following and suggest any necessary changes?

- A dam classification *assessment will be completed* in line with the NZSOLD 2024, Building Act *2004 and NZ Building Dam Safety Regulation 2022* requirements. The brief assessment identified 6 out 12 culverts as 'classifiable dams.' Based on Tuesday's discussion, the memorandum will be updated to replace all reference of 'classifiable dams' with 'inadvertent dams'.
- *Memorandum needs to be updated to include illustrated cross sections for each dam showing heights, stored reservoir, and flood levels at various ARI's (note, use culvert completely blocked scenario for volume calc).*
- *A detailed potential impact classification (PIC) reports meeting all the requirement of NZSOLD 2024 is required for the fast-track application.*
    - I note that some identified 'inadvertent dams' have catchments too small for runoff to realistically approach the embankment crest level. We will address this in the report to provide a transparent view of the actual site constraints.

Dam-Break assessment

- Undertake a dam break assessment for the culverts identified as 'inadvertent dams' as per NZSOLD 2024 and AT discussions. This includes
    - Simulation of a Post-development model scenario to establish a base-case scenario.
    - Simulation of a scenario which allows for a 'rainy-day' and 'cascade' failure scenario:
        - A 100-year (+3.8°C) storm event, assuming culverts to be fully operational (or 0% blockage).
        - A 1000-year ARI storm event, assuming culverts are partially or completely in operational.
        - *Simulation to include guidance (storm events to consider) in accordance with NZSOLD 2024 when assessing dam breach*.
- Undertake a PIC assessment (to be completed by *Chartered Geotechnical engineer, specialised in SW management dams*) and categorize the risk of 'dam break'.
- Evaluate the risk to the lots/roads under the above-mentioned scenarios and recommend likely mitigation measures (if required) to reduce the likelihood and consequence of 'dam break'— this will be pursued during the EPA stage. *Note, likely new lots affected by the potential flood inundation arising from dam breach will be need to be protected and will require "registering consent notices* on titles".
    - This will also include *Chartered Geotechnical/Dam Engineers* insights and commentary.
- Identify safety-egress routes for all areas in the development.
- Optional: Undertake additional scenarios to further include the existing NZTA culvert in the 'dam break' assessment.
- *Provide PIC providing parameters, assumptions, findings, dam locations, sections and flood level details and SW Flood modelling*.
- Provide a technical memorandum providing parameters, assumptions, findings and recommendations for the assessment.

As noted above, we will seek consent conditions to address any *low/medium/high risks dams* identified through the assessment that will be pursued during the EPA stage. The report will include commentary on the likely measures available to reduce hazard severity.

Thanks and kind regards,

Shakti Singh - Senior Engineer
BEngTech, CPEng, CMEngNZ

www.fsconsulting.co.nz

This email, together with all or any attachments, is intended to be read by the named recipient only. If you are not the intended recipient please notify the sender immediately and delete this email.

Memorandum

To:	Nadine Perera | Principal Planner | Strategic Development Partnerships | Built Environment and Place | Auckland Transport
From:	Paul Schischka | Consultant Transportation Engineer | PTM Consultants
Date:	28 April 2026
Subject:	Delmore Residential Subdivision Second Fast Track Application Transport Assessment
Revision:	4

This memorandum contains my road safety / traffic engineering specialist review comments on the second Delmore fast-track application.

The proposed Delmore residential development, located in the Wainui / Orewa area north of Auckland contains approximately 1,213 new houses, new roads to vest, and has an overall area of around 109 hectares.

I have reviewed the application documents supplied by the applicant. The documents most pertinent to my review are;

- The Integrated Transportation Assessment (ITA) report prepared by Commute Transportation Consultants (Commute) dated 23 December 2025.
- The roading drawings prepared by McKenzie and Co. dated April 2025.
- The Upper Orewa Concept Structure Plan dated December 2025 (author not stated).
- Additional traffic engineering drawings provided on 19 March 2026, 17 April 2026, and 21 April 2026.
- Design for temporary road connection between the Delmore site and Grand Drive.
- Appendix 9.1 Auckland Transport Response Memo, amended version including responses from the applicant up to 18 March 2026.
- Appendix 25 Roading and Access Report
- Appendix 44 Proposed Conditions of Consent.
- Appendix 47.1 Draft Construction Management Plan.
- Auckland Transport Response Memorandum dated 16 April 2026, prepared by Leo Hills of Commute ("The 16 April 2026 Commute memo").

As part of the review of the first Delmore application I visited the site on 14 May 2025 in a joint site visit with Auckland Transport, Auckland Council, the applicant and their advisors.

Executive Summary

A. I consider that residents of the proposed residential subdivision are likely to be dependent on the use of private motor vehicles as a mode of transportation. Several of the local roads within the subdivision have steep gradients which discourage walking and cycling. The challenging topography of the site makes it impractical to achieve higher densities. While there is a small planned commercial development within neighbouring the Ara Hills development, there are no supermarkets or larger retail developments within a practical walking distance. There are no schools within practical walking distance.

B. There is presently no safe active modes route from the development across the SH1 / Grand Drive motorway interchange. My understanding is that the neighbouring Ara Hills developer is required to build a connection as a condition of their consent, but to my knowledge there is no firm date for construction of this to commence. I recommend that a condition of consent is sought for the proposed Delmore subdivision requiring that a safe active modes link across the motorway be provided before any dwellings are occupied.

C. The applicant's trip generation assessment is based on a medium design residential rate. I consider that, due to most dwellings in the sub-division being standalone and the likelihood that the development will be highly car dependant, that actual trip generation rates will be higher.

D. To address potential delay and congestion effects at the Grand Drive motorway interchange and surrounding road network the applicant proposes to provide an alternative route in the form of a connection between the development and Upper Orewa Drive. The applicant's proposed condition 99 controls the number of dwellings threshold for when the link must be provided. I consider that there is insufficient modelling in the ITA to confirm that this threshold is appropriate. I have suggested alternative wording for the condition.

E. The applicant's proposed condition 101 would require them to undertake traffic monitoring and construct a new left turn lane on the eastern side of the SH1 / Grand Drive interchange if the monitoring identifies an unacceptable level of service on any approach. I consider that the wording proposed by the applicant does not require sufficent monitoring to confirm whether or not there is a problem at the interchange and I have suggested alternative wording for the condition.

F. The applicant has proposed that the link to development will be via a new roundabout at the intersection of Road 17 and Upper Orewa Drive. I consider that this is an appropriate form for the intersection to take, but note that the roundabout design provided lacks information like vehicle tracking, sight distance assessment, and 3D design which would allow a full review. Nonetheless, there is nothing in the limited information provided to date which indicates that an appropriate intersection design cannot be provided.

G. The applicant proposes to upgrade the Wainui Road / Upper Orewa Road intersection to provide a right turn bay for the turn into Upper Orewa Drive in order to mitigate potential road safety effects due to an increased volume of turning traffic at the intersection. They also propose to construct one metre wide sealed shoulders on Upper Orewa Drive for similar reasons. I consider that the section of Wainui Road east of Upper Orewa Drive should also be upgraded to mitigate potential road safety effects and the applicant is proposing this under Condition 100(b).

H. There a pre-existing issue at the Russell Road / Upper Orewa Road intersection relating to limited driver sight distances for drivers turning right into Russell Road which the proposal could exacerbate by increasing the volume of traffic using Upper Orewa Road. The applicant has proposed upgrades at this intersection which I consider will mitigate the potential road safety effects under proposed Condition 100(d).

I. The proposed subdivision has a road hierarchy of arterial roads, collector roads, and local roads broadly in line with the Upper Orewa Concept Structure Plan, which I consider to be generally acceptable. However, Road 1, which is a collector road, lacks the separated cycle facilities which are proposed on the other collector roads (Roads 5 and 17). I anticipate that Road 1 will carry a high traffic volume once the future urban zone land to

the south is urbanised, as show on the structure plan, and that cycling facilities will be needed in this road to manage potential effects on cyclists.

J. The vehicle tracking drawings for some of the horizontal curves within the new road network indicate that there is insufficient space for vehicles to pass a rubbish truck coming in the other direction. Addressing this will require carriageway widening near the curves which could have an impact on the width of the road reserve. To mitigate the potential traffic safety and operational effects I recommend that a condition of consent is sought requiring that sufficient carriageway space be provided to allow vehicle tracking which complies with the Auckland Council Code of Practice for Land Development and Subdivision Chapter 3 Transport without the footpath or berm widths going below the minimums in the code. The applicant has agreed to do this as proposed Condition 113.

K. The applicant has provided a sight distance assessment in the form of drawings for selected intersections and vehicle crossings serving jointly owned access lots (JOAL). These drawings show that in order to provide safe driver sight distances at some of the intersections or JOALs that certain areas of some of the residential lots adjacent to the road must be kept clear of low level planting or structures. In some cases these areas are only relatively small parts of the lot and I consider that in these cases the potential traffic safety effects could be mitigated with a consent notice on the title of the lots requiring these areas to be kept clear of high structures or planting.

L. In other cases the area which would need to be kept clear is comprises a significant proportion of the overall lot and a consent notice could potentially prevent a dwelling being built on the lot. In these cases I recommend that the proposed development be redesigned to address the potential traffic safety effects by adjusting lot boundaries or moving vehicle crossings to locations to positions where driver sight lines are sufficient.

M. The site will have a temporary wastewater treatment plant until such a time as it can connect to the Watercare network. Regular tanker access is needed between the east end of Russell Road and the south end of Road 1 to service this plant. This tanker is approximately 19.5m long, and will consist of a truck or trailer similar to a milk or petrol tanker. The applicant has provided a report showing that widening of the carriageway is needed in three places on Russell Road to facilitate use of this road by the tanker. Condition 106, which relates to this widening, has insufficient detail and I have recommended alternative wording.

N. Recently land connecting the Delmore site to Grand Drive has been vested as road, however this land does not cover the same area as the NOR 6 designation and it is not possible to build the NOR 6 in accordance with the drawings provided with the designation in the land vested. The applicant has provided a design for a temporary connection road between their site and Grand Drive. I consider that this design will have potentially significant effects on traffic and pedestrian operations and safety. Reconstructing this section of road as the permanent layout at a later date when land becomes available would cause significant disruption for the occupants of any dwellings within the Delmore site which were occupied.

O. The applicant has stated that is their *"intention is to provide the full roading width, notwithstanding this will require Auckland Transport to acquire the additional land required to construct it."* Should this occur it would need to be 100% funded by the applicant and because it would be subject to a statutory process under the Public Works Act Auckland Transport cannot confirm if the land can be acquired until the process is gone through.

P. I consider that it is not necessary to connect the NOR 6 Road through to the intersection of Upper Owera Road and Russell Road as part of the proposed subdivision provided that the measures proposed by the applicant, including a connection between Road 17 and Upper Owera Road and upgrading Upper Owera Road are undertaken. A turning head is now proposed the south end of the NOR 6 Road. The NOR 6 Road will eventually need to be connected through but this can happen when the land to the south of Delmore is urbanised.

Q. Integration of the transport network between the Delmore site and the proposed Plan Change 119 Ara Hills Precinct immediately to the north is poor. There is only one road link proposed, which connects to a paper road running along the west side of Ara Hills and there are no roads or active modes routes between the two sites near the NOR 6 Road. This lack of connectivity will result in effects in the form of reduced access to local amenities and public transport for future residents.

R. A two-way (bi-directional) separated cycle path is proposed on one side of collector roads 5 and 17, as well as the NOR 6 Road. Drivers using a vehicle crossing across a bi-directional cycle may not be expecting cyclists crossing their path to come from both directions. For instance, a driver exiting a site onto the road and intending to turn left may only look to their right for oncoming traffic, and may not notice a cyclist approaching from their left. For this reason this type of path is only appropriate where there are only a small number of vehicle crossings or intersections across it. I consider that the most recent version of the design drawings are appropriate in this regard.

Car Dependency

1. Car dependency in residential subdivisions occurs when land use and transport patterns heavily favour private motor vehicle use over alternative travel modes such as public transport, or active modes such as walking and cycling.

2. Car dependency in residential subdivisions can result in a number of adverse effects. High trip generation can cause congestion on the wider transport network causing delays and increased travel time both for motorists travelling to and from the development but also for other users of the transport network. It can make travel difficult or inaccessible to people who do not have readily available access to a private car. More private vehicle use can have adverse environmental effects in the forms of increased emissions, both greenhouse gases, but also fine particulate matter emissions which can cause health effects. There are health benefits from active travel modes which residents who travel exclusively or nearly exclusively by private vehicles are denied.

3. I consider that the proposed Delmore residential development is likely to have high levels of car dependency for the following reasons;

    a. Several of the local roads and part of the NoR6 road within the development have steep gradients (over 8%) which discourage walking.

    b. There are no schools within reasonable walking distance. The nearest school is Nukumea Primary School which is around 4km away (about 1 hour walking time) when measured by the shortest walking route. The Ministry of Education (MoE) owns land on the west side of Upper Owera Road to the south of the site, but this is not designated in the AUP for use as a school, and the proposal does not include footpaths or cycling facilities which would allow access between the MoE land and the Delmore site.

c. There is a small commercial centre included in the Ara Hills development (which is consented but not yet built) but things like supermarkets will require the residents to drive to them.

d. This site is difficult to service by public transport. Practically servicing the site via public transport would require a road link through stage 2 to be complete and a connection to Upper Orewa Drive provided. Walking distances and road gradients to likely bus stop locations from the outer edges of the development are likely to discourage public transport use. The location and density of the proposed development mean that future bus services are unlikely to be more than a connector type service with around 30 minute frequency.

4. However, I also acknowledge that the applicant has taken steps help mitigate car dependency. Measures proposed include cycling facilities in the form of separate cycle paths have been proposed on Roads 5, 17, and the NOR6 road. These four roads also have carriageway widths which would allow bus services to operate on them. All collector roads and the most of the NOR6 arterial road have gradients under 8%. An active modes bridge is proposed between Roads 12 and 23. A temporary footpath is proposed along part of Upper Owera Road and Russell Road, and between Road 08 and Russel Road. While I still consider that there will be a high level of car dependency I consider that these measures will go some way to mitigating the effects. The challenging topography of the site means that steep gradients and low density cannot be completely avoided.

Trip Generation

5. Car dependency is likely to result in higher trip generation rates per dwelling than would be expected for similar developments with better walkability and public transport access.

6. The Commute Integrated Transportation Assessment (ITA) section 5.1 has used a trip generation rate of 0.65 peak hour trips per dwelling based on the New South Wales Roads and Transport Authority Guide to Traffic Generating Developments ('The RTA guide') rate for medium density residential.

7. The RTA guide defines medium density residential as follows:

"A medium density residential flat building is a building containing at least 2 but less than 20 dwellings. This includes villas, town houses, flats, semi-detached houses, terrace or row houses and other medium density developments. This does not include aged or disabled persons' housing."

8. I note that most of the dwellings are stand alone and are larger (3 or 4 bedrooms) than is typical for medium density.

9. I consider that the RTA guide trip rate of 0.85 peak hour trips per dwelling for a dwelling house would have been a more appropriate rate for this development. The daily trip generation rate for dwelling houses in the guide is 9 trips per dwelling.

10. If this were used then the trip generation for the whole development given in Section 5.1 of the ITA peak hour would increase from 813 to 1,063 trips per hour and the daily trips would increase from 8,125 trips to 11,250 trips.

Traffic Modelling

11. Section 6 and Appendices C and D of the ITA provide information on traffic modelling (using the SIDRA traffic modelling software package) undertaken by Commute as part

of their traffic assessment. Of particular note is the modelling for the Grand Drive / SH1 motorway interchange.

12. The interchange is laid out as two roundabouts. I consider that the critical period will be the morning (AM) commuter peak hour. It is expected that in this period a high proportion of trips generated by the proposal will be vehicles turning right at the eastern roundabout then using the southbound motorway off-ramp to travel south on State Highway 1. As Delmore is developed and dwellings are occupied more vehicles from the development will make this movement and there will be less opportunities for drivers on the eastern side of the roundabout to enter the interchange. If the number of trips generated by the Delmore proposal gets too high this will result in increased delays and queue lengths on Grand Drive to the east of the interchange.

13. Appendix C of the ITA contains SIDRA model results. Seven scenarios have been modelled. The ITA does not provide a clear description of the scenarios and what follows is my understanding.

    a. **Existing Scenario** (ITA Figures 57, 58, 65, and 66). The existing situation, based on traffic surveys undertaken in November 2024. This includes the approximately 173 dwellings within Ara Hills which had been constructed at the time of the survey.

    b. **Consented Scenario** (ITA Figures 59, 60, 67, and 68). All traffic from the existing scenario, as well as estimated trips for the dwellings within Ara Hills which were consented but not built at the time of the 2024 traffic survey.

    c. **Proposed Scenario** (ITA Figures 61, 62, 79, and 70). All traffic from the consented scenario plus estimated traffic from both Stages 1 and 2 of Delmore.

    d. **Proposed With Additional East Approach Left Turn Lane Scenario** (ITA Figure 71). As per the proposed scenario but scenario includes an upgrade to the eastbound roundabout at the interchange where an extra 200m long left turn lane is provided on the east side (Grand Drive).

    e. **Proposed with Ara Hills Plan Change Scenario** (ITA Figures 63, 64, 72, and 73). All traffic from the proposed scenario plus estimated traffic from the additional 375 dwellings which PC119 would facilitate within the Ara Hills Precinct, but which have not been consented.

    f. **Proposed with Ara Hills Plan Change (With 30% Delmore reduction) Scenario** (ITA Figures 74 and 75). The proposed scenario but with 30% less Delmore Traffic due to the Upper Owera Road link being open. This scenario has been modelled for the western roundabout only.

    g. **Proposed with Ara Hills Plan Change AM (With 30% Delmore Reduction & Additional Eastern LT Lane** (ITA Figures 76 and 77) The proposed scenario but with 30% less Delmore Traffic due to the Upper Owera Road link being open and an upgrade to the eastbound roundabout at the interchange where an extra 200m long left turn lane is provided on the east side (Grand Drive). This scenario has been modelled for the eastern roundabout only.

14. In the table below I have summarised the SIDRA modelling results from Appendix C of the ITA for the eastern roundabout in the AM peak period, focusing on the operating of the east leg of the intersection. LOS is level of service, using an A (best) to F (worst) range. Queue lengths are 95th percentile queues.

Scenario	Intersection LOS	East leg (Grand Drive) LOS	East leg (Grand Drive) Queue Length	East leg (Grand Drive) Average Delay
Existing	A	A	43.2m	3.1s
Consented	A	A	59.2m	4.6s
Proposed	F	F	1,168.1m	233.5s
Proposed With Additional East Approach Left Turn Lane	A	A	51.9m	8.5s
Proposed with Ara Hills Plan Change	F	F	291.0m	479.7s
Proposed with Ara Hills Plan Change AM, with 30% Delmore Reduction & Additional Eastern LT Lane	A	A	51.9m	8.5s

15. The SIDRA modelling indicates that if all dwellings proposed in the Delmore site were to be constructed without the Upper Owera Road link being open there would be significant adverse effects on queue lengths and average delays on the eastern (Grand Drive) approach to the motorway interchange.

16. However, the modelling shows that the additional delays on the eastern leg can be almost entirely eliminated by constructing a new 200 metre long left turn lane on the eastern leg of the interchange, and that with this mitigation, as well as the link through to the Upper Owera Road the eastern roundabout at the interchange should operate with low levels of delay even when both all dwellings in the Delmore site and all dwellings in the proposed Plan Change(PC119) Ara Hills precinct are occupied.

17. The applicant's proposed Condition 101 would require the applicant to undertake monitoring of the interchange and would only require the applicant to build the left turn lane mitigation if the monitoring finds that level of service on is E for any approach. The wording on this condition is therefore critical. I have concerns with the applicant's proposed wording which are covered further below in this memorandum.

18. The applicant's proposed Condition 99 requires that the Upper Owera Link is provided before 1,325 dwellings are occupied across the Delmore and Ara Hills site.

19. The 16 April 2026 Commute memo contained modelling for an additional scenario with 1,325 dwellings across the Ara Hills (575 dwellings) and Delmore (750 dwellings) developments without the connection between Road 17 and Upper Owera Road. I will refer to this as the Stage 1 complete scenario as it assumes all dwellings in Stage 1 of Delmore are completed and occupied as well as all of the currently consented dwellings in Ara Hills.

20. The results of this modelling are summarised and contrasted with the "consented" scenario model in the table below.

Scenario	Intersection LOS	East leg (Grand Drive) LOS	East leg (Grand Drive) Queue Length	East leg (Grand Drive) Average Delay
Consented	A	A	59.2m	4.6s
Stage 1 Complete	B	C	250.9m	34.7s

21. The results indicate that in the period between Stage 1 of Delmore being completed and the connection between Road 17 and Upper Owera Road being opened there will be a very noticeable increase in queues and average delays for motorists on the eastern leg of the Grand Drive interchange in the critical AM peak period.

22. The Auckland Network Operating Plan (ANOP) sets out target levels of service for Auckland Transport's arterial road network and other critical routes. Grand Drive is classified as a secondary arterial east of the interchange and the target LOS for this type of route is C in the AM peak. On this basis I consider that the Stage 1 Complete model indicates that Grand Drive will operate acceptably in the AM peak but it is close to the limit of acceptability and there is little to no spare capacity before the performance of the interchange becomes unacceptable.

23. It should be noted that the left turn lane mitigation involves works on a motorway interchange under the control of NZTA, and confirmation should be sought from them as to whether they would accept the proposed mitigation or foresee any potential issues with it.

Proposed Condition 99

24. Proposed conditions 99 and 101 relate to potential congestion and delay effects for motorists using the road network which could be caused by the additional trips on the network generated by the Delmore development.

25. The updated version of Condition 99 proposed by the applicant on 18 March 2026 reads;

> *"Prior to the occupation of more than 1,325 dwellings across the Delmore site and Ara Hills sites, Roads 5, and 17 must be constructed and operational and the intersection of Road 17 and Upper Orewa Road must be constructed as a single-lane roundabout and designed to achieve sight distances in accordance with Austroads Guide to Road Design Part 4B: Roundabouts Park 4B for 60km/h operating speeds."*

26. Page 2 of the ITA states *"This corresponds to the 575 Ara Hills consented dwellings and 750 Delmore dwellings or 1,325 dwellings in total."*

27. This condition would only be binding on the Delmore developer. The Ara Hills developer already has consent to build 575 dwellings. In section 5.3.2 of the ITA Commute estimates that only 173 dwellings have been completed inside the Ara Hills site, which leaves 402 dwellings remaining.

28. Depending on the order in which each developer completes their dwellings the 1,325 dwelling threshold could be completed before the connection to Upper Owera Road is opened. In fact it would be possible, although perhaps unlikely, for the Delmore developer to complete 1,152 of the total 1,213 dwellings inside their development without reaching the 1,325 dwelling threshold in Condition 99 if the Ara Hills developer does not complete any more dwellings first.

29. I consider that it would be better the 575 dwellings which already have consent in the Ara Hills development to be treated as if they were already complete and part of the receiving environment.

30. The Ara Hills developer has applied for a private plan change (PC119) to rezone their site with to facilitate an anticipated 900 residential lots (325 above the number of existing consented dwellings, assuming only one dwelling per lot). Since PC119 has been notified I consider that the ITA and proposed conditions should have regard to it.

31. Removing the 575 already consented Ara Hills dwellings from Condition 91 results in the threshold being reduced to 750 dwellings. Accounting for the additional dwellings PC119 would facilitate, but which are not already consented would mean this 750 dwelling threshold is shared across the two developments.

32. The SIDRA modelling in the ITA is based on the medium density trip generation rate of 0.65 peak hour trips per dwelling, which I consider to be too low for reasons outlined above. If the 0.85 peak hour trips per dwelling rate which I consider to be more appropriate was used then it is likely that the modelling would show even longer queue lengths and delay times at the eastern roundabout.

33. I consider that the proposed development should be considered to be a low density residential development when considering trip generation.

34. Section 5.3.4 of the ITA notes that the traffic assessment for PC119 uses a trip generation rate of 1.0 peak hour trips per dwelling. The Commute ITA states that *"A trip rate of 1 per dwelling in the peak hour is in excess of best practice based on the RTA and TfNSW guides and considered highly conservative and unlikely to eventuate."*

35. While I agree that rate of 1.0 trips per dwelling is too high, I consider the rate of 0.65 trips per dwelling used in the Delmore ITA to low and that a rate of 0.85 should be used to account for potential effects of high levels of car dependency within the Delmore development.

36. To address this, I recommend that the 750 dwelling threshold be reduced proportionately by a factor of 0.764 (calculated by 0.65 / 0.85). This would equate to a threshold of 573 dwellings.

37. Taking into account this reduced threshold, PC119, and the already consented 575 dwellings inside the Ara Hills site I suggest the following wording for Condition 99 should be applied;

> "*Prior to the occupation of more than 573 dwellings in the Delmore site, Roads 5 and 17 must be constructed and operational and the intersection of Road 17 and Upper Orewa Road must be constructed as a single-lane roundabout and designed to achieve sight distances in accordance with Austroads Guide to Road Design Part 4B: Roundabouts Part 4B for 60km/h operating speeds."*

Proposed Condition 101

38. Proposed condition 101 provides for monitoring of the effects of trip generation from the site at the Grand Drive motorway interchange and potential mitigation measures. It states;

"101. Once development reaches 1,425 dwellings, and prior to the occupation of more than 1,450 dwellings within the Delmore and Ara Hills sites, the consent holder must:

(a) Provide a written report to Council, prepared by a suitably qualified traffic engineer, setting out the following:

- *Results of a survey outlining the level of traffic generated from the Delmore site using the Grand Drive interchange.*
- *Results of a survey outlining the level of traffic generated from the Delmore site using the Upper Orewa access (from Road 17).*
- *Survey and assessment of performance of the Grand Drive / SH1 interchange. This is to determine if the Level of Service (LOS) has reached "E" for any approach.*
- *If the performance level in Condition 93(a)(iii) is reached at the time of monitoring, an assessment of traffic effects must be provided, setting out the mitigation options, including physical changes at the Grand Drive interchange, travel and traffic demand management options.*

(b) Construct the mitigation options as outlined in Condition 93(a)(iv), if recommended by the written report.

39. My comments on this condition are as follows;

a. Delmore has 1,213 dwellings and there are already 575 dwellings consented in the Ara Hills site with a combined total of 1,788 dwellings. This is 338 dwellings more than the 1,450 dwellings which would trigger the need for a traffic survey. It is possible that the interchange will work acceptably at 1,450 dwellings but not 1,788 dwellings. The traffic assessment provided for the Ara Hills Plan Change is based on 950 dwellings, 375 more than already consented.

b. I consider that additional traffic surveys and assessment needs to be undertaken as the number of dwellings occupied moves from 1,450 to 1,788 dwellings.

c. The condition only requires a single survey for each of the matters listed in the bullet points under Condition 101(a). This could potentially consist of a one day survey. I consider that this is not sufficent to understand traffic conditions surrounding the site and that several days of survey should be undertaken.

d. The peak periods for the surveys should be specified as 6am to 9am and 4pm to 7pm. Surveys should be taken at least a week apart and on three different weekdays.

e. The surveys must not occur in the period around Christmas and New Year, as traffic volumes are known to be atypically lower in this period.

f. The surveys should include not only the volume of traffic making each movement, but also queue lengths (being the maximum observed in three minute long increments).

g. There should be a clearly stated requirement for all survey data to be provided to Council in the traffic monitoring report and not just a summary.

h. The trigger point for mitigation should be LOS E or worse on any one approach, not just LOS E or worse at the interchange as a whole.

i. It is not clear what the purpose of surveying traffic using the roundabout at the Upper Owera Road / Road 17 intersection to enter and leave the site is since the matter being monitored is whether there is unacceptable congestion at the motorway interchange, and not how many vehicles are entering or leaving the Delmore site.

j. The ITA has already identified an appropriate mitigation measure if a congestion issue is identified by the assessment in the form of an additional left turn lane on the eastern leg of the interchange (Grand Drive). Rather than require an assessment of mitigation options I recommend that the condition specially that that left turn lane be constructed by the consent holder if the level of service threshold of E or worse is reached, with alternatives accepted only if mutually agreed between the consent holder, Council, and NZTA.

k. The ITA modelling is based on a 200m long left turn lane and the condition wording should include this.

l. The reference to condition 93(a)(iii) in the applicant's proposed conditions of consent is incorrect and needs to be updated to accord with new condition numbering.

40. On this basis I suggest the following wording for Condition 101;

"1) Once the Road 17 / Upper Orewa Road roundabout is operational, the Consent Holder must undertake traffic surveys and undertake additional assessment at the earlier of:
(a) 12 months following the opening of the roundabout; or
(b) Prior to the occupation of 1,450 dwellings.

2) The traffic surveys must be undertaken at the State Highway 1 / Grand Drive motorway interchange by a suitably qualified traffic engineer and must include, as a minimum:
(a) Surveys undertaken over at least three separate weekdays, including both AM (6.00am to 9.00am) and PM (4.00pm to 7.00pm) peak periods, and excluding school and public holiday periods, including but not limited to the Christmas to New Years period. The surveys must be undertaken at least one week apart, and on different weekdays.
(b) Measurement and recording of traffic volumes and queue lengths for all movements / lanes on all approaches to both of the roundabouts which constitute the interchange. Queue lengths should be recorded every three minutes with the longest length queue observed for each lane in the three minute interval recorded.

3) Within 20 working days of completing the traffic surveys, the Consent Holder must provide to Council a Traffic Monitoring Report, prepared by a suitably qualified traffic engineer, that:
(a) Summarises the results of the traffic surveys;

(b) *Includes an appendix with copies of all the data collected as part of the surveys;*
(c) *Assesses whether the Grand Drive interchange or any approach to the Grand Drive interchange is operating at level of service E or worse.*

4) *Where the Traffic Monitoring Report identifies that the Grand Drive interchange or any approach to the interchange is operating at level of service E or worse, the Consent Holder must:*
   (a) *Prepare a detailed design for mitigation in the form of a new 200 metre only left turn lane on Grand Drive the eastern approach to the interchange.*
   (b) *Consult with Waka Kotahi NZTA on the left turn lane design and undertake any changes to the design necessary to gain NZTA acceptance.*
   (c) *Submit the left turn lane design to Council for approval within 20 working days of submitting the Traffic Monitoring Report. The assessment must include written confirmation from Waka Kotahi NZTA that it has reviewed the proposed design and considers it acceptable.*

5) *The consent holder may propose alternative mitigation measures to the left turn lane but must provide detailed design drawings and assessment of the alternative mitigation prepared by a suitably qualified traffic engineer for the review of NZTA and Council. The left turn lane may be substituted but only upon mutual agreement, in writing, by the consent holder, Council, and NZTA.*

6) *The Consent Holder must, at their own expense, implement the left turn lane under condition 101(4), or other mitigation measures, mutually agreed to by the Consent Holder, NZTA, and Council under Condition 101(5) as soon as practicable, and no later than 6 months following Council approval, unless otherwise agreed in writing by Council.*

7) *Additional traffic surveys and assessment, in accordance with Conditions 101(2) and 101(3) must be undertaken by the applicant prior to the occupation of 1,600 and 1,750 dwellings. If the assessment undertaken under Condition 101(3) identifies that the Grand Drive interchange or any approach to the interchange is operating at level of service E or worse, the Consent Holder must carry out the design, consultation, and mitigation works described in Conditions 101(4), 101(5), and 101(6). "*

Active Modes Link Across Interchange and Along Grand Drive

41. Section 7.7.2 of the ITA assessed active modes accessibility for the development. It relies on an active modes bridge across the motorway interchange and a shared path along one side of Grand Drive which is a condition of the Ara Hills development but which has not been constructed yet.

42. My understanding is that the Ara Hills developer is well advanced with the design of this bridge. However, it should not be assumed that the Ara Hills developer will have completed this link before the first dwelling of the Delmore development is occupied. I

recommend a that there is condition of consent requiring that the bridge and path are complete and open for public use before the first dwelling is occupied. This condition does not need to specify that the Delmore applicant is responsible for undertaking the works, only that it must be open.

Road Network Hierarchy and Typical Cross-sections

43. All proposed roads within the development have been designed as local roads except for the NOR 6 road (which is an arterial road) and Roads 1, 5, and 17 which are collector roads.

44. This is consistent with Appendix 14 Upper Orewa Concept Structure Plan and I consider that the hierarchy proposed is appropriate.

45. Typical cross-section drawings for the local roads and the NOR6 road are show component element widths which are generally in line with Auckland Transport's Transport Design Manual. Wider carriageways may be needed on curves and around intersections to allow space for heavy vehicle tracking. This matter is covered in additional detail in the section of this memorandum which covers vehicle tracking.

46. There is a minor issue with the width of the back berms for the local roads which are 50mm below the Transport Design Manual's minimum width, but I consider that this matter can be addressed at engineering approval stage, and in any case it does not cause an effect in AUP terms.

47. Road 1 is indicated as a collector road in McKenzie & Co. Drawing 3725-1-3600-Rev H which also provides a typical cross section for Road 1. The drawing shows a 7m wide carriageway, which is suitable for use as a potential future bus route (subject to widening on curves for bus tracking) and footpaths, front and back berms on both sides with widths compliant with the minimums in the AT Engineering Design Code Footpaths and the Public Realm.

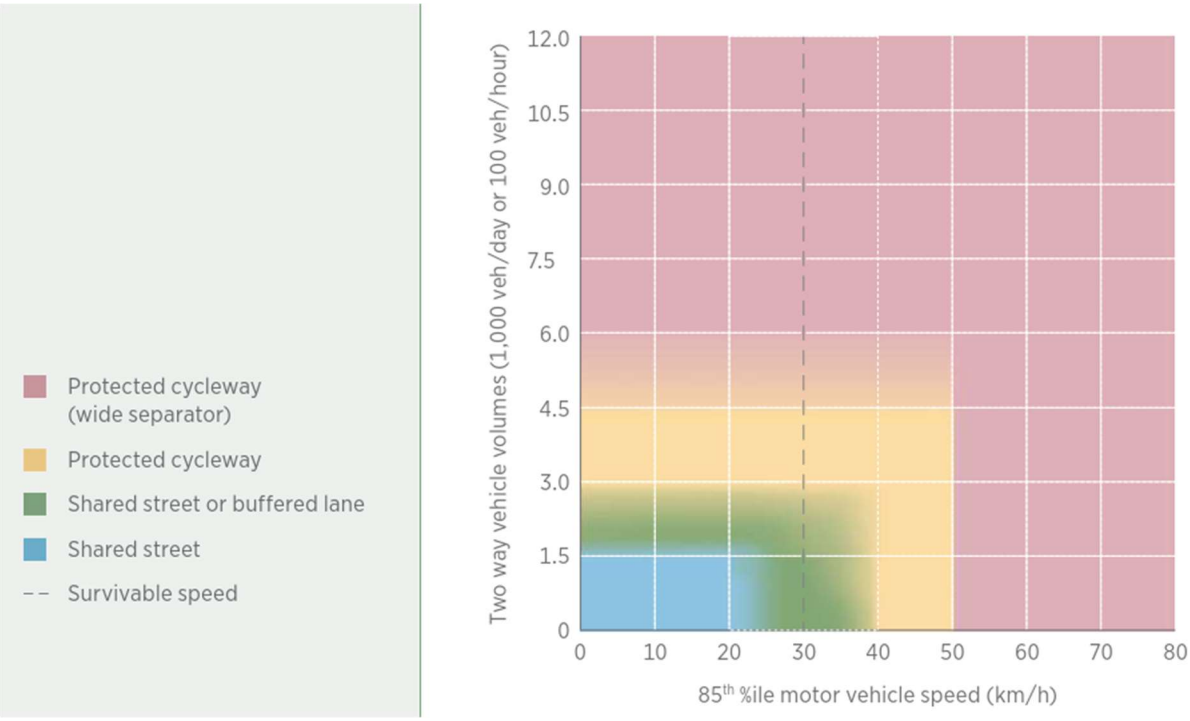
48. However unlike the other two collector roads this road does not have any separate cycling facilities, and I consider that this will have a significant adverse effect on cyclists, both in terms of reduced safety as they will need to share the carriageway with faster moving motor vehicle traffic, but also in terms of active modes usage because if safe cycling routes are not available then people are less likely to choose cycling as a travel mode.

49. This matter has been discussed with the applicant who has responded that they do not believe that Road 1 will carry sufficent traffic to justify cyclist facilities. While I accept that traffic associated with activities located solely within the Delmore site may not generate enough traffic to justify cyclist facilities, I consider that consideration should be given to traffic using Road 1 to travel to and from land outside of the Delmore site.

50. The Upper Owera Concept Plan shows Road 1 as a collector road linking through to the future urban zone (FUZ) land to the south of the Delmore site. The concept structure plan shows this area as being developed as residential. This road will be the most direct link to the Grand Drive interchange for this land when it is urbanised and I expect that it will in time carry a high volume of traffic.

51. AT's Engineering Design Code Cyclist Infrastructure contains a diagram (Section 2.2 types of cycling infrastructure) showing what type of cycling infrastructure is appropriate in what circumstances based on traffic volumes and vehicle operating speeds

52. Road 1 is designed for a 50 km/h operating speed. Collector roads in urban Auckland typically carry upward of 3,000 vehicles per day or 300 vehicles per hour. I expect that Road 1 will eventually carry this volume of traffic or more.



53. I recommend that Road 1 are designed as cycle routes and cycle infrastructure in the form of off-road cycle paths, separate from the footpath, are provided on each side. This is necessary to help mitigate the effects of an otherwise very car dependant development. For Road 1 I recommend that it have the same cross-section as Roads 5 and 17.

54. This will require additional space within the road reserve, and this is not able to be addressed via a condition of consent. The scheme plans for the proposal should be updated to widen Road 1 to allow for this before issue of consent.

Intersection Design – Upper Orewa Road / Road 17 Intersection

55. The drawings show the proposal includes a roundabout at the intersection of Upper Orewa Road and Road 17 (refer McKenzie & Co. Drawing 3725-2-3005-Rev H).

56. This design is presented on a conceptual level only. No 3D design vertical information on levels or gradients is shown, no vehicle tracking is provided, nor has an updated sight line assessment been undertaken.

57. However, I consider that nothing in the information provided to date indicates that an appropriate roundabout design cannot be achieved at the intersection. The approximate 32 metre diameter size is within the range which I would expect for compact roundabout design in this type of location.

58. The central island has been offset to the north of the true centre of the intersection, which appears to have been done to avoid issues with the property boundary and steep topography on the south side of the intersection. In some circumstances this can result in poor speed control as drivers enter the roundabout, however in this case I consider that the design has appropriately dealt with this issue by bending the eastern leg around to point in toward the central island.

Intersection Design – Russell Road / Upper Orewa Road Intersection

59. There is a pre-existing traffic safety issue at the Russell Road / Upper Orewa Road intersection near the site. This intersection is currently laid out as a T-intersection with a Give Way priority control on the Russell Road approach. There is a horizontal curve in Upper Orewa Road at the intersection and vegetation on the inside of the curve (much of which is in private land) limits sight distances between drivers turning right into Russell Road and southbound drivers on Upper Orewa Road. This limited sight distance increases the risk of a crash between a vehicle turning right into Russell Road and a southbound vehicle.

60. An excerpt from Google Streetview showing the intersection is shown in the figure below.



Figure: Excerpt from Google Streetview showing the Upper Orewa Road / Russell Road intersection.

61. While this is a pre-existing issue, the proposal would increase traffic volumes on Upper Orewa Road near this intersection by 183% and this would significantly exacerbate the pre-existing issue.

62. It is acknowledged that the proposal would not increase traffic entering or leaving Russell Road itself, but the increase in southbound traffic on Upper Orewa Road which the drivers of existing traffic turning right into Russell Road must give way to results in a traffic safety effect.

63. A drawing prepared by Commute dated 15/04/2026 has been supplied by the applicant containing a sight distance assessment for the right turn into Russell Road as well as proposed changes to the road marking layout. The applicant has proposed

Condition 100(d) which would require them to implement the markings changes shown before the Road 17 / Upper Owera Road connection is opened.

64. I consider that the proposed road marking changes, when combined with the shoulder widening on Upper Owera Road proposed by the applicant under Condition 100(a) will be sufficent to mitigate the potential road safety effects at this intersection.

Intersection of Upper Owera Road and Wainui Road

65. The Upper Orewa Road / Wainui Road intersection is presently a give way priority controlled T-intersection. There is no right turn bay on Wainui Road and no shoulders which could be used by a westbound driver on Wainui Road to pass a vehicle waiting in the lane to turn right into Upper Orewa Road. If the intersection is not upgraded this is likely to result in an increase in delays for westbound drivers on Wainui Road, even if they are not travelling to or from the Delmore development.

66. There is also a potential traffic safety effect as vehicles waiting in the traffic lane to turn right from Wainui Road into Upper Orewa Road will be vulnerable to rear-end type crashes. An increase in the number of vehicles turning out of Upper Orewa Road is also likely to increase the crash risk at the intersection.

67. An upgrade to a three-legged roundabout at this location is included in NOR 6. I note that the purpose of the NOR is to secure route protection designations. No implementation funding or definite timeline is associated with the NOR, and even if public funds were allocated it could be over a decade before the roundabout is constructed. The intersection should be upgraded at the same time as the proposed Delmore development to address the effects of traffic generated by the development.

68. Proposed Condition 100(b) requires the applicant to *"Upgrade the Upper Orewa Road / Wainui Road intersection to provide a right turn bay on Wainui Road and a left turn lane on Upper Orewa Road."*

69. I consider that this is appropriate. The proposed plan change for Milldale North proposes rezoning land around the intersection to live zone urban and extending it through with a fourth leg to the south. The proposed plan change also shows a roundabout at the intersection.

70. While I consider that a three legged roundabout could potentially be built within the existing road reserve land at the intersection an optimal design for a four legged roundabout would require the central island to be positioned more to the south, using land which is currently outside of the road reserve. I therefore consider that the future fourth leg would require extensive reconstruction of the intersection, involving additional costs and disruption for road users, which is not justified given that it appears that the additional fourth leg may be constructed in a relatively short time frame.

71. A right turn bay will require less work to upgrade than rebuilding the three legged roundabout as a four legged roundabout and I consider that condition proposed represents a reasonable approach in the circumstances.

72. I note that there are power poles in close proximity to the intersection which I expect will need to be relocated to construct the right turn bay. This can be confirmed at engineering approval stage, but the applicant should take this into consideration.

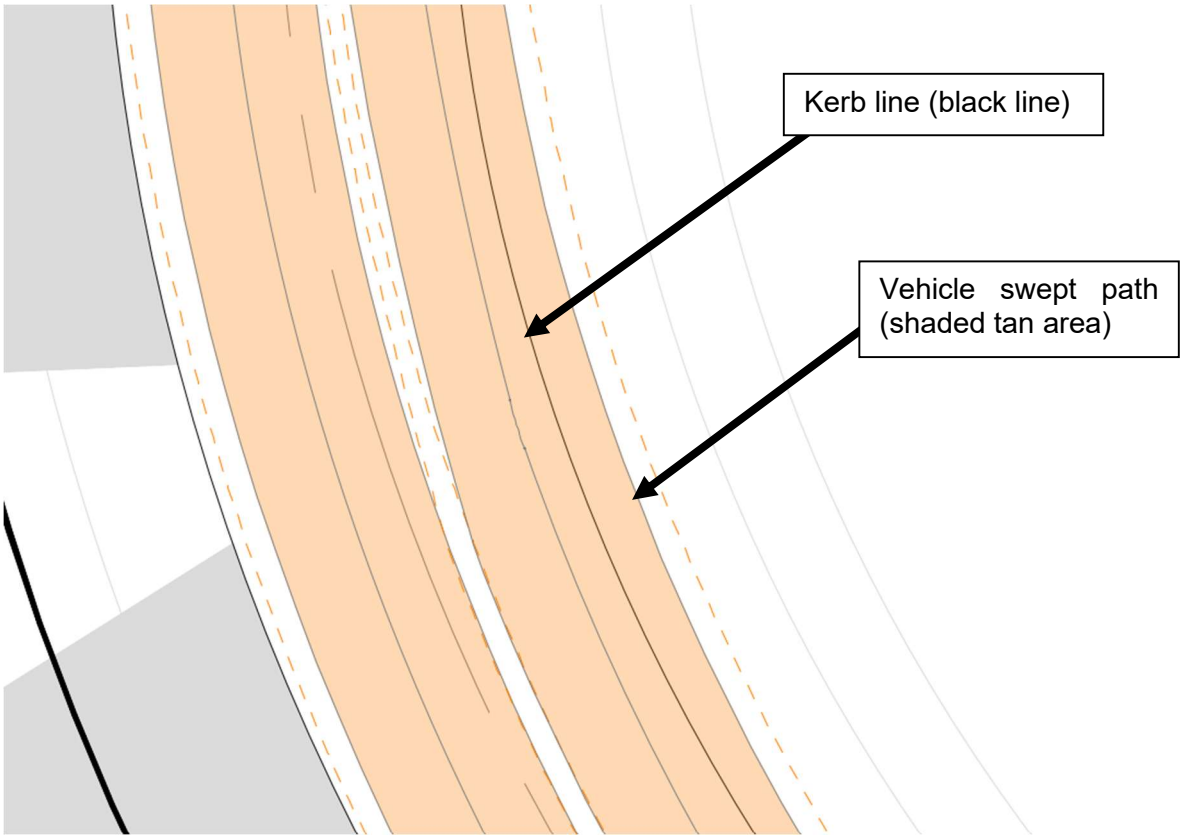
Vehicle Tracking Issues

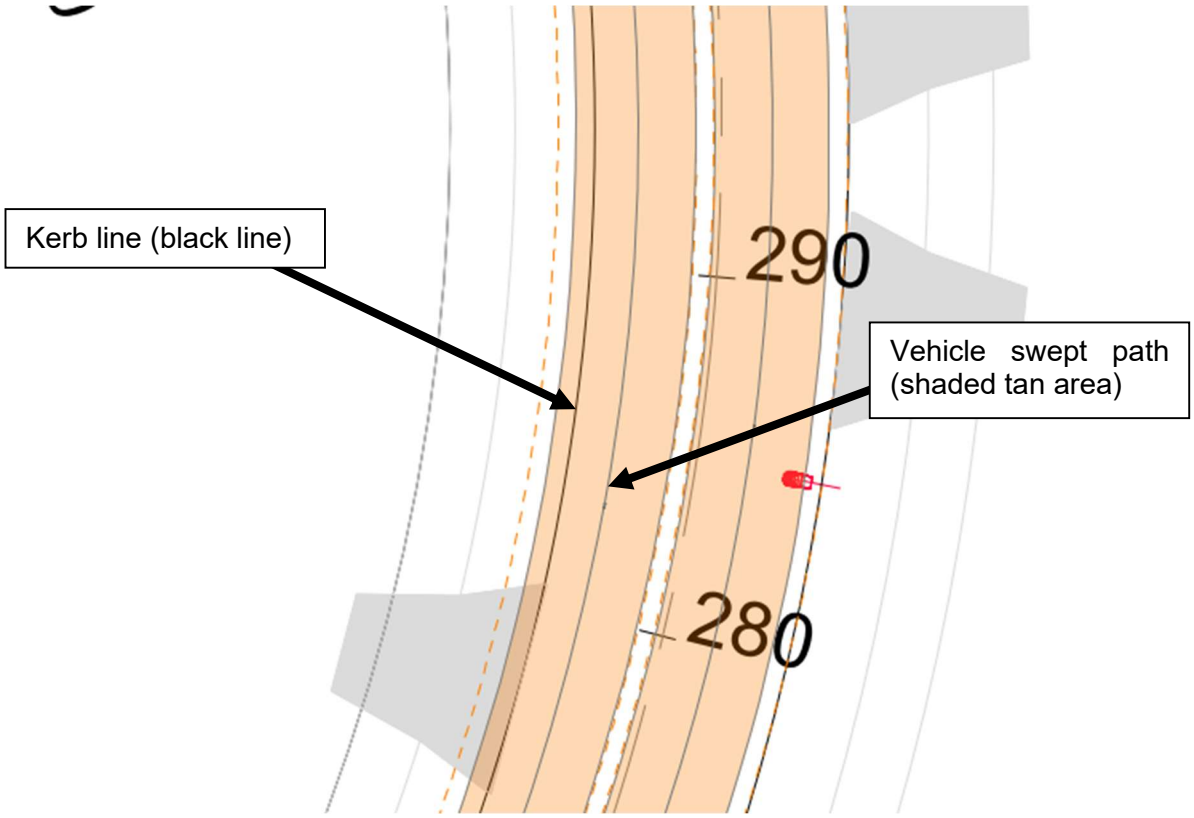
73. Appropriate design of roads and intersections for the appropriate design and check vehicles is important to address potential traffic safety and operational effects on the road network. If insufficient space is provided this can cause safety effects in the form of increased side-swipe or head-on crashes between vehicles travelling in opposite directions or operational effects where heavy vehicles (like buses or rubbish trucks) cannot use a route without mounting the kerb. If excess space is provided then this increases both crossing distances for pedestrians and vehicle turning speeds and it can result in a pedestrian safety effect.

74. The Auckland Code of Practice for Land Development and Subdivision Chapter 3 Transport Contains information on requirements for vehicle tracking on roads on the Auckland Transport network. This document requires that a 0.5m clearance is provided between the kerb face and the swept path of the body of the turning vehicle and between the vehicle and another vehicle.

75. Section 9.1 and Appendix F of the ITA contains a vehicle tracking assessment for the proposed new roads and intersections.

76. I have reviewed the drawings provided and note that there are many locations where heavy vehicles are shown driving over kerb lines on curved when passing another vehicle coming in the opposite direction. Below are two examples from Commute Drawings 2 and , where I have annotated an excerpt from the tracking drawings, but these are examples only and are not the only two places where this issue occurs.





77. Vehicles track over kerb lines on the following Commute Tracking Drawings in relation to the following locations.
    - Drawing 26A - Intersection of Roads 22/26.
    - Drawing 7D - JOAL9/Road 1.

78. No tracking drawing has been provided for the JOAL11/Road 1, JOAL11/Road 1, or JOAL 37/Road 4 vehicle crossings.

79. The applicant has proposed Condition 113 which reads;

    "113. Sufficient carriageway space is to be provided to ensure vehicle tracking in compliance with the Auckland Code of Practice for Land Development and Subdivision Chapter 3 Transport without the footpath or berm widths going below the minimums in the Code."

80. I note however that more land may need to be vested as road to comply with the proposed condition. If the design has to be changed with more road to vest this is unable to be conditioned. The road and scheme plan drawings will need to be updated before consent is granted.

81. Page 6 of the Auckland Transport Response Memorandum from Barker & Associates states the updated roading plans would be provided 20 April 2026. While updated plans were provided, there was no updated vehicle tracking drawings supplied with them.

Vehicle Tracking For Wastewater Tanker

82. The Delmore site will have its own wastewater treatment plant which will operate until such time as the site is able to connect to the Watercare system.

83. During engagement between the applicant and Auckland Transport they were asked about vehicle routes and tracking for vehicles servicing the treatment plant. In response they provided a report prepared by Commute dated 3 July 2025 as well as an additional drawing for truck tracking at the Wainui Road / Upper Owera Road intersection.

84. The Commute report refers to *"a truck capacity of 28.8 m³ for transportation of treated wastewater and reverse osmosis reject. The vehicle is based on a Fonterra Truck and Trailer which is approximately 19.5m long".*

85. This vehicle would reach the site via Wainui Road, Upper Owera Road, and Russell Road, where it would get access via a barrier arm at the south end of Road 1, with the loading point for the truck in the cul-de-sac head.

86. The Commute report identifies three locations on Russell Road where additional widening is needed to accommodate the tanker vehicle. These are shown in the Figure below which is excerpted from the report.



87. Proposed condition 106 requires this widening to be undertaken. The wording refers to tracking plans but does not specify which plans or the standard to which the work will be undertaken. The plans provided (refer to the figure above) have insufficient detail to see how much widening is needed on each curve.

88. To address these ambiguities I recommend the following alternative condition 106;

"106. Prior to wastewater removal being required on Russell Road, the consent holder must at their own expense widen Russell Road so that a there is sufficent space for a 19.5m long truck and trailer tanker to pass a 6.3m long van travelling in the opposite direction with a minimum of 0.5m clearance between the vehicles and between the edge of the vehicles and the edge of the carriageway. Road widening must also be undertaken at the intersection of Russell Road and Upper Owera Road to ensure that a 19.5m long truck and

trailer tanker can turn left from Russell Road onto Upper Owera Road without crossing into the northbound traffic lane on Upper Orewa Road. This work must be in accordance with the Auckland Council Code of Practice for Subdivision and Development Chapter 3 Transport."

Sight Distance Assessment – Internal Roads

89. Austroads Guide to Road Design Part 4A (AGRD4A) provides recommendations for driver sight lines at intersections and vehicle crossings.

90. The appendix to the ITA includes driver sight distance assessment drawings for public road intersections and the intersection between key JOALs and public roads. While most intersections are shown to have appropriate sight distances Commute Drawings 17AA, 19AA, and 10BB show that in order to achieve appropriate sight distances sight lines must cross over areas inside land which is not road reserve.

91. Since Auckland Transport cannot control what future owners may construct or plant on these areas it is possible that sight lines will become obstructed. I consider that this would present an unacceptable effect on traffic safety.

92. In the particular case of sign lines from JOAL 9 looking south along Road 1 shown on Commute Drawing 17AA four lots are impacted. The worst affected lot is Lot 184 where approximately one fourth of the lot is needed for driver sight lines to be preserved. Cross-referencing against architectural drawings shows that the proposed dwelling on Lot 184 is in a location which will block driver sight lines.

93. This could be resolved by placing consent notices on the affected titles limiting what can be planted or built on parts of the lots, but there is a risk that the future owners may not comply with the consent notice, and it would cover a significant portion of some lots and would be very difficult to enforce. No consent notice requiring this has been proposed by the applicant.

94. This matter could also be resolved by vesting the affected land as road reserve.

Visibility Splays at Vehicle Crossings

95. Providing sufficient Inter-visibility between drivers exiting private property and pedestrians crossing or about to cross vehicle crossings is important to help reduce the risk of a vehicle colliding with a pedestrian on a vehicle crossing and associated pedestrian safety effects.

96. Proposed Condition 104 requires that 2m by 2.5m visibility splays be provided on both sides of all vehicle crossings. I consider that the condition is appropriate.

Vehicle Crossings

97. The applicant's proposed Condition 102 on the construction of vehicle crossings refers to superseded versions of Auckland Transport's standard engineering detail drawings for vehicle crossings.

98. Vehicle crossings serving less than 10 dwellings are to be constructed as per the Auckland Transport TDM Technical Standards Drawing VX0103 Revision E dated 23/01/2025. Vehicle crossings serving 10 or more dwellings are to be constructed as per the Auckland Transport TDM Technical Standards Drawing VX0203 Revision D dated 23/01/2025. The Auckland Transport Transport Design Manual Practice Note 07 (Edition 1) Vehicle Crossing Design Standards contains detailed design guidance for vehicle crossings which the applicant should refer to when preparing their detailed design for engineering plan approval.

99. I recommend that the condition be amended to read as follows:

"102. The consent holder must provide new vehicle crossings to serve all residential lots. The vehicle crossings must be constructed in accordance with Auckland Council Code of Practice for Subdivision and Development Chapter 3 Transport."

Proposed Temporary Connection of the NOR 6 Road to Grand Drive

100. The land needed for the link to Grand Drive is subject to NoR6. This designation provides for route protection. Auckland Transport and Auckland Council have no funding to construct the link to Grand Drive so construction of a link would need to be at Delmore's expense.

101. Some land has recently been vested as road connecting the Delmore site to the western end of Grand Drive by the developer of the neighbouring Ara Hills development. The area vested covers only part of the land designated for NOR 6 in this area. The full NOR 6 design cannot be constructed without additional land which has not been vested. Some of this additional land is needed for permanent occupation by the road and temporarily needed for earthworks and other enabling works.

102. The Delmore applicant has provided a design for a temporary road connection between their site and the end of Grand Drive which uses only the land which has been vested.

103. I consider that there are significant traffic engineering issues with the temporary road connection design provided which will result in adverse effects on traffic and pedestrian safety and operations.

104. In comparison to the NoR6 design the temporary road has a reduced width cross-section with several elements either removed or combined. Below I cover the differences and the potential effects.

a. Front and back berms have been removed. Potential effects; loss of amenity – discourages active modes as a travel choice. Absence of buffer between carriageway and cycleways/footpaths increases crash risk for pedestrians somewhat. Absence of buffer between the shared path and handrail on top of the retaining wall on the north side means that there is less usable space for cyclists resulting in a risk of handle bars or peddles getting caught on the barrier. Streetlight poles (and potentially other service poles or cabinets) will need to go in the footpath / shared path rather than the berm.

b. 3m wide shared path replaces two-way separate offroad cycle path and separate footpath on the north side. Potential effects; increased risk of collision between cyclist and pedestrian. Some pedestrians may be less willing to use this path due to perceived risk of a collision with a cyclist. Note that a 3m wide shared path would need a departure from standards as it does not conform to the Auckland Transport's Transport Design Manual.

c. Flush median removed. Potential effects; reduced separation between opposing traffic lanes means increased risk of head-on type crashes. Vehicles turning right into the vehicle crossing on the north side must wait in the westbound lane blocking it, resulting increased delays and increased rear-end crash risk.

d. The drawings show a retaining wall on the north side which would become an Auckland Transport asset to maintain. A barrier able to restrain both errant vehicles (road safety barrier) as well as being able to prevent falling from heights

for pedestrians and cyclists will be needed but is not indicated on the drawing provided by the applicant.

e. On the south side a batter slope is shown next to the footpath with gradients ranging from 1 in 3 to 1 in 1 (reinforced earth). This will need a similar barrier to the north side. It is not clear if the applicant has included space for the barrier.

f. The drawings show a vehicle crossing which clashes with a proposed retaining wall for the temporary layout.

105. Page 2 of the updated ITA states that the applicant will work with Auckland Transport on the permanent connection after the completion of the entire Delmore development. There is uncertainty as to how this would work particularly how the applicant could be bound to undertake this. No condition of consent in relation to this matter has been proposed by the applicant.

106. It is not clear how the temporary road can be rebuilt with the permanent (NoR6) layout at a later date without closing it for a protracted period. Given that this temporary road will initially be the only access to the Delmore site, and that the only other access (via Upper Owera Road) will only be opened once a substantial number of the dwellings are occupied, it appears that constructing the permanent layout will have a significant adverse effect on Delmore residents. It would be best if Auckland Transport could acquire, on the applicant's behalf, the land inside Ara Hills which is part of the NoR6 designation so that the permanent layout can be constructed instead of the temporary layout

107. Page 7 of the 16 April 2026 Commute memo states that *"The applicant's intention is to provide the full roading width, notwithstanding this will require Auckland Transport to acquire the additional land required to construct it".*

108. Auckland Transport could potentially buy the land in the NoR6 designation needed to construct the full roading width permanent connection, but it would be subject to a statutory process under the Public Works Act and therefore there is no certainty that the land can be compulsorily acquired until the statutory process has been gone through. In any case, the applicant will need to fund 100% of the cost of acquiring the land.

NOR 6 Road Connection to Upper Owera Road

109. The possibility of the Delmore applicant constructing the full NOR 6 connection through to the intersection with Russell Road and Upper Owera Road was discussed with the applicant as part of the engagement process.

110. I consider that this connection is not needed to support the proposed development. The applicant is providing connection in the form of a roundabout to Upper Owera Road at the south end of Road 17, which the applicant's traffic modelling indicates will provide sufficent capacity for those parts of Stage 2 which cannot be provided for at the Grand Drive interchange. The applicant is also proposing to upgrade Upper Owera Road by constructing shoulder widening, which will help address potential road safety effects on this road.

111. I remain concerned about road safety effects on driver sight lines at the intersection of Upper Owera Road and Russell Road, and this matter could be resolved by constructing a roundabout at this intersection, as per the NOR 6 design, but a full link to the north is not needed and there may be other ways by which the driver sight lines

issue can be addressed. This matter is discussed in more detail elsewhere in this memorandum.

112. However, as the NOR 6 road is not being extended through to Upper Owera Drive a turning head should be provided in vested road reserve at the south end of this road. The applicant has proposed Condition 111 which would require them to provide a temporary turning head in this location. However this is not shown on the drawings.

113. The applicant should be asked to add the turning head to the drawings. The level of the NoR6 road is approximately 4 to 5m above the existing ground level at the termination and it is not clear how the turning head will integrate with the adjacent lots 606 and 609 given the difference in levels.

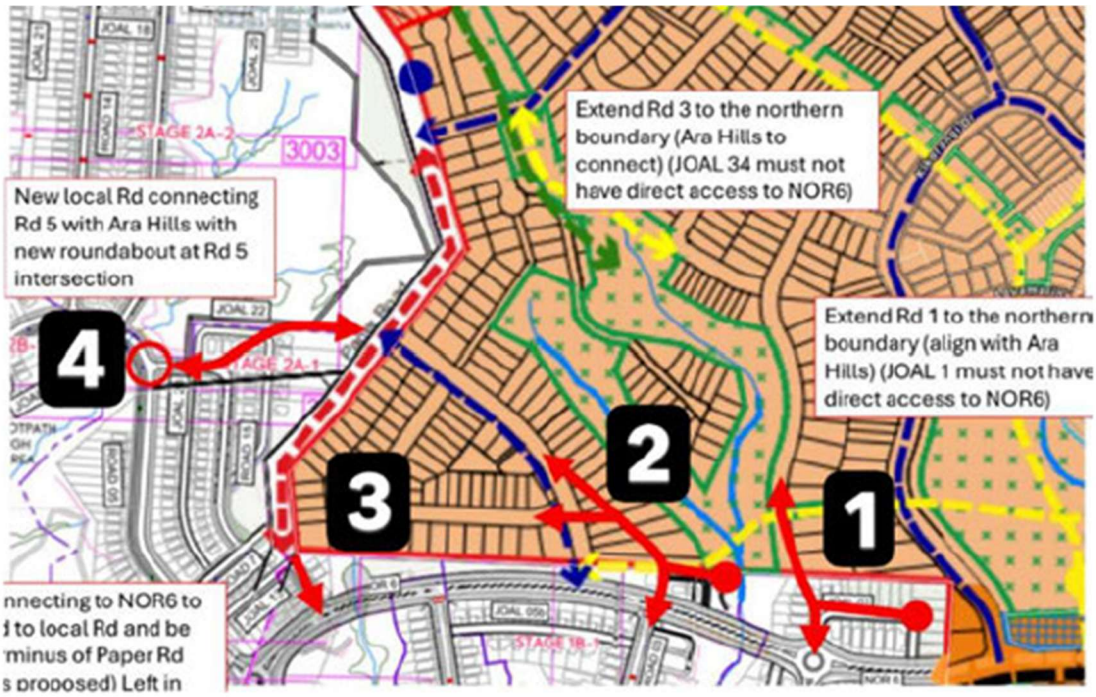
114. The future NoR6 road will have a bridge located between the end of the road formed as part of this proposal and Upper Owera Road. Lots 606 and 609 are close to the future bridge and it is not clear how development of these lots can be accomplished while integrating with the adjacent bridge abutments and future road levels. The applicant should be asked to provide more assessment of this matter, which should take the form of a scheme design for the bridge and abutments near Lots 606 and 609, including an assessment of the construction area needed.

Lack of Integration between Delmore and Ara Hills

115. Plan Change 119 (PC119), which covers approximately 85 hectares of currently Future Urban Zone land to the north and east of the Delmore site, was notified in 2025. This application seeks to rezone this land and enable approximately 900 residential lots. The Integrated Transport Assessment for PC119 is based on 950 dwellings. The owner of the Ara Hills site currently has consent for 675 dwellings, so PC119 would allow for an additional 375 dwellings.

116. I am concerned about the lack of integration between the Ara Hills and Delmore sites. The site layout as originally presented had no direct road or active modes links between the two sites. This will result in increased travel distances and times for future residents of the two sites. This particularly effects active modes like walking and cycling, and also impacts public transport as longer walking routes to public transport discourages its use. I am particularly, but not solely, concerned about the ability of residents in the south-western corner of the Ara Hills site to access the future public transport route on the NOR 6 road.

117. During engagement with the applicant Auckland Transport provided suggestions for potential locations for links between the sites which the applicant assessed and responded to in Appendix 9.1 Auckland Transport Response Memo.



118. I have reviewed the Appendix 9.1 memo. It explains why the applicant considers that connections are locations 1, 2, and 4 in the diagram above are not feasible due to steep topography between the two sites. Some figures are provided in the memo which show cross-sections but they are poor resolution and do not clearly show the distance between the edge of the NoR6 road and boundary with Ara Hills or the vertical levels at these locations. This information should be reviewed by Auckland Transport to determine support or otherwise of the applicant's conclusions. It appears that a connection near Location 1 might be feasible with a grade no steeper than the Local Government Act maximum gradient for a vested road of 1:8.

119. While it is strongly preferrable that walking routes with accessible gradients are provided in situations where this is not possible stairs can be considered. While stairs have a significant effect on wheelchair and other mobility impaired users by denying them access, they are better than nothing where it accessible routes are not possible. The applicant should also provide an assessment of whether a pedestrian connection with stairs would be feasible. Auckland Transport's Transport Design Manual has information on maximum gradients and the design of landings.

120. Section 2.3 of the Appendix 9.1 memo states that a connection from the paper road on the west side of Ara Hills and Road 7 is viable and that the connection could be constructed by the Ara Hills developer on their side. The Delmore applicant should provide a specimen design for the first 50m of the paper road to show that a connection is feasible. It may be necessary for Delmore to vest some additional land near the connection point to provide for a curve in the road at the boundary.

121. The applicant should also allow for frontage upgrades to the paper road, including provision of an active mode path and potentially vehicular access.

122. Section 3.0 of the Appendix 9.1 memo shows some proposed pedestrian access paths to the paper road on the west side of Ara Hills from Roads 14 and 15 in Stage 2. The

applicant should provide long-sections and typical cross-sections for these paths and integrate them into their other drawings. The path alignments shown are not direct and have potential CPTED (Crime Prevention Through Environment Design) issues, and they do not provide as direct of a walking route to Grand Drive (which is a future bus route) as the locations suggested by AT, but if these are the only viable options they may be better than nothing.

123. Overall, there is poor connectivity between Ara Hills and Delmore and this is likely to result in residents on both sides being more car dependant due to the lack of suitable active modes links in the area.

124. The 16 April 2026 Commute memo states that, in regard to the integration with the Ara Hills development, "*The applicant is currently working through options with AVJ and will provide further detail to Auckland Transport as soon as practicable, but by 11 May at the latest.*"

125. This further detail has not been supplied to Auckland Transport at the date this memorandum was prepared.

Transport Network Resilience for Stage 1

126. During engagement with the applicant concern was raised in regard to lack of resilience in the proposed network for Stage 1 as despite the high number of dwellings proposed there was only one transport connection open to the public out of the site (via the connection to Grand Drive).

127. Stage 1 will have access to Russell Road (via intersection with Road 1) which provides emergency resilience, but is not open to the public and is for use of wastewater vehicles only. it is unclear how this access is proposed to operate. During engagement with the applicant they were asked to confirm how the access to Russell Rd will be managed for both stages including during events when Grand Drive Interchange is closed.

128. During engagement with the applicant they were asked to comment on this matter. They responded that *"Access to Russell Road is provided via Road 1 and is proposed to be controlled by an automatic lifting arm installed to restrict general traffic associated with the temporary wastewater off-take. In the event of an incident, closure, or significant congestion at the Grand Drive Interchange, this access can be converted to an alternative route for Stage 1 traffic. The lifting arm is capable of being operated remotely or via an emergency override, allowing controlled access to Russell Road when required. The use of this access during incident scenarios would be managed in coordination with 1 Memorandum emergency services and the road controlling authority, with appropriate traffic management measures implemented to ensure safety and maintain network function. This access arrangement would apply until the secondary access is opened at Upper Orewa Road."*

129. While Russell Road, which is an unsealed road, is not suitable in its current form is not suitable for sustained and ongoing use as an access to the Delmore site by the general public, I consider that it could be used in emergencies or unexpected events should the link to Grand Drive become unavailable. Should this alternative route be needed for more than a few days temporary traffic management could be provided on Russell Road to help ensure that it can be safely used.

130. The applicant has proposed Condition 112 which covers use of the Russell Road via Road 1 during an incident, closure, or significant congestion at the Grand Drive interchange. I consider that the proposed condition is appropriate.

Path Along Upper Owera Road and Russell Road and Connection to Road 17

131. Proposed Condition 100(c) requires the consent holder to *"Construct a temporary off-road footpath (minimum 1.8m in width and an all-weather surface) along Upper Orewa Road and Russell Road between the Road 17 / Upper Orewa Road intersection and the eastern boundary of the Delmore site."*

132. I consider that this path is most likely to be used for recreational purposes as it does not provide the most direct link to local shops, schools, public transport, or other likely walking destinations.

133. Auckland Transport's Engineering Design Code Footpaths and the Public Realm sets out the types of materials suitable for footpaths. In rural areas compacted gravel or hoggin paths are acceptable in the right context. I consider that the exact materials and design of the paths can be addressed at Engineering Approval stage and that the proposed condition is appropriate.

134. The Ministry of Education has accrued land on the west side of Upper Owera Road near the intersection with Wainui Road for a new school (although there is as yet no designation for the school on the land). Providing an suitable walking route between the development and the school will help reduce car dependency for residents of the Delmore site and encourage walking as a travel mode. I therefore recommend that the temporary footpath be extended down Upper Owera Road to connect to the school.

135. I recommend the following wording;

"x. *The consent holder must, at their own expense, construct a temporary off-road footpath (minimum 1.8m in width and an all-weather surface) along Upper Orewa Road between the intersection with Russell Road and the Ministry of Education site in Upper Orewa Road. This condition will become inoperable if the Ministry of Education site is not designated for use as a school site within two years of consent being granted".*

Shoulder Widening on Owera Road and Wainui Road

136. The applicant has proposed Conditions 100(a) and 100(b) which would require the consent holder to upgrade Upper Owera Road between Road 17 and Wainui Road and Wainui Road between Upper Owera Road and the Waterloo Creek Bridge respectively to both be upgraded to provide minimum one metre wide sealed shoulders on both sides of the road prior to opening the roundabout at the intersection of Road 17 and Upper Orewa Road.

137. Opening the roundabout will connect the development through to the Auckland Transport road network to the south of the site and will allow residents of the site, particularly those in Stage 2, to access the motorway network via Upper Owera Road and Wainui Road. As a result I expect that the volume of traffic using these two roads will increase significantly. Shoulder widening will help mitigate potential road safety effects on these roads resulting from the increased volume of traffic using them, and I consider that the proposed conditions are appropriate.

138. Auckland Transport's Engineering Design Code Urban and Rural Roadway Design states that 1.0m wide shoulders are the minimum recommended for most situations. Widening the shoulders will help mitigate potential road safety effects resulting from

the increased volume of traffic using this road, and in particular risks around loss of control and run-off-road type crashes.

139. It should be noted that widening the shoulders will require ancillary works in the roadside areas involving matters such as extending culvers, relocating roadside drains, regarding the shoulder areas, relocating structures such as road signs or utility poles, potentially relocating underground services (if any), and other works, but I consider that the exact details cone be worked out as part of the engineering approval process.

Vehicle Crossings on Road 5 Crossing Bi-directional Cycleway

140. The applicant's drawings show that Collector Roads 5 and 17 have a two-directional off-road cycleway along one side only. This type of layout is most appropriate where one side of the road has a lot less vehicle crossings and intersections than the other.

141. An earlier internation of the design drawings for Road 5 had 10 vehicle crossings on the west side between chainages 140 and 260.

142. The drawings have subsequently been updated replacing the 10 vehicle crossings with two which serve a JOAL providing rear access to the lots on the western side of Road 5 in this location. I consider that the updated vehicle access arrangements in this location are appropriate where they cross the cycleway.3

Intersection Spacing

143. The side road intersections between Road 5 and Roads 7 and 12 are very closely spaced. This can result in increased crash risk where drivers turning in and out of one intersection conflict with turning drivers at adjacent intersections. The same issue appears on Road 17 at the Road 24 and 28 intersections.

Bus Stops and Other Public Transport Requirements

144. I have been provided a copy of a Power Point presentation dated 17 March 2026 prepared by Auckland Transport's internal public transport specialists which gives information on bus requirements within the Delmore site. My understanding is that this information was provided to the applicant in March.

145. The most recent version of the road drawings prepared by McKenzie and Co. for the development (provided 21 April 2026) show bus stop locations generally according to the locations indicated in the Power Point presentation. I this section I provide traffic engineering specialist comments on the public transport related aspects of the updated drawings, having regard to the Power Point presentation.

146. The Power Point presentation requested that the roundabout at the intersection of the NoR6 Road, Road 5, and Road 6 be designed to allow a for U-turn movements by buses. This would facilitate a potential bus route serving Stage 1 of the site before State 2 and the connection through to Upper Owera Road was opened.

147. The applicant has not provided vehicle tracking drawing showing that a U-turn by a bus is possible at the roundabout. The applicant should be asked to provide this.

148. The Power Point presentation indicates that a pair of bus stops was needed on the NoR6 road east of the roundabout between approximate chainages 540 and 590, but notes that 'careful thought' will need to be given to visibility and treatment adjacent to the cycle lane'.

149. McKenzie & Co. Drawing 37525-1-3002-Rev G dated 14 April 2026 shows bus stops in this location. I consider that the bus stop on the north side of the NoR6 road near chainage 585 is appropriately located, but more information is needed from the applicant to show that a bus stop, including a shelter can be accommodated next to the cycle path on this site. I consider hat the bus stop on the south side near chainage 555 could potentially cause sight distance issues for pedestrians crossing the east leg of the NoR6 road at the roundabout from the south side when a bus is stopped. The applicant should be asked to provide a crossing sight distance (CSD) check and provide an assessment sight lines for pedestrians when a bus is stopped at the proposed stop.

150. The Power Point presentation indicates that a pair of bus stops is needed on the NoR6 road on either side of the roundabout at the intersection with Road 1. These bus stops are indicated on the departure side of the roundabout, which helps prevent sight line issues for pedestrians crossing near the roundabout.

151. McKenzie & Co. Drawing 37525-1-3003-Rev G dated 14 April 2026 shows bus stops in this location. The bus stop on the south side near chainage 995 is located next to a road barrier in the front berm area. This is not appropriate because bus passengers getting on or off the bus at the stop would need to climb over the barrier. This barrier appears to be intended to prevent errant vehicles from going over the headwall of a culvert which passes under the road near chainage 975. I recommend that the applicant investigate moving the barrier to the back berm area and combining it with the pedestrian barrier in this location shown on the drawing.

152. The drawings show a reduced front berm width at the bus stop on the north side of the NoR6 road near the chainage 1095. This may prevent a bus shelter being installed at this stop. The applicant should provide more assessment to confirm this will not be the case as more lane may need to be vested as road from lots 22 to 25 to provide space for a future shelter.

153. The Power Point presentation indicates that provision should be made for a potential future pair of bus stops on Road 1 between approximate chainages 375 and 325. The presentation shows that the bus stops do not need to be built as part of the development, but a pedestrian refuge should be provided when the road is built.

154. McKenzie & Co. Drawing 37525-1-3006-Rev G dated 14 April 2026 shows this pair of bus stops. The bus stop on the east side, near chainage 335 has a road barrier located in the front berm at the stop. I recommend that the applicant investigate moving the barrier to the back berm area and combining it with the pedestrian barrier in this location shown on the drawing.

155. The pedestrian refuge requested by the Point Presentation is not shown in the drawings. This is needed to ensure that bus patrons can cross safely between the two bus stops. Providing this refuge is likely to require localised widening of the carriageway and the vesting of more land as road reserve. The applicant should be asked to provide an assessment of the road safety effects of not providing a pedestrian facility near the stops.

156. The Power Point presentation indicates that a pair of bus stops on Road 5 between approximate chainages 320 and 450. The presentation shows that a pedestrian refuge should be provided along with the stops.

157. McKenzie & Co. Drawing 37525-2-3003-Rev H dated 14 April 2026 shows this pair of bus stops. The bus stop on the north side near chainage 340 is located on the outside

of a curve. I am concerned that buses may not be able to come parallel to the kerb in this location, resulting in gap between the kerb and the bus which could trip bus passengers as they get on or off the bus. The other stop in the pair has a similar issue, but to a lesser extent. No pedestrian refuge islands are shown on the drawings, but this appears to be due to a potential clash with the intersection with Road 13 which is located between the stops.

158. I consider that the applicant should investigate positioning this pair of bus stops further south, between the Road 15 intersection and JOAL 42 vehicle crossing. I note that this relocation would provide more even spacing between this pair if bus stops and the adjacent pairs in either direction.

159. The Power Point presentation indicates that a pair of bus stops near the roundabout at the Road 5 / Road 17 intersection. McKenzie & Co. Drawings 37525-2-3007-Rev H and 37525-2-3008-Rev H dated 14 April 2026 shows this pair of bus stops.

160. The stop located on the north side of Road 5 near chainage 570 is located next to a road barrier in the front berm area. I recommend that the applicant investigate moving the barrier to the back berm area and combining it with the pedestrian barrier in this location shown on the drawing.

161. The Power Point presentation indicates that a pair of bus stops on Road 17 between approximate chainages 240 and 330, as well as a pedestrian refuge. McKenzie & Co. Drawing 37525-2-3006-Rev H 14 April 2026 shows this pair of bus stops, but does not show the pedestrian refuge island.

162. The pedestrian refuge islands are needed to ensure that bus patrons can cross safely between the two bus stops. Providing this refuge is likely to require localised widening of the carriageway and the vesting of more land as road reserve. The applicant should be asked to provide an assessment of the road safety effects of not providing a pedestrian facility near the stops.

Other Road Drawings Matters

163. The longitudinal gradients of several of the local roads are steep and will discourage active modes. Anything over 8% is considered to potentially discourage walking as a travel mode, including walking to public transport. I note that the applicant's civil and transportation specialists have endeavoured to minimise the number of roads with gradients over 8%, and that in steep topography like that found on the site some roads with steeper gradients are unavoidable.

164. It should be noted that Auckland Transport's Engineering Design Code Footpaths and the Public Relam requires a departure from standards from Auckland Transport for footpaths over 8% gradient. This is normally sought during the Engineering Approval stage and the applicant should be cautioned as an advice note that there is no guarantee a departure will be granted.

165. A turning head, in accordance with the standard engineering detail drawings in Auckland Transport's Transport Design Manual should be provided at the end of Road 10. If this is not provided then vehicles, especially heavy vehicles like rubbish trucks, will need to reverse back along Road 10 in order to exit, and this will have both a traffic safety and operational effect. To address this matter I recommend the following condition of consent;

"x. Before any dwellings adjacent to Road 10 are occupied the consent holder must, at their own expense, construct a vehicle turning head at the south end of Road 10 in

accordance with the Auckland Council Code of Practice for Subdivision and Development Chapter 3 Transport."

166. Road 01 will need to be designed to connect to Russell Road in future when the land next to Russell Road is urbanised. The turning head shown in the application drawings at the south end is acceptable for now, but the applicant should be advised that Auckland Transport will require that a specimen design of a future connection to the south showing that that an adequate future connection will be able to be made will be required at Engineering Approval stage and that this may have an impact on road boundaries and levels inside private property.

167. The McKenzie and Co. roading drawings show traffic calming in the form of speed tables on the local roads. While I support the use of traffic calming on these roads to help moderate vehicle operating speeds, I note that some speed tables shown on the drawings are not appropriately located. Some are adjacent to vehicle crossings or parking bays, and it appears that some may be located in locations with an overly steep gradients, and potentially in locations where the driver sight lines to the tables are restricted by over vertical crest curves.

168. The applicant has proposed Condition 107 which would require traffic calming measures shall be provided at 60m intervals on all local roads. Consistent 60 metre spacing may not be achievable in all local roads due to other site constraints like the positions of intersections, vehicle crossings, parking bays, etc. I recommend that the condition be amended as follows to allow more flexibility in spacing;

> *"107. Traffic calming measures shall be provided at 60m intervals on all local roads, or in other such locations as approved by Auckland Council, and in accordance with Auckland Council Code of Practice for Subdivision and Development Chapter 3 Transport."*

169. Auckland Transport's Practice Note 2: Use of raised devices on the AT Network and Engineering Design Code Traffic Calming contains detailed engineering guidance on the use of traffic calming devices which the applicant should refer to when preparing the detailed design for engineering plan approval.

Disclaimer / Important note:

The views and comments expressed by PTM Consultants within this memorandum are made without prejudice, on the applicant's proposal. Specialists have not conducted a specific review for design and standards compliance. We reserve the right to add to our comments in the future should there be any further changes or information presented. This memorandum has been compiled for the use of Auckland Transport, Auckland Council, and the expert panel only and is not to be amended, used, forwarded or circulated without the written permission of PTM Consultants. It is an express condition of the supply of this information that the recipient is responsible for verifying its content, correctness, and completeness. PTM Consultants accepts no liability or responsibility for any error, loss or damage suffered by the recipient arising out of, or in connection with, the use or misuse of this information.

Nadine Perera (AT)

From: Craig Richards <Craig.Richards@beca.com>
Sent: Wednesday, 22 April 2026 15:35
To: Nadine Perera (AT); Paul Schischka
Cc: Rob Mason
Subject: Re: Delmore

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Hi Nadine,

Here are my comments from a review of the additional information. I have focussed on external transport impacts and mitigation, there may be some cross over with Paul's comments.

Condition 91 Active Modes Link Access Interchange and Along Grand Drive.

The applicant does not agree with including a condition on this matter. In the Commute ITA the trip rate used in traffic modelling assumes "there are future viable active mode routes between the site and these attractions" i.e. that the ped/cycle connection across the Motorway is delivered. On this basis I consider a condition is appropriate in that if the connection is not provided the traffic effects will be more significant than currently planned for. Therefore I support the condition wording as proposed by Paul, it doesn't need to say that it will be delivered by Delmore only that it needs to be in place.

Intersection Design - Russel Road / Upper Orewa Road Intersection

The applicant has suggested line marking which improves the sight distance issue here. It may be worth considering shifting the flush island marking even further north to maximise visibility and whether a raised island would be more effective? Some additional signage on the Upper Orewa Road approach could also help to manage speeds.

Widening of Shoulders on Upper Orewa Road and Wainui Road

Condition 100.(b) now includes the requested widening.

However the advice note below condition 100 would need to be reworded. The note states that the upgrades would not be required if the NoR6 road has been constructed or if upgrades have been undertaken by another party. The NoR6 upgrade would not deliver the road widening on Wainui Road, so this would still need to be delivered by the applicant.

Condition 98

The condition simply states that 'access to the site is constructed and operational', this is too limited and needs to be specific to delivering the NoR6 design of the Grand Drive extension which caters for all modes of travel and can be retained in perpetuity, i.e. does not need to be upgraded to the NoR6 design at a later stage. I do not support a temporary arrangement. I understand the applicant is relying on AT to purchase land that enables construction of this extension to the NoR6 design, as AT has no plan to purchase this land in the short to medium term, I do not see how suitable access can be achieved. As the Grand Drive access will be the primary access, and only access for Stage 1 this needs to be in place prior to occupation of dwellings and it needs to deliver the intended multimodal access function that supports the trip rates assumed in the ITA.

Condition 101

The response states that the applicant is currently reviewing this condition and will provide an update in due course. As far as I am aware this update has not been received. I support the amendments suggested by Paul in his memo.

Let me know if there is anything else you were expecting me to comment on.

Cheers
Craig

Nadine Perera (AT)

From: Rob Mason <Rob.Mason@supportinggrowth.nz>
Sent: Wednesday, 22 April 2026 12:23
To: Nadine Perera (AT)
Subject: RE: Delmore Fast Track #2 - EPA Panel Formal Request for Comment

This Message Is From an External Sender
Looks suspicious? Please click the 'Report Suspicious' button for automatic analysis. Report Suspicious

Hi Nadine. I've had a look through the amended information provided and set out some comments below. Not a lot of change to my earlier comments

Grand Drive Interchange Connection

1. The Road design and access plans show a direct connection through the Te Ara Hills development as per the SGA alignment as well as an alternative alignment. The direct connection is preferred for the following reasons:
    a. Better horizontal alignment
    b. Avoids future disruption to traffic during construction
    c. The proposed retaining wall would need to be removed and a new wall/embankment constructed, resulting in cost.
    d. Proposed cross section is narrow with berm widths of 1.8m and 3.0m

Southern Tie-in to Upper Orewa Road

2. South of chainage 340m the NoR6 arterial road is in a fill embankment. The bottom of the vertical sag curve is at ch320 where the road alignment starts to rise to head up to Upper Orewa Road. It's unclear how the termination of the NoR6 arterial will integrate with the proposed Lots 606 and 609 given the road is about 4-5m higher than the existing ground. A
3. Condition 112 requires a turning head to be constructed at the end of the NoR6 arterial. Given the difference in levels at this location, it is unclear how this will integrate with the adjacent lots and accommodate the future connection to the south. The proposed levels need to align with the future NoR 6 arterial connection.
4. Stage 2 – Lots 606 and 609 are positioned immediately alongside the future arterial alignment. This corresponds to the position of the future bridge to connect the arterial to Upper Orewa Road. If these sites are to be developed, the applicant would need to show how the development can integrate with the future levels of the road and the bridge abutments. Design cross-sections would need to be provided to demonstrate that development of these lots will not preclude the construction of the NoR6 alignment to Upper Orewa Road. This needs to allow for sufficient construction area to be able to build the adjacent bridge and abutments.
5. I have not commented on the suitability of the vertical alignment as this will be a decision for Auckland Transport.

Cheers,
Rob

Rob Mason | Technical Engineering Specialist
Te Tupu Ngatahi – Supporting Growth

Nadine Perera (AT)

From: Kang Han (AT)
Sent: Tuesday, 21 April 2026 14:18
To: Nadine Perera (AT)
Cc: Traffic Engineering NorthWest (AT); Jun Park (AT); Jatin Sharma (AT); Antony Hing (AT)
Subject: RE: Delmore Fast Track #2 - EPA Panel Formal Request for Comment

Hi Nadine

Thank you for the updates.

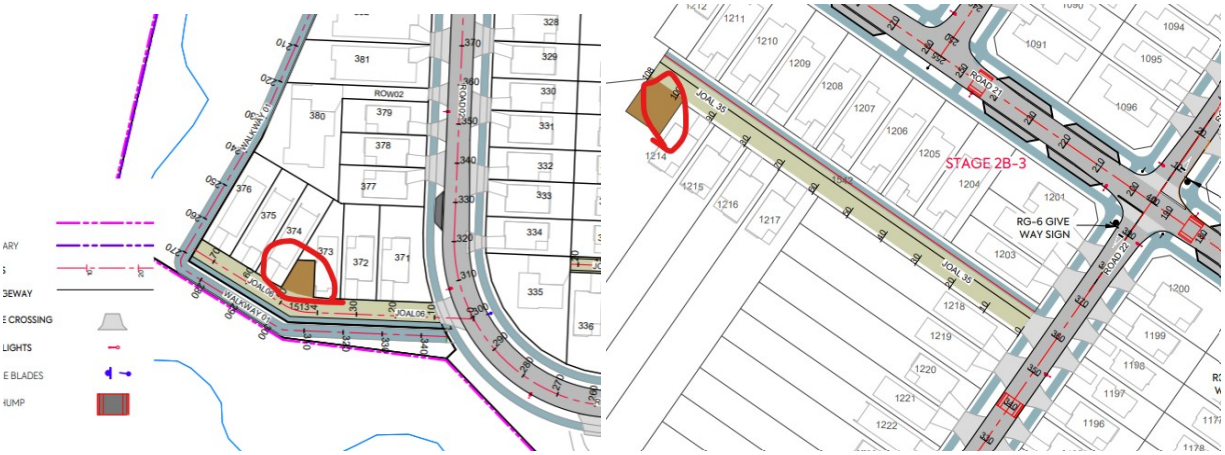
I found some of TE concerns were not addressed in the new drawings, please see the comments below:

1. Speed table placement (previously raised concern):
The current plan shows a significant number of speed tables across the network; however, several appear to be in inappropriate locations. Some are positioned adjacent to driveways and indented parking bays, where speed tables should generally be avoided. In addition, visibility constraints due to steep grades remain a concern and will need to be reassessed once the speed tables are relocated.

2. JOAL 03 connection to Grand Drive:
The connection to Grand Drive appears to be closed, resulting in JOAL 03 operating as a cul-de-sac. There are several similar cases across the layout, which suggests that some JOAL road classifications may have changed. Could tracking be reviewed to confirm that adequate space is provided for U-turn movements at the ends of these roads, particularly for rubbish trucks accessing properties for bin collection?



3. Missing legend of brown colour area:
It is unclear whether the new brown-coloured areas are intended to represent? please confirm.



4. Paul's comments:
   Please also ensure that all of Paul's comments are fully addressed.

Thank you

Kang Han | Transportation Engineer
Traffic Operations | Customer & Network Performance
Auckland Transport

From: Nadine Perera (AT) <Nadine.Perera@at.govt.nz>
Sent: Tuesday, 21 April 2026 10:52 am
To: Andy Irwin (AT) <Andy.Irwin@at.govt.nz>; Traffic Engineering (AT) <TrafficEngineering@at.govt.nz>; Rob.Mason@supportinggrowth.nz; Bethany Park (AT) <Bethany.Park@at.govt.nz>; Putri Kusumawardhani (AT) <Putri.Kusumawardhani@at.govt.nz>; Katherine Dorofaeff (AT) <Katherine.Dorofaeff@at.govt.nz>; Steve Wrenn (AT) <Steve.Wrenn@at.govt.nz>; Andrew McGill (AT) <Andrew.McGill@at.govt.nz>; Paul Schischka <Paul.Schischka@ptmconsultants.co.nz>; Jimin Hong (AT) <Jimin.Hong@at.govt.nz>; Jubin Gautam (AT) <Jubin.Gautam@at.govt.nz>; Craig Richards <craig.richards@beca.com>; Sean Pearce <sean.pearce@awa.kiwi>; Irene Tulloch (AT) <Irene.Tulloch@at.govt.nz>; Tania Steen (AT) <Tania.Steen@at.govt.nz>; Alayna Fiatau (AT) <Alayna.Fiatau@at.govt.nz>; Kang Han (AT) <Kang.Han@at.govt.nz>; Traffic Engineering NorthWest (AT) <TrafficEngineeringNorthWest@at.govt.nz>; Adrian Grant (AT) <Adrian.Grant@at.govt.nz>; Saul Vingrys (AT) <Saulius.Vingrys@at.govt.nz>
Cc: Tessa Craig (AT) <Tessa.Craig@at.govt.nz>; Hedre Dednam (AT) <Hedre.Dednam@at.govt.nz>
Subject: RE: Delmore Fast Track #2 - EPA Panel Formal Request for Comment

Good morning,

Updated drawings have been provided by the applicant. Please refer the following link emailed separately (attached).

Please note comment is needed by Friday 24 April

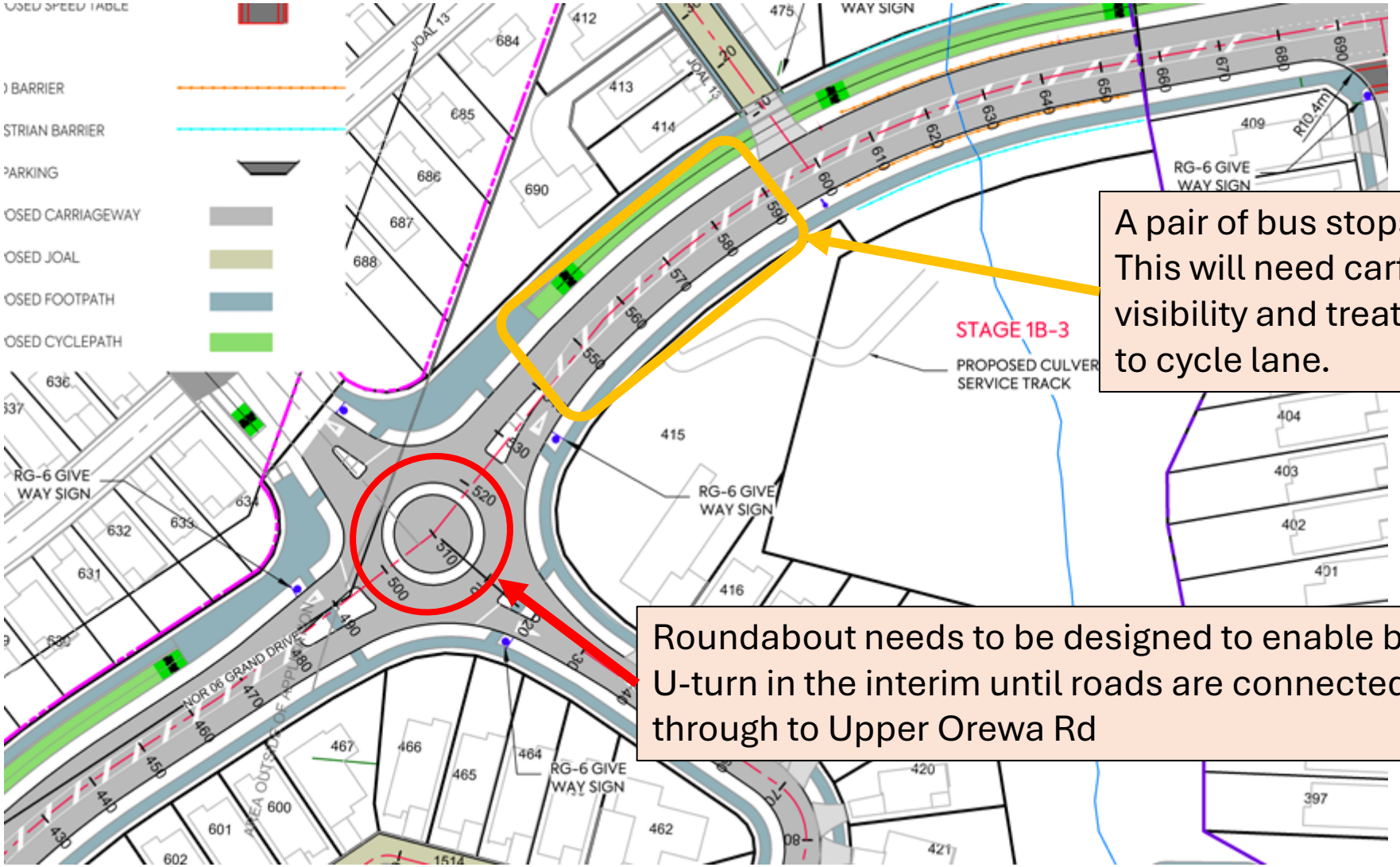
Kind Regards,

Delmore
Bus Requirements

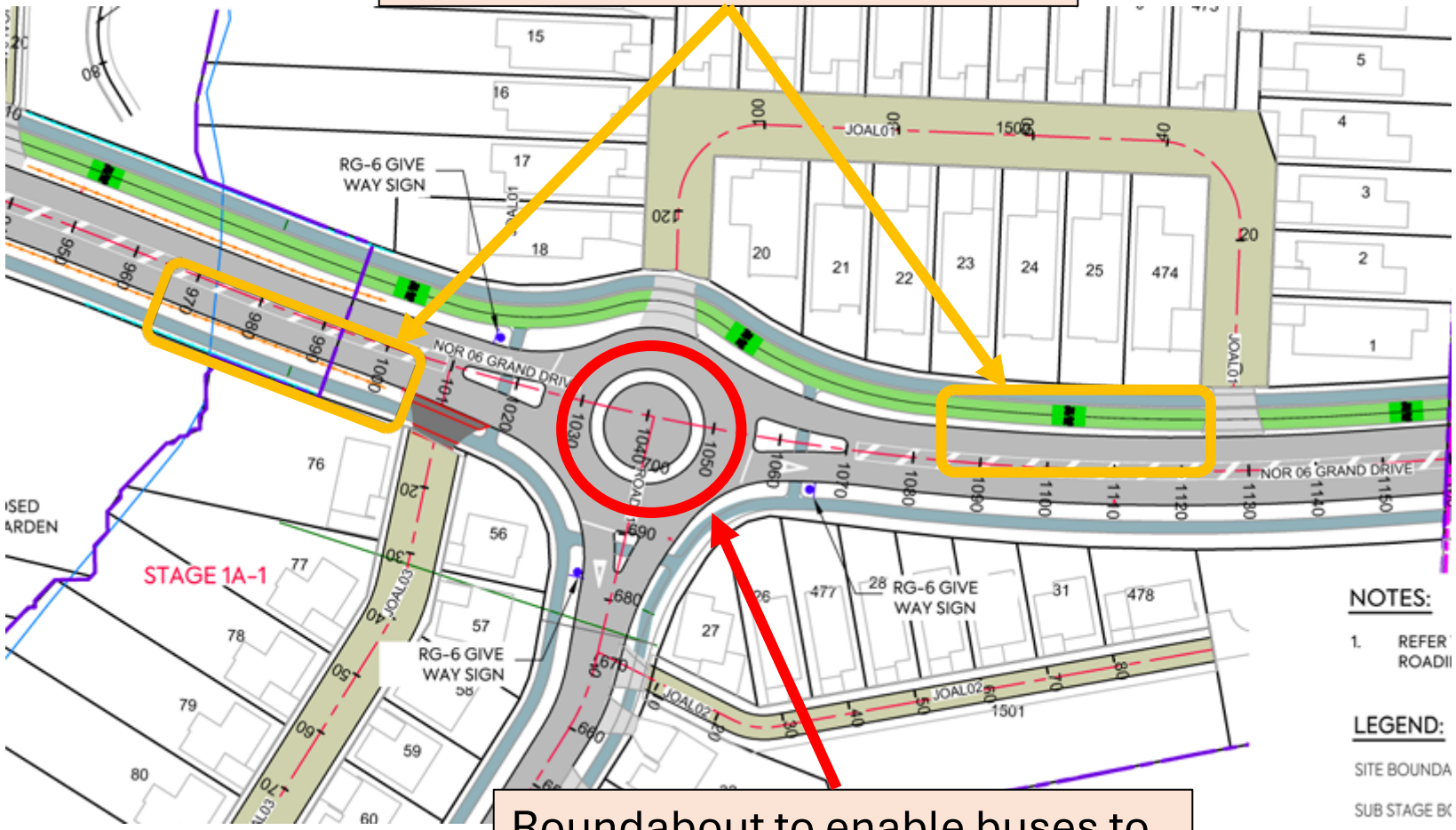
17th March 2026

Stage 1

Location	Approx Chainage	Intervention	Notes
Intersection of NOR 6/ Road 5 / Road 6	510	Make roundabout big enough for buses to U-turn using NOR 6	
NOR 6	About 580	A pair of bus stops	Visibility checks Will need pedestrian refuge Cycle lanes – safe for bus passengers
Intersection of NOR 6 (1040) / Road 1	1040	Make roundabout big enough for buses to U-turn using NOR 6	
NOR 6	1100	A pair of bus stops near roundabout - ideally downstream of Roundabout 990 & 1100	Bike lane
Road 1	about 350 southbound about 380 northbound	Design for a pair of bus stops. (not build)	Visibility checks Will need pedestrian refuge Cycle lanes – safe for bus passengers
Russell Road / Road 1 (000)		Ensure that the future intersection can be made suitable for buses. Road 1 to Russell Rd and vice-a-versa	


A pair of bus stops
This will need carful thought to visibility and treatment adjacent to cycle lane.
Roundabout needs to be designed to enable buses to U-turn in the interim until roads are connected through to Upper Orewa Rd
STAGE 1B-3
PROPOSED CULVER
SERVICE TRACK
RG-6 GIVE WAY SIGN
BARRIER
STRIAN BARRIER
PARKING
OSED CARRIAGEWAY
OSED JOAL
OSED FOOTPATH
OSED CYCLEPATH

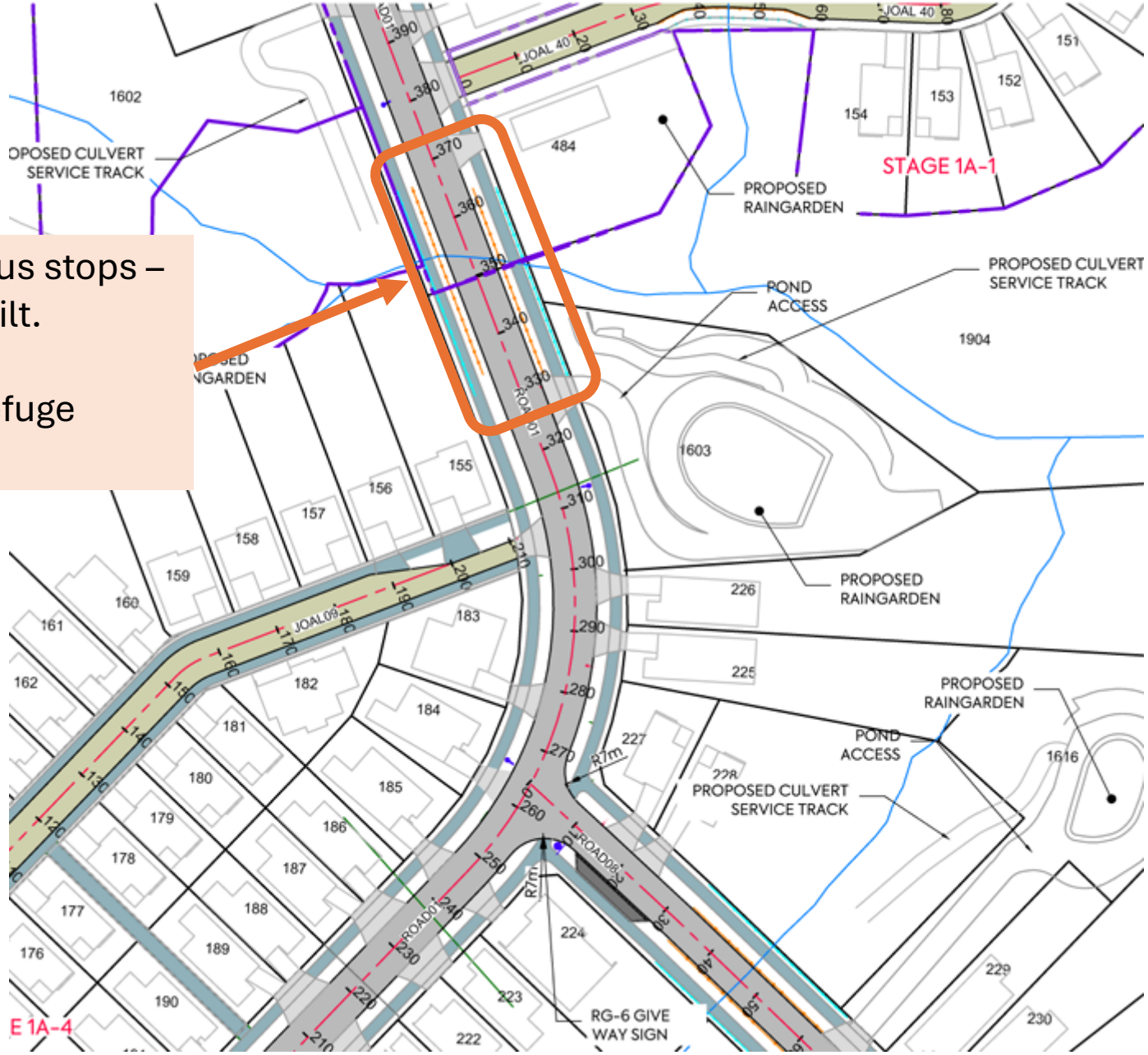
Bus stops



Roundabout to enable buses to U-turn in the interim

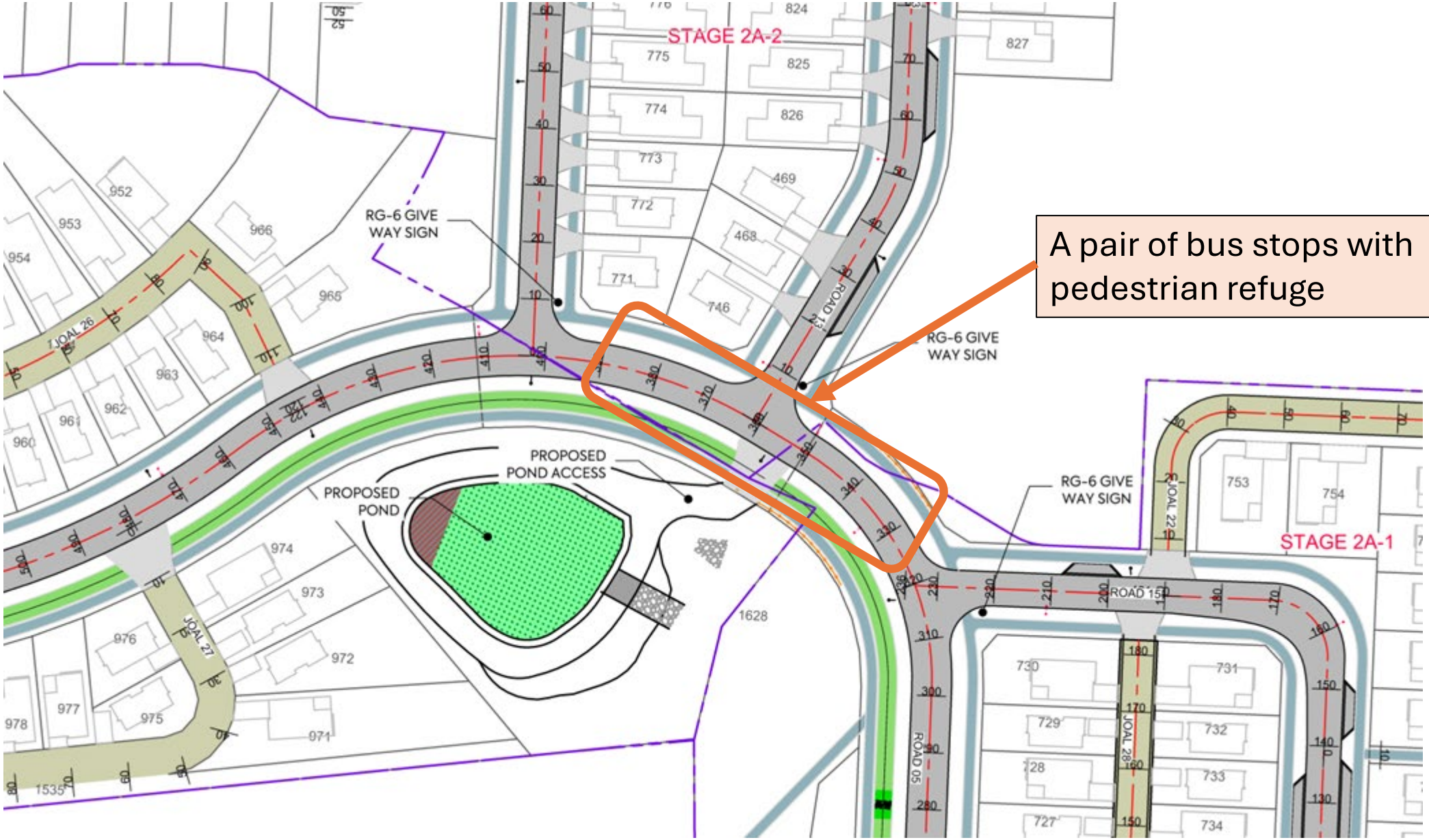
Design for bus future bus stops – does not need to be built.

However, pedestrian refuge should be built.

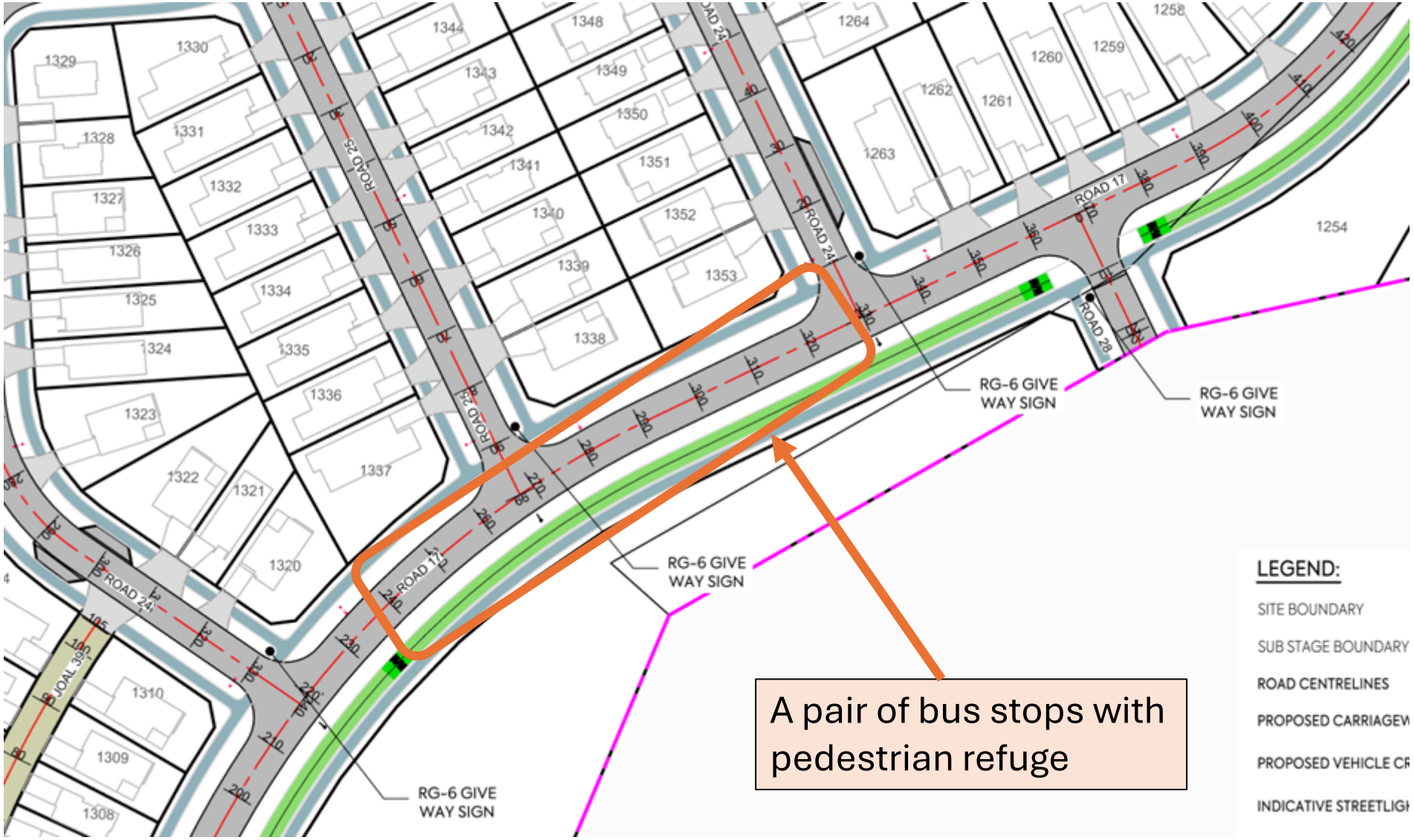


Stage 2

Location	Chainage	Intervention	Notes
Road 5 Sheet 3 - DRW # 3725-2-3003	About 340 (eastward) About 390 (westbound)	A pair of bus stops – Tail to tail with pedestrian refuge	Not cycleway
Either Road 5 or Road 17	About 570 on Road 5 or 750 on Road 17	A pair of bus stops - eastbound on Road 5, southbound on Road 17 As close to junction as possible	Not cycleway
Road 5 / Road 17 roundabout		Ensure roundabout is suitable for bus movements. Road 5 to Road 17 and vice-a- versa	
Road 17 – roads 25	Northbound 290 Southbound 240	A pair of bus stops – Tail to tail with pedestrian refuge	Not cycleway


STAGE 2A-2
STAGE 2A-1
RG-6 GIVE WAY SIGN
RG-6 GIVE WAY SIGN
RG-6 GIVE WAY SIGN
PROPOSED POND ACCESS
PROPOSED POND
A pair of bus stops with pedestrian refuge


PROPOSED
POND
ROAD 18
ROAD 19
ROAD 20
ROAD 17
ROAD 05
1036
1035
1034
1033
1032
1001
1000
999
983
982
1086
1097
1100
6000
1113
1114
1115
1116
1117
1118
5020
Bus stops
LEGEND:
SITE BOUNDARY
SUB STAGE BOUNDARY
ROAD CENTRELINES
PROPOSED CARRIAGEWAY
PROPOSED VEHICLE CROSSI
INDICATIVE STREETLIGHTS
ROAD SIGNS / NAME BLADES
PROPOSED SPEED TABLE
ROAD BARRIER


ROAD 24
ROAD 25
ROAD 17
ROAD 28
RG-6 GIVE WAY SIGN
RG-6 GIVE WAY SIGN
RG-6 GIVE WAY SIGN
RG-6 GIVE WAY SIGN
A pair of bus stops with pedestrian refuge
LEGEND:
SITE BOUNDARY
SUB STAGE BOUNDARY
ROAD CENTRELINES
PROPOSED CARRIAGEW
PROPOSED VEHICLE CR
INDICATIVE STREETLIGH

Nadine Perera (AT)

From: Steve Wrenn (AT)
Sent: Tuesday, 17 March 2026 09:25
To: Nadine Perera (AT)
Cc: Adrian Grant (AT)
Subject: RE: Delmore Fast Track #2 - Lodged Documents Availability
Attachments: Delmore - Bus Requirements.pptx

Hi Nadine,

Thanks for the links.

Adrain and I discussed bus stop locations and other requirements for public transport. Please note the requirements in the attached are slightly different than previously suggested. There is one less pair of bus stops on Road 17. This is due to getting plans with chainage.

Key Matter:

- Enabling buses to U-turn at the roundabout on NOR 6
- All bus stops need to be design for bus shelters – platforms for shelters but not the shelters.
- For establishing bus stops key aspects are that they should be tail to tail with pedestrian refuge. There will be a need to check for visibility and design for safe pedestrian movement for bus passengers through the cycle lanes.

I note that in Road Drawing for Road 1 (stage 1 - DWG 3725-1-3600) and Roads 5 & 17 (not shown stage 2 – DWG 3725-1-3600) the typical cross-section does not reflect what is shown on the plans. The plans show a cycle lane but this is not reflected in the typical cross-section.

Steve Wrenn – Principal Planner
Network Development – Public Transport Development
Auckland Transport
Level 4. 20 Viaduct Harbour Avenue
Auckland Central, 1010
Steve.wrenn@at.govt.nz

From: Nadine Perera (AT) <Nadine.Perera@at.govt.nz>
Sent: Monday, 16 March 2026 2:35 pm
To: Steve Wrenn (AT) <Steve.Wrenn@at.govt.nz>
Cc: Adrian Grant (AT) <Adrian.Grant@at.govt.nz>
Subject: RE: Delmore Fast Track #2 - Lodged Documents Availability

fasttrack.govt.nz/__data/assets/pdf_file/0032/19787/Appendix-26_-Roading-Drawings-Stage-1.pdf
fasttrack.govt.nz/__data/assets/pdf_file/0033/19788/Appendix-26_Roading-Drawings-Stage-2.pdf

Kind Regards,

Nadine Perera | Principal Planner

Nadine Perera (AT)

From: Irene Tulloch (AT)
Sent: Thursday, 23 April 2026 08:43
To: Nadine Perera (AT)
Cc: Tania Steen (AT)
Subject: RE: Delmore Fast Track #2 - comments on road layout related to proposed road stopping

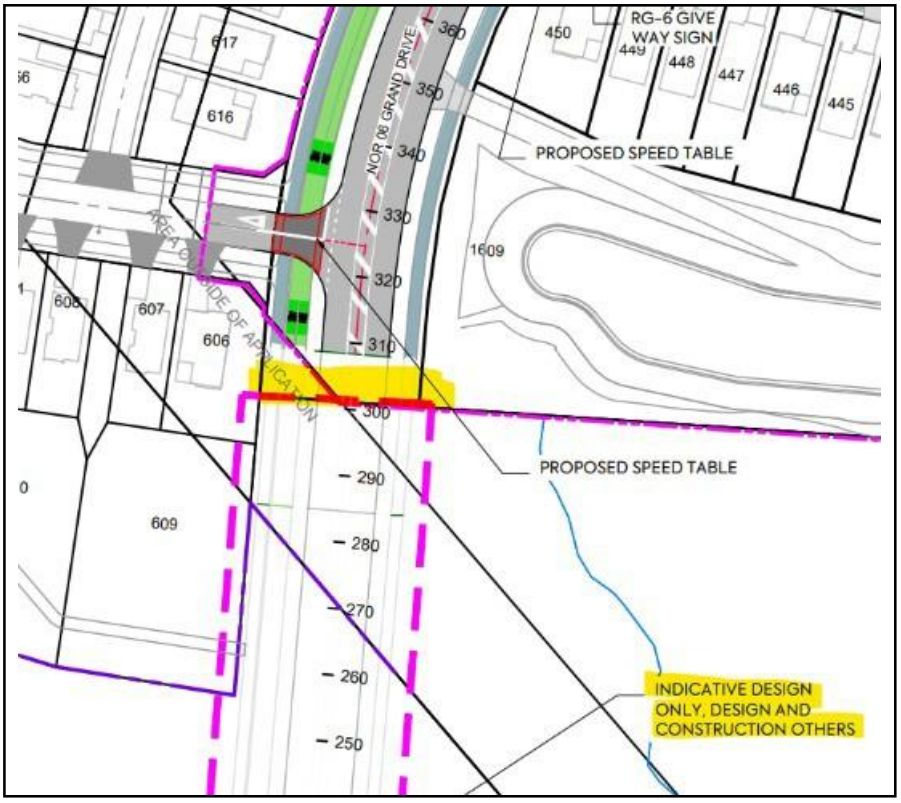
Hi Nadine

Thank you for the updated plans, Appendix 26a for Stage 1 and Stage 2.
In our recent discussions with Delmore on road stopping actions and stages of the development, we understood they were making a Stage 1A or 2A or similar, to isolate the impacted sections of the unformed road that are proposed to be stopped and become future lots or JOALs.
Also to vest legal road connection in stage 1 to enable progression of road stopping. The folder with new plans does not appear to have made that accommodation.

Stage 1

- Sheet 1 details some road formation on part of paper road for NOR 6 road. We had noted to Delmore previously that formation works will required CAR.
- Sheet 2 details Joal13 being formed up to boundary of paper road.

Nothing in Stage 1 details any road stopping requirement.

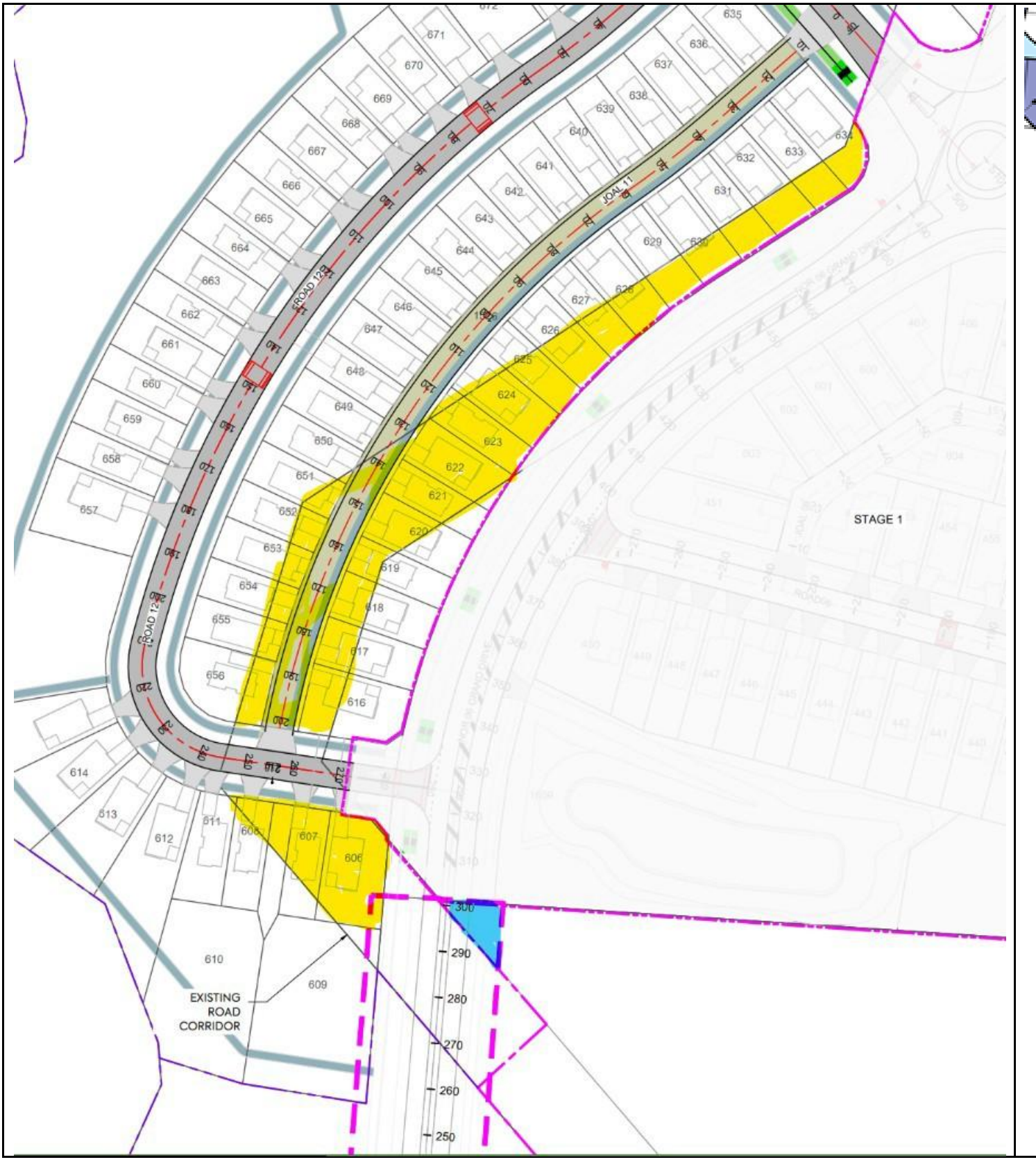


Stage 2

- Sheet 1 – the yellow highlighted area details subdivision lots on the paper road. From our last discussion with Delmore we understood they were putting in a stage 1A or 2A?
  To deal with road stopping requirements once the NOR 6 is vested then stopping of the yellow section of paper road to progress

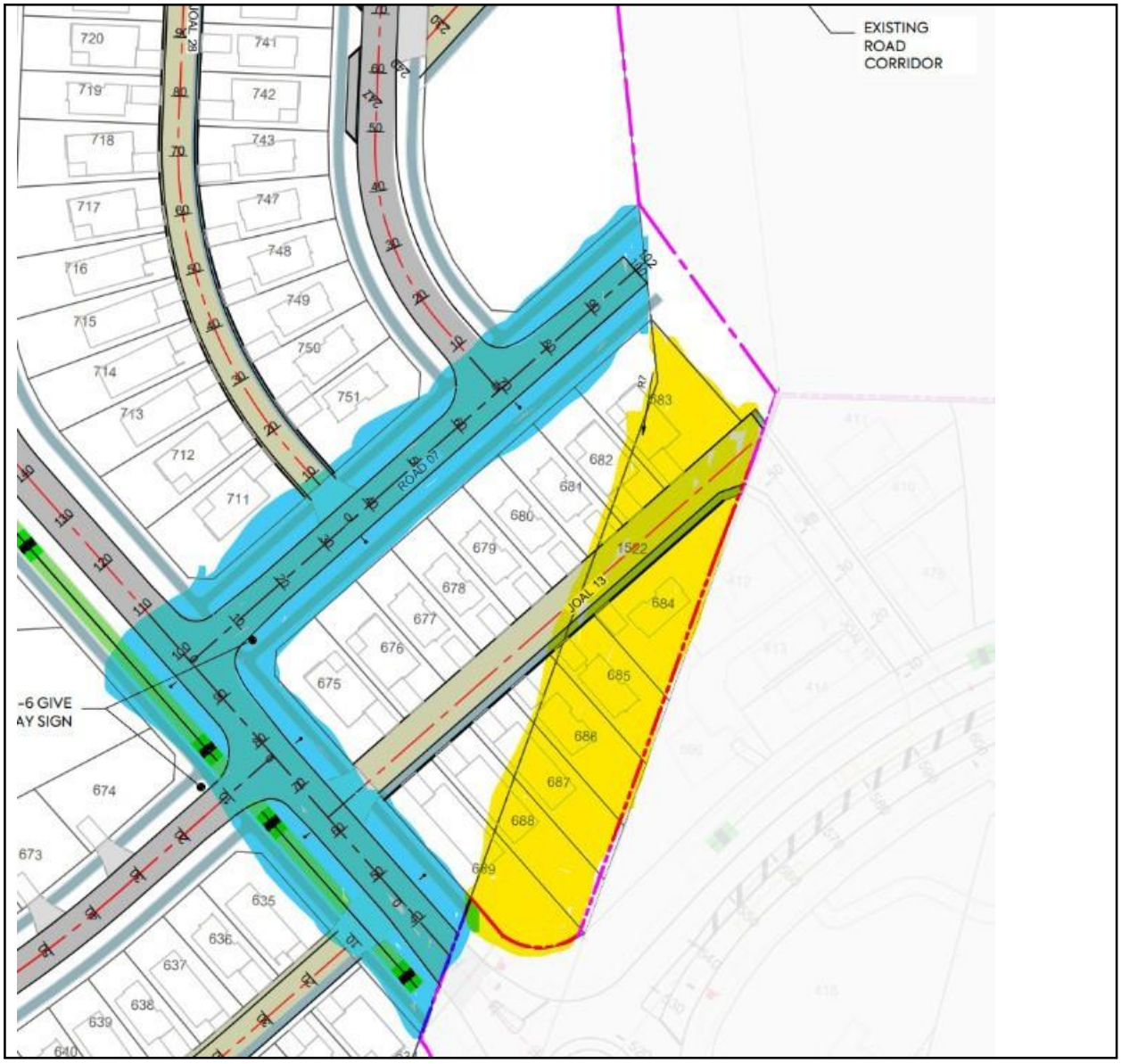
  The highlighted triangle area below was raised previously to Delmore. Prior plans noted this was section of land in NOR was to be acquired by others?
  Without the highlighted triangle area as road, it creates a pinch point in the existing paper road and new NOR. This is likely to impact the proposed road stopping for the yellow sections if a full width road is not provided/remaining.

  Stage 2 - Sheet 1



- Sheet 2 - the yellow highlighted area details subdivision lots on the paper road. From our last discussion with Delmore we understood they were putting in a stage 1A or 2A?
- The blue highlighted section of new road needs to be vested prior to the yellow section being stopped.

Stage 2 – sheet 2



Ngā mihi | Kind regards Irene

Irene Tulloch | Principal Technical Property Specialist
Property Services | Property, Planning and Place Group

Memo

Project Number	A40080.00
Project	Wainui North School
Date	16 April 2026
Author	Chris Horne
Subject	Review of publicly available information

Incite
PO Box 3082
Auckland 1140
Tel 09 369 1465

To: Gemma Hayes

We have been asked to review publicly available information of the proposed school campus (primary and secondary schools) at Upper Orewa Road, Wainui. The Ministry of Education (Ministry has acquired two of the three sites it required for this school and has been negotiating on the third title). A notice of requirement has not yet been submitted.

Fulton Hogan Private Plan Change and Fast Track Application for Milldale North

The Ministry has been involved in ongoing discussions with Fulton Hogan in regard to its own school plans and potential to cross land currently owned by Fulton Hogan on the north side of Wainui Road since 2022, and as a consequence Fulton Hogan has identified the location of the future school campus in its proposed structure plan to support its private plan change for Milldale North and its Fast-Track referral application on the Fast-Track website that has now been accepted for fast-track.

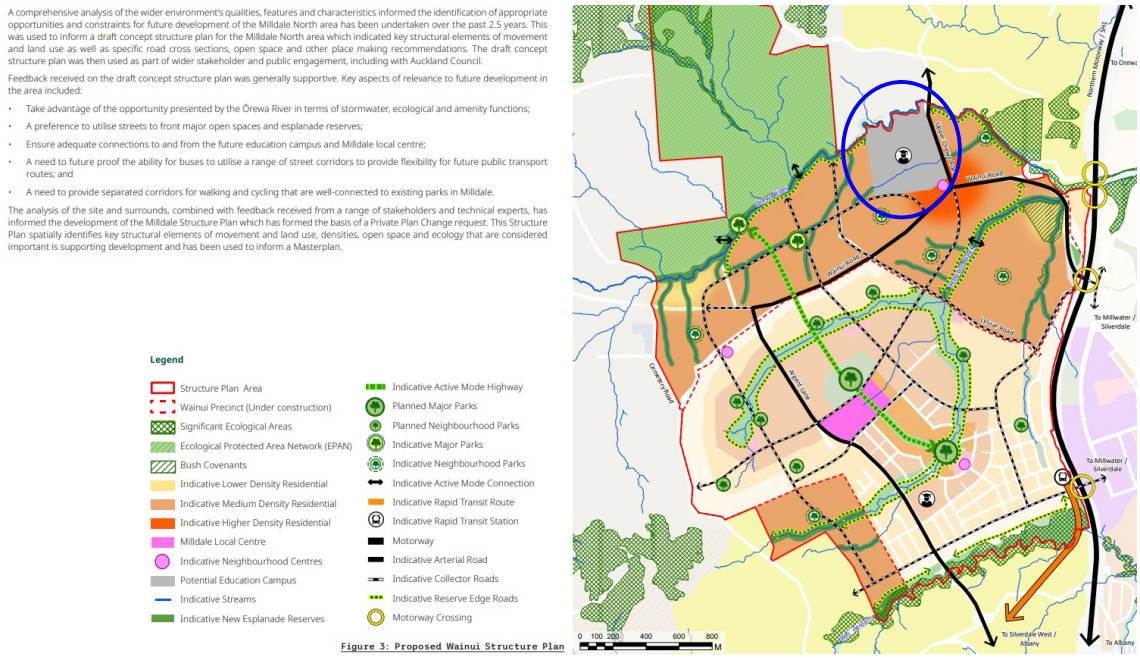


Figure 1: Fulton Hogan Proposed Wainui Structure Plan

The private plan change has been lodged with Auckland Council but is yet to be notified. However, the proposed structure plan appears in the Fast-Track referral application (publicly available on the Fast-Track website)

Supporting Growth North Transport Projects

The proposed school precinct/campus location appears to be widely known in the community and key stakeholders in the area and appears in submissions on the Auckland Transport Notices of Requirement (NoR) for the Supporting Growth North Project, and notably:

- NoR 6 New connection between Milldale and Grand Drive (including Upper Orewa Road) – now Designation 14108
- NoR 10 Wainui Road Upgrade – now Designation 14109

The proposed school location is identified in the s42A report for the NoRs still publicly available on the Auckland Council website given the location was clearly identified in the submission on the NoRs by the Ministry of Education (copy attached).

Submissions

Matters raised by submissions specifically related to the urban design of NOR 10 included:

- Submitter Genevieve A Rush-Munro, Frant A Clendon, Genrus Family Trust (#5) are concerned with the lack of integration within the NOR of Fulton Hogan's structure plan, noting that their property is proposed to be a local centre adjacent to the school and intersection.

  "Concepts include the development of the Submitter's land for a new neighbourhood centre to service Milldale North, shown in Figure 3."



Figure 22. Excerpt of Fulton Hogan plan from submission #5

"The Submitter believes key local community opportunities have not been identified and addressed, and in particular future land use options for its property."

This submission is addressed by earlier comments on the need for integration with future urban development at 1.4.1.

Figure 2: Extract form s42A report (Urban Design Comments) on NoR 10 Wainui Road Upgrade, including the Fulton Hogan proposed structure plan and school camps location

Delmore Fast-Track Applications

The school location is also specifically identified in a proposed structure plans in withdrawn and relodged Delmore Fast-Track Applications included on the Fast-Track website:

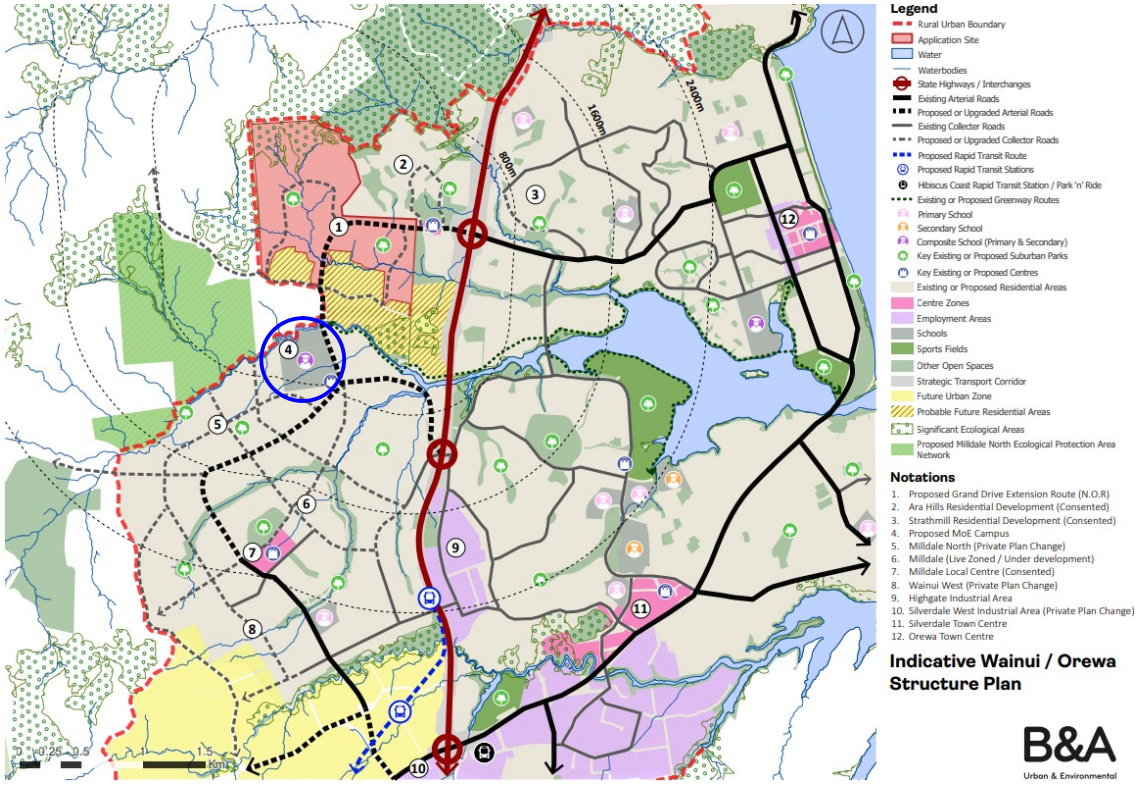


Figure 3: Appendix 13 to withdrawn Delmore Fast-Track Application

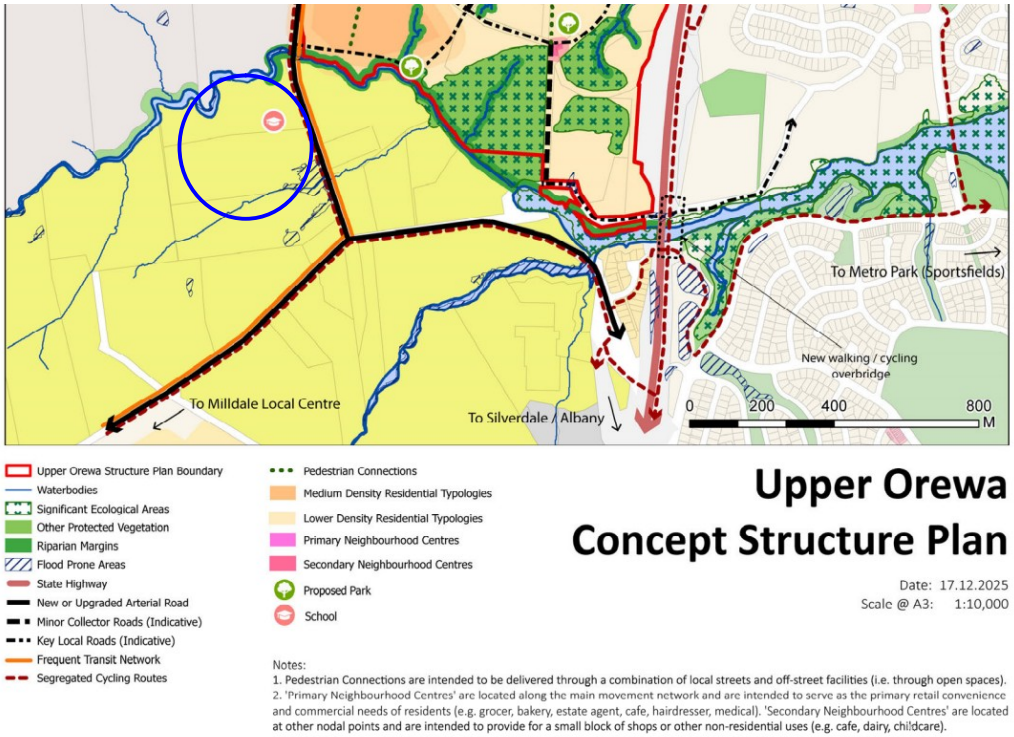


Figure 4: Appendix 14 to 2026 resubmitted Delmore Fast-Track Application

National Education Growth Plan 2023

The National Education Growth Plan 2030 (NEGP) released in 2019 and the subsequent update in 2021 refer to the need to acquire land for a secondary school in Wainui, but no locations is shown.

Online and Official Information Act (OIA) Search

These sources did not include any specific references to a location for a new secondary school in Wainui.

Summary

The Minister is yet to lodge a Notice of Requirement for the proposed Wainui school campus. However, its location is identified on publicly available information including the Wainui North and Delmore Fast-Track application documents and submissions reports on the SGA North Auckland Transport Notices of Requirement (now designations). Delmore themselves have identified the location and referred to it in their Fast-Track applications.

Attachments:

- A: Extracts from SGA North Project s42A report, Milldale North Fast Track Application and Delmore Fast-Track Applications (public information)
- B: Milldale North Masterplan – Fast-Track Referral Application (Attachment E)
- C: Indicative Wainui Orewa Structure Plan – Withdrawn Delmore Fast-Track Appclation (Appendix 13)
- D: Concept Structure Plan – Relodged Delmore Fast Track Application (Appendix 14).
- E: Ministry of Education submission on SGA North Project Notices of Requirement

Delmore: Proposed Consent Conditions

1.0 General

2.0 Land Use (s9)

3.0 Subdivision (s11)

4.0 Streamworks Conditions (s13)

5.0 Water Permit for Dewatering/Diversion of Groundwater (s14)

6.0 Stormwater Discharge Permit (s15)

7.0 Wastewater Discharge Permit (s15)

8.0 Air Discharge Permit (s15)

9.0 Archaeological Authority

The following consent conditions are proposed for the Delmore substantive application under the Fast-track Approvals Act 2024.

1.0 General

1.1.1 Activity in accordance with application

1. The consent holder must undertake the works in general accordance with the application formally received by the Environmental Protection Authority on the 23 December 2025, and the following documents. In the event that any of the provisions of the following documents conflict with the requirements of these conditions of consent, these conditions of consent must prevail.

    - Application form and Assessment of Environmental Effects and Statutory Analysis prepared by Barker & Associates Ltd titled "*Delmore – 88, 130, 132 Upper Ōrewa Road and 53A, 53B and 55 Russell Road, Ōrewa"* and dated December 2025; and
    - The following reports, plans and further responses listed at **Attachment 1**.

1.1.2 Consent Lapse

2. Under section 125 of the RMA, these consents lapse eight years after the date they are granted, unless:

    (a) The consents are given effect to; or

    (b) The council extends the period after which the consents lapse.

1.1.3 Consent Duration

3. Resource consents for streamworks, groundwater diversion/dewatering, stormwater discharge, wastewater discharge and discharge to air expire 35 years from the date the consent is granted, unless it has lapsed, been surrendered, or cancelled at an earlier date pursuant to the RMA.

4. Resource consents for bulk earthworks expire 15 years from the date the consent is granted, unless it has lapsed, been surrendered, or cancelled at an earlier date pursuant to the RMA.

1.1.4 Monitoring Deposit

5. The consent holder must pay the Auckland Council an initial consent compliance monitoring charge of $3,000 (inclusive of GST), plus any further monitoring charge or charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to these consents.

Advice Note: The initial monitoring deposit is to cover the cost of inspecting the site, carrying out tests, reviewing conditions, updating files, etc., all being work to ensure compliance with the resource consents. In order to recover actual and reasonable costs, monitoring of conditions, in excess of those covered by the deposit, these will be charged at the relevant hourly rate applicable at the time. The consent holder will be advised of the further monitoring charge. Only after all conditions of the resource consents have been met, will Auckland Council issue a letter confirming compliance on request of the consent holder.

Pre-commencement conditions

1.1.5 Construction Management Plans

6. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the management plans required under the following conditions must be submitted to Council for certification.

   (a) A Construction Management Plan (CMP) – see Condition 2.1.2 of land use consent;

   (b) An Erosion and Sediment Control Plan (ESCP) – see Condition 15 of land use consent;

   (c) A Construction Air Quality Management Plan (CAQMP) – see Condition 18 of land use consent;

   (d) A Construction Traffic Management Plan (CTMP) – see Condition 17 of land use consent;

   (e) A Construction Noise and Vibration Management Plan (CNVMP) – see Condition 19 of land use consent;

   (f) A Chemical Treatment Plan (ChTMP) – see Condition 20 of land use consent;

   (g) A Tree Management Plan (TMP) – see Condition 3027 of land use consent;

   (h) A Fauna Management Plan (FMP) – see Condition 3128 of land use consent;

   (i) An Adaptive Management Plan (AMP) – see Condition 21 of land use consent; and

   (j) A Settlement Monitoring Plan (SeMP) – see Condition 4744 of land use consent; and

   (k) A Stream Works Management Plan (SWMP) – see Condition 191166 of the stream works consent.

   Advice note: Management Plans shall be sent to *monitoring@aucklandcouncil.govt.nz.*

7. The management plans required by Condition 6 may be separate documents or may form part of the CMP. Management plans may be submitted in parts or in sub-stages to reflect the staged implementation of the project. Each stage must be certified by Council.

Commented [CM1]: Response to DOC feedback from previous application.

8. A copy of the CMP, SWMP and the ESCP (and any updates to these documents) shall be provided to Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga at the same time as they are provided to Auckland Council.

1.1.6 Pre-start Meeting

9. For each of Stage 1 and Stage 2, prior to the commencement of any works within the area covered by that Stage (or sub-stage), the consent holder must hold a pre-start meeting that:

   (a) Is located on the subject site;

   (b) Is scheduled not less than five (5) days before the anticipated commencement of any enabling works, construction and/or earthworks;

   (c) Includes the relevant Auckland Council representative(s);

   (d) Includes representation from the contractors who will undertake the works and any Suitably Qualified and Experienced Professionals (SQEPs) if required by other conditions; and

   (e) Includes the archaeologist approved to oversee the project works covered by the Archaeological Authority obtained for the project works.

10. The meeting must discuss the erosion and sediment control measures and must ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. The following information must be made available at the pre-start meeting:

   (a) Timeframes for key stages of the works authorised under this consent;

   (b) Resource consent conditions;

   (c) The finalised Erosion and Sediment Control Plan required by Condition 15; and

   (d) The Chemical Treatment Management Plan required by Condition 20.

11. The consent holder will invite Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga to attend the pre-start meeting no less than 10 working days before the scheduled meeting. The purpose of the meeting is to discuss cultural induction and monitoring, archaeological monitoring, the erosion and sediment control measures, earthworks methodologies, stormwater management, relevant management plans, timeframes for the work and to ensure all relevant parties are aware of and familiar with the necessary conditions of this consent. The following information must be made available at the pre-start meeting:

   - Timeframes for key stages of the works authorised under this consent;
   - Name and contact details for key contractors and SQEPs (as required);
   - Resource consent conditions;
   - Final or draft copies of the management plans listed in Condition 6;
   - Any cultural induction and monitoring material supplied to the consent holder by or on behalf of Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga before the meeting;
   - A copy of the Archaeological Authority obtained for the works; and
   - Confirmation from the consultant acting for consent holder that the contractor's Public Liability cover, and Health & Safety Plan / policy have been viewed and found satisfactory.

Advice Note: To arrange the pre-construction meeting please contact Auckland Council to arrange this meeting on email at monitoring@aucklandcouncil.govt.nz.

1.1.7 Cultural Monitoring

12. The consent holder must invite Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga to attend each of the following activities at least 10 working days before the activity begins specifically to carry out cultural monitoring and observation:

    (a) Commencement of Stage 2 topsoil strip;

    (b) Commencement of Stage 2 topsoil strip;

    (c) Commencement of works within the area covered by consent notice 10576706.2; and

    (d) If any archaeological sites or artefacts are discovered per Condition 62~~59~~.

    Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga shall be notified no later than 15 working days after the completion of each of the activities set out in Condition 12(a)-(c).

2.0 Land Use (s9)

2.1.1 Consent Holder

13. The land use consent is to attach to the consent holder, Vineway Limited. The consent holder may transfer the whole or part of its interest in the consent to any other person and must provide written notice of the transfer to Auckland Council.

Advice Note: This purpose of this condition is to expressly provide for the land-use consent to attach to the applicant, in accordance with Section 134 of the Resource Management Act.

2.1.2 Construction Management Plan

14. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Auckland Council for certification, a Construction Management Plan (CMP). The purpose of the CMP is to detail the management procedures and construction methods to be undertaken to avoid, remedy or mitigate potential adverse effects on the environment arising from earthworks and construction works. The CMP must include the following as applicable to the project or project stage.

    (a) Details of the site manager, including their contact details;

    (b) The location of a notice board that clearly identifies the name, telephone number and address for service of the site manager;

    (c) Construction methodology;

    (d) An outline construction programme of the works;

    (e) Measures to be adopted to maintain the land in a tidy condition in terms of disposal/storage of rubbish, storage and unloading of building materials and similar construction activities;

    (f) Measures to ensure that no rubbish, fuel, solvents, concrete wash-down material or other related materials enter the freshwater environment;

    (g) Location of workers' offices, conveniences and parking;

    (h) Procedures for avoiding the deposit of soil debris on public roads, and procedures for the removal of soil debris and demolition and construction materials from public roads and places;

    (i) Location and layout of construction yards, including associated buildings, fencing and site access;

    (j) Means of maintaining safety of the general public;

    (k) Any cultural induction and/or monitoring material provided in accordance with Condition 11 and 12, which must be appended to the CMP.

2.1.3 Erosion Sediment Control Plan

15. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, the consent holder must prepare and submit to Auckland Council for certification, a final Erosion and Sediment Control Plan (ESCP). The ESCP(s) must be prepared in accordance with the draft ESCP submitted with the application, and in accordance with *Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating ~~Amendment 2~~any amendments to this document (GD05)*. The ESCP must contain sufficient details to

address the following matters:

(a) Specific erosion and sediment control measures for the earthworks (location dimensions, capacity), including the location of any sediment retention ponds (SRPs), decanting earth bunds, super silt fences, silt fence clean and dirty water diversion bunds and stabilized construction entrances;

(b) Supporting calculations and design drawings as necessary, including confirmation ~~of 2% vs 3% SRPs where required;~~that all SRPs are to be constructed based on a 3% criteria;

(c) Details of construction methods;

(d) Monitoring, maintenance and inspection requirements;

(e) Catchment boundaries and contour information as necessary;

(f) Identify location of stabilised construction entrances; and

(g) Details relating to the management of exposed areas (e.g. grassing, mulching).

Commented [CM2]: Updated to address comments from AC earthworks team.

Advice note: The above ESCP requirement relates to bulk earthworks stages. Additional ESCPs are required at subdivision stage for civil works.

16. Within 10 working days following implementation and completion of the specific erosion and sediment controls required by the ESCP (referred to in Condition 15) and prior to the commencement of the earthworks activity, the consent holder must provide to Auckland Council written certification prepared by a SQEP confirming that the erosion and sediment control measures have been constructed in accordance with GD05.

Advice Notes: Certification of the sediment and erosion control structure should contain sufficient details to address the following matters:

- *Details on the contributing catchment area;*
- *Retention volume of structure (dead storage and live storage measured to the top of the primary spillway);*
- *Dimensions and shape of structure;*
- *Position of inlets/outlets; and*
- *Details regarding the stabilisation of the structure.*

2.1.4 Construction Traffic Management Plan

17. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Construction Traffic Management Plan (CTMP) in accordance with the Auckland Council's requirements for CTMPs and the New Zealand Transport Agency's Code of Practice for Temporary Traffic Management. The purpose of the CTMP is to ensure that during construction the surrounding road network (including the footpaths) operates safely and efficiently for all road users including existing residents and pedestrians, and that internal construction traffic movements operate safely and efficiently. The CTMP plan must contain sufficient details to address the following matters:

(a) Construction dates and hours of operation including any specific hours for traffic

congestion/noise outside the construction hours in Condition 4441;

(b) Truck route diagrams both internal to the site and external to the local road network;

(c) Temporary road closure and traffic management signage/details for both pedestrians and vehicles to appropriately manage the interaction of these road users with heavy construction traffic;

(d) Details of site access/egress over the entire construction period. Noting that all egress points to be positioned so that they achieve appropriate site distance as per the Land Transport Safety Authority "Guidelines for visibility at driveways" RTS-6 document;

(e) Details of staging areas / work area;

(f) Details of vehicle cleaning facilities within the site to avoid mud and other material being dropped on the road; and

(g) Location of construction vehicle parking onsite.

2.1.5 Construction Air Quality Management Plan

18. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Construction Air Quality Management Plan (CAQMP). The objective of the CAQMP is to avoid as far as practicable, offensive or objectionable dust, arising from construction activities beyond the boundary of the project site. The CAQMP must address the following matters as a minimum:

(a) Description of the works, anticipated equipment/processes, and durations.

(b) Periods of time when emissions of dust might arise from construction activities.

(c) Identification of sensitive land uses likely to be adversely affected by emissions of dust from construction activities.

(d) Methods for mitigating dust that may arise from the construction site, potentially including but not limited to:

- Controlling vehicle speeds
- The use of vacuum sweeping (hard paved areas)
- Water suppression
- Restabilising ground cover on exposed earth by way of revegetation or geotechnical cloth (or similar) and wheel washes for vehicles at exit points.

(e) Methods for undertaking and reporting on the results of daily inspections of construction activities that might give rise to dust.

(f) Procedures for maintaining contact with stakeholders, notification of proposed construction activities and handling complaints about dust or other air quality matters.

(g) Identification of contingency measures to address verified effects on neighbouring property in the event of a process malfunction or accidental dust discharge.

(h) Contact numbers for key construction staff responsible for managing air quality during construction.

2.1.6 Construction Noise and Vibration Management Plan

19. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Construction Noise and Vibration Management Plan (CNVMP). The objective of the CNVMP is to identify and implement the best practicable option to minimise adverse construction noise and vibration effects. The CNVMP must be prepared with reference to Annex E of NZS 6803:1999 Acoustics – Construction Noise and must address the following matters as a minimum:

(a) Applicable site noise and vibration criteria, including the criteria in Condition 45~~42~~;

(b) Programme of works and hours of operation;

(c) Identification of surrounding noise and/or vibration sensitive receivers;

(d) Details of the specific monitoring management and mitigation measures required to comply with the relevant noise and vibration criteria;

(e) The requirement to provide written communication to occupants of all immediately neighbouring buildings prior to the commencement of activities on site. The written communication shall set out:

- A brief overview of the construction works;
- The working hours and expected duration;
- All mitigation measures to be implemented;
- The procedure for recording concerns/complaints regarding noise and vibration;
- The procedure for noise and vibration monitoring where concerns are raised by receivers; and
- Contact details for site personnel for any concerns regarding noise and vibration.

Commented [CM3]: Added in response to AC - noise and vibration

2.1.7 Chemical Treatment Plan

20. At least 20 working days prior to the commencement of activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a Chemical Treatment Management Plan (ChTMP). The ChTMP must be prepared in general accordance with Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 2 (GD05). The ChTMP must include as a minimum:

(a) Specific design details of a chemical treatment system based on a rainfall activated methodology for the site's sediment retention ponds, decanting earth bunds, or any other approved impoundment devices;

(b) Monitoring, maintenance (including post storm) and contingency programme (including a record sheet);

(c) Details of optimum dosage (including assumptions);

(d) Results of initial chemical treatment trial;

(e) A spill contingency plan; and

(f) Details of the person or bodies that will hold responsibility for long term operation and maintenance of the chemical treatment system and the organisational structure which will support this system.

21. All sediment retention ponds and any other impoundment devices, must be chemically treated in accordance with the ChTMP required by Condition 20. All measures required by the ChTMP must be put in place prior to commencement of the earthworks activity and be maintained for the duration of the earthworks activity.

2.1.8 Adaptive Management Plan

22. ~~At least 20 working days prior to the commencement of~~At least 20 working days prior to the commencement of earthworks for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a final Adaptive Management Plan (AMP) for all earthworks which are to be undertaken throughout the full duration of consent. The AMP must be in general accordance with the draft AMP submitted with the application and referenced under Condition 1, and must be prepared in general accordance with Auckland Council's guideline document "Erosion and Sediment Control Adaptive Management Plan Discussion Document", July 2020. The AMP must address monitoring requirements and changes to management procedures in response to the results of monitoring.

23. All monitoring and management procedures as detailed within the certified Adaptive Management Plan required by condition 22, and any subsequent revisions, must be implemented on an ongoing basis throughout the duration of all earthworks activities on site.

Advice Note: The AMP is a live document, and updates are expected to address unforeseen circumstances or changes in the earthworks methodology as the site responds though its adaptive monitoring regime, to ensure sediment discharges are minimised and the potential for significant adverse effects are avoided.

24. An earthworks area which has been stabilised as a result of a trigger level exceedance or a management response as defined and required by the certified Adaptive Management Plan (required under condition 22) and any subsequent revisions approved by the Council, can only be re-opened for earthworks on the written approval of the Council.

25. As a result of observed inefficiencies upon site inspection or identified within the site reporting, Council may request that the Adaptive Management Plan be updated to address those inefficiencies. If such a request is made by the Council, the revised plan must be submitted to the Council within 5 working days of the request. The updated AMP must not be implemented without the Council's approval.

Commented [CM4]: Updated in response to AC earthworks. Draft AMP has now been prepared.

~~22. . activity for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification, an Adaptative Management Plan (AMP) for all earthworks which are to be undertaken throughout the full duration of consent. The AMP must address monitoring requirements and changes to management procedures in response to the results of monitoring, and must include but is not limited to, the following details:~~

~~(a) Pre-construction Baseline monitoring containing the in-stream results for turbidity and / or total suspended solids (TSS) within the receiving environment;~~

~~(b) Baseline monitoring results from an appropriate location;~~

~~(c) Weather forecasting and monitoring;~~

~~(d) Trigger levels for water quality and rainfall events (actual and forecasted events);~~

~~(e) Ongoing monitoring and sampling regime for the receiving environment, including turbidity and~~

~~/ or TSS monitoring downstream within the receiving environment; and~~

~~(f) Management responses when a trigger level is exceeded.~~

2.1.9 Culvert Management and Monitoring Plan

~~23.~~26. At least 20 working days prior to the commencement of any vegetation clearance within the site, the consent holder must prepare and submit to Council for certification an Culvert Management and Monitoring Plan to manage the risk of blockage of the NZTA culvert from residual slash, debris, or sediment during construction activities.

~~24.~~27. The certified Culvert Management and Monitoring Plan must be implemented for the duration of construction works and shall remain in effect until the development is fully built out and the site has been stabilised to the satisfaction of Council.

~~25.~~28. Should the Culvert Management and Monitoring Plan identify that accelerated scour or erosion has been observed, the consent holder must consult with NZTA to determine whether further mitigation is necessary for the culvert. This may be through the installation of a relief inlet riser (consistent with NZTA P46 standard design) and/or additional embankment interface reinforcement/resilience measures.

2.1.10 Geotechnical Earthworks Review

~~26.~~29. At least 10 working days prior to the commencement of works for any stage or sub-stage of the development, the consent holder must provide a detailed construction methodology endorsed by a chartered geo-professional who must provide written confirmation of the review. The methodology must include earthworks, boundary works and installation of slope protection measures in accordance with the recommendations provided within the Geotechnical Report, referenced in Condition 1 and submitted to Auckland Council. No bulk earthworks onsite are permitted prior to written confirmation that the detailed construction methodology has been reviewed and accepted by the Council.

Advice note: The ~~earthworks~~ detailed construction methodology is required to ensure stability is maintained throughout the civil works stage of the development.

Commented [CM5]: Updated in response to AC geotechnical

2.1.11 Tree Management Plan

30. At least 20 working days prior to the commencement of any vegetation clearance works for any stage or sub-stage of the development, the consent holder must prepare and submit to Council a final Tree Management Plan (TMP) for certification. ~~Council must respond to the request within 20 working days, or the TMP is deemed to be certified.~~ The purpose of the TMP is to manage arboricultural effects on vegetation identified within the Arboricultural Report and to specify procedures for restricting the spread of kauri dieback. Measures for kauri dieback management must include:

(a) Identification and mapping of all kauri trees within or adjacent to the works area and establishment of a Kauri Contamination Zone;

(b) Implementation of vehicle, machinery, equipment and footwear hygiene procedures for any works undertaken within the Kauri Contamination Zone to prevent the spread of contaminated soil and organic material;

(c) Installation and use of wash-down or cleaning facilities for vehicles, machinery and equipment entering or leaving the Kauri Contamination Zone;

(d) Management of earthworks to ensure that soil and organic material disturbed within the Kauri

Contamination Zone is not transported beyond that area, unless it is disposed of at an approved landfill; and

~~(a)~~(e) Adoption of best practice kauri dieback management protocols, including those relating to tree removal, pruning, and machinery hygiene.

2.1.12 Fauna Management Plan (FMP)

~~27.~~31. At least 20 working days prior to the commencement of works for any stage or sub-stage of the development, the consent holder must prepare and submit to Council for certification a final FMP. The FMP must be in general accordance with the draft FMP submitted to Council and approved under Condition 1 and must include the measures as outlined in Condition 31~~28~~(a) – (d).

Advice note: The FMP may be prepared in parts to align with the development staging.

Long tail bats

(a) The FMP must include the following measures relating to long tail bats:

- Measures to minimise as far as practicable, disturbance from construction activities within 50m of any active long tail bat roosts that are discovered through survey until such roosts are confirmed to be vacant of bats;
- Timing of any construction works within 50m of any active maternity long tail bat roosts. Those construction works shall be undertaken outside the bat maternity period (between December and March) where reasonably practicable; and
- Details of areas where vegetation is to be retained and where additional planting is proposed to be provided and maintained for the purposes of the connectivity of long tail bat habitats.

Native Avifauna (Birds) (excluding wetland birds)

(b) The FMP must include the following measures relating to native avifauna (birds):

- Timing of any construction works which may have adverse effects on native avifauna (birds) (excluding wetland birds). Those construction works shall be undertaken outside of the bird breeding season (1 September to ~~February~~31 March inclusive) where practicable; and
- Where works are required during the bird breeding season, methods to minimise adverse effects on native avifauna (birds), including a survey to identify if and/or where native bird nesting behaviour is occurring and measures by which to deter dotterels from establishing nests within or adjacent construction areas (as per Table 1 of the draft FMP).~~; and~~
- ~~Where works are required during the bird breeding season, methods to minimise adverse effects on native avifauna (birds).~~

Native Wetland Birds

(c) The FMP must include the following measures relating to native wetland birds:

- Details of any nesting bird surveys of native wetland birds. Nesting bird surveys shall be undertaken within any wetland where works are proposed, including a 50m radius from the wetland. Surveys shall be undertaken prior to any such works taking place and repeated at the beginning of each wetland bird breeding season until the completion of construction; and

Commented [CM6]: Updated as a response to DOC feedback, where they wanted specific measures included for kauri dieback. Note this is already included within the TMP so no further changes to the TMP are required.

Condition also updated to remove deemed certification in response to AC arborist and DOC.

Commented [CM7]: FMP updated in response to AC - ecology

- Timing of any construction works which may have adverse effects on native wetland birds. Those construction works shall be undertaken outside of the bird breeding season (1 September to ~~February~~31 March inclusive) where practicable; and
- Where works are required during the bird breeding season, methods to minimise adverse effects on native wetland birds; and
- Details of what protection and buffer measures are proposed to manage effects on nesting native wetland birds. Proposed measures shall address:
    - The type, intensity and duration of construction activity;
    - The likely sensitivity of the nesting bird species to the construction activity; and
    - Any environmental features (e.g. vegetation and contour) that could influence the extent of potential adverse effects on the native wetland birds.

Native Lizards

(d) The FMP must include the following measures relating to native lizards:

- Credentials and contact details of the ecologist/herpetologist who will implement the plan;
- Timing of the implementation of the FMP;
- A description of methodology for survey, trapping and relocation of lizards rescued including but not limited to: salvage protocols, relocation protocols (including method used to identify suitable relocation site(s)), nocturnal and diurnal capture protocols, supervised habitat clearance/transfer protocols, artificial cover object protocols, and opportunistic relocation protocols;
- The location and~~A~~ description of the proposed relocation site; including ~~discussion of~~:
    - Provision for additional refugia, if required e.g. depositing salvaged logs, wood or debris for newly released ~~skinks~~ lizards that have been rescued;
    - Any protection mechanisms (if required) to ensure the relocation site is maintained (e.g.) covenants, consent notices etc;
    - W~~Any w~~eed and pest animal management measures to ensure the relocation site is maintained as appropriate habitat.

Advice note: It is recommended that the lizard rescue plan is undertaken in conjunction with the vegetation clearance operations (and contractor) for an integrated approach (on the same day), to enable the physical search for gecko's following felling of trees and shrubs, and to rescue any skinks from ground cover vegetation and terrestrial retreats.

~~28.~~32. All construction works undertaken on site must comply with the certified FMP.

~~29.~~33. A suitably qualified and experienced ecologist/herpetologist approved to oversee the implementation of the lizard management measures outlined in Condition 31~~28~~ must certify that the lizard related works have been carried out according to the certified FMP within two weeks of completion of the vegetation clearance works.

~~30.~~34. A copy of the FMP (and any updates to these documents) shall be provided to Ngāti Manuhiri, Te

Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga at the same time as they are provided to Auckland Council.

2.1.13 Wetland and Stream Delineation

~~31.~~35. Within each of Stage 1 and Stage 2, and prior to the commencement of any works authorised by this consent within that Stage area, the consent holder must delineate and establish with an exclusion fence at least a 10 metre setback from the natural wetlands and streams. The purpose of the exclusion fence is to exclude construction machinery or spoil from accidental incursion to the natural wetlands and streams and to protect them from the effects of earthworks.

Advice Note: A day-glow barrier mesh or pigtail fence/wire or rope would be sufficient for this purpose. Streams shall be classified as per the AUP(OP) intermittent and permanent definitions (Chapter J), and wetlands in accordance with Ministry for the Environment (MfE) wetland delineation protocols.

~~32.~~36. No work (other than as authorised by this consent) is permitted to be carried out within the area surrounded by the exclusion fence required under Condition 35~~32~~, and no building or fill materials must be stored or placed within that area, either on a temporary or permanent basis.

2.1.14 Wetland Offset Plan

~~33.~~37. At least 20 working days p~~P~~rior to the commencement of earthworks on-site, the consent holder must prepare and submit to Council for certification, a final Wetland Offset Plan. The Wetland Offset Plan must be prepared with input from a suitably qualified ecologist, hydrologist and stormwater engineer. The objective of the Wetland Offset Plan is to attain a no net loss of natural wetland areas. The Wetland Offset Plan must be in general accordance with the following documents approved under Condition 1:

(a) The Landscape Plans prepared by Greenwood Associates, dated December 2025; and

(b) The report prepared by WWLA, titled "Wetland and Culvert Assessment", dated December 2025; and

(c) The report prepared by Virdis, titled "Delmore Fast Track Application – Ecological Impact Assessment", dated December 2025.

The Wetland Offset Plan must include the following minimum details:

(a) Calculated accountancy for unavoidable wetland reclamation in accordance with the AUP(OP) Appendix 8;

(b) The location of the area(s) proposed for wetland creation;

(c) Works to ensure ~~a~~ wetland hydrology is created and maintained;

(d) Planting schedule, including species, density and grade;

(e) Legal protection (e.g., consent notice);

(f) A five-year maintenance and monitoring plan to ensure the wetland(s) and associated planting is successfully established; and

(g) Measures to be undertaken if the wetland(s) or planting(s) is not successful.

Advice note: The Wetland Offset Plan may be submitted in stages or sub-stages to align with the development staging.

Commented [CM8]: Updated in response to DOC feedback

~~34.~~38. The consent holder must implement the Wetland Offset Plan approved under Condition 37~~34~~. All wetland planting and landscaping must be implemented within the first planting season following completion of earthworks and wetland formation works in the relevant area, unless otherwise agreed in writing by Council.

Advice note: The wetlands will be completed in stages or sub-stages to align with the development staging.

~~35.~~39. Within three months following completion of the wetland creation and planting works, the consent holder must submit to Council written certification confirming that the wetlands have been constructed and planted in accordance with the certified Wetland Offset Plan.

~~36.~~40. The consent holder must maintain and monitor the wetland(s) and associated planting for a period of five years following completion of planting. Monitoring methods shall include, but not be limited to, vegetation plots to stay in place during the five year monitoring period and photopoints. Annual monitoring reports must be prepared by a SQEP and submitted to Council within three (3) months of each monitoring anniversary. Each report must, as a minimum:

(a) Assess wetland hydrology, vegetation establishment, species composition and weed and pest presence;

(b) Evaluate performance against the success criteria specified in the certified Wetland Offset Plan; and

(c) Identify any remedial actions required.

Commented [CM9]: Updated in response to AC - terrestrial ecology

2.1.15 Engineering Plan Approvals

~~37.~~41. All new public assets including roads, vehicle crossings, footpaths and street furniture must be designed to Auckland Transport's relevant Engineering Standards; or be in accordance with this consent and the reports and plans approved under Condition 1; or be in accordance with departures approved under the Standards at a later date.

~~38.~~42. Prior to the commencement of works for any relevant stage or sub-stage (excluding vegetation removal and/or earthworks) the consent holder shall submit complete engineering plans for all infrastructure proposed to be vested to Council for engineering plan approval.

Advice note: Landscaping associated with public roads will be considered for engineering plan approval when the lots are created and land is to be vested at the time of subdivision. It is advisable that any landscaping as part of the land use be designed in accordance with Auckland Council standards and in particular "The Auckland Code of Practice for Land Development and Subdivision Chapter 7: Landscape.

Commented [CM10]: Auckland Council Parks addition

During Construction Conditions

~~39.~~43. The consent holder must maintain and implement the Construction Management Plan (CMP), Construction Traffic Management Plan (CTMP), Construction Air Quality Management Plan (CAQMP), Construction Noise and Vibration Management Plan (CNVMP), Chemical Treatment Management Plan (ChTMP), Erosion and Sediment Control Plan (ESCP), the Tree Management Plan (TMP), and the Fauna Management Plan (FMP), throughout the entire earthworks and construction period within the Stage to which they relate. Any changes to a CMP, CTMP, CAQMP, TMP, ChTMP, CNVMP, FMP or ESCP must be submitted to Council for certification.

~~40.~~44. All earthworks and construction works associated with the implementation of this resource consent shall be carried out:

(a) Between the hours of 7:30am and 18:00pm, Monday to Saturday; and

(b) Shall not occur on Sunday's and public holidays; but

The restriction on hours of works shall not apply to low noise generating activities, such as site set up or staff meetings, which may occur outside of these hours.

2.1.16 Construction Noise and Vibration

~~41.~~45. Noise arising from earthworks and construction works on-site shall not exceed the following limits when measured or assessed at any building on any other site that is occupied during the works in accordance with the requirements of NZS6803:1999, where affected party approval has not been obtained.

Address	Activity	
	Earthworks during Stage 1E	*All other times*
59 Russell Road	75 dB LAeq	Noise limits in Standard E25.6.27
All other properties	Noise limits in Standard E25.6.27	Noise limits in Standard E25.6.27

~~42.~~46. If vibration levels from earthworks or construction works exceeding 2mm/s are predicted or measured, in any axis when measured in the corner of the floor of the storey of interest for multi-storey buildings (if applicable), or within 500mm of ground level at the foundation of a single storey building, the consent holder must ensure the vibration will not exceed 5 mm/s and must consult with the relevant occupants to:

(a) Discuss the nature of the work and the anticipated days and hours when the exceedances are likely to occur;

(b) Determine whether the exceedances could be timed or managed to reduce the effects on the receiver; and

(c) Provide in writing, no less than 3 days before to the work begins, details of the location and duration of the works, a phone number for complaints and the name of the site manager.

2.1.17 Geotechnical

~~43.~~47. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, a Settlement Monitoring Plan (SeMP) prepared by a~~—~~ chartered geo-professional~~SQEP~~, must be submitted to Council for certification. Any later proposed amendment of the SeMP must also be submitted to Council for certification.

~~44.~~48. The purpose of the SeMP is to set out the practices and procedures to be adopted to ensure compliance with the consent conditions regarding earthworks fill settlement monitoring and must~~shall~~ include, at a minimum, the following information:

(a) A monitoring location plan, showing the location and type and construction detail of all settlement monitoring points;

(b) Details of the monitoring frequency;

(c) All monitoring data, the identification of services susceptible to damage and all building/service condition surveys undertaken to date; and

(d) Details of criteria to confirm that fill induced settlements have sufficiently attenuated.

Commented [CM11]: Updated in response to AC geotechnical

Commented [CM12]: Updated in response to AC geotechnical

Settlement monitoring results must be presented in the Geotechnical Completion Report (refer Condition 4946 and Condition 5047).

~~45.~~49. The placement and compaction of fill material, construction of geogrid reinforced slopes, shear piles, retaining and palisade walls, soil nails, shear keys, counterfort drains and subsoil drainage works must be supervised by a ~~-~~ chartered geo-professional~~SQEP~~. In supervising the works, the chartered geo-professional~~SQEP~~ must ensure that they are constructed and otherwise completed in accordance with the recommendations contained within the Geotechnical Report approved under Condition 1, relevant engineering code of practice, and the detailed plans forming part of the application and approved under Condition 1.

~~46.~~50. Within 20 working days from the completion of earthworks, subsoil drainage and slope protection structures, a Geotechnical Completion Report (GCR) signed by the chartered geo-professional must be provided to the Council. The GCR must include (but not to be limited to):

(a) Earthworks operations (e.g. fill compaction, testing, inspections etc.);

~~(a)~~(b) Site inspections, observations, recommendations and photo evidence;

~~(b)~~(c) Results of settlement monitoring;

~~(c)~~(d) Statement of professional opinion (as per schedule 2A of NZS4404:2010); and

~~(d)~~(e) Certified as-built plans for the implemented ~~earth~~works including but not limited to earthworks cut and fill, shear keys, reinforced earth batter slopes, soil nails, retaining and palisade walls, counterfort drains and ~~-and~~ subsoil drainage.

~~47.~~51. The GCR must ~~also~~ provide justification on soil expansivity, subsoil site class, foundation requirements, geotechnical input of erosion protection measures for dispersal devices on each lot and confirming that the works have been completed in accordance with the approved construction methodology as required by Condition 2926 and evidence of settlement monitoring as required by Condition 5047 have been met. The GCR must include results of settlement monitoring and demonstration that sufficient settlement attenuation has occurred and be provided to the satisfaction of the Council.

~~48.~~52. All earthworks must be managed to ensure that they do not lead to any uncontrolled instability or collapse either affecting the site or adversely affecting any neighbouring properties. In the event that such collapse or instability does occur, the consent holder~~it~~ must immediately ~~be rectified.~~rectify the damage.

2.1.18 Earthworks

~~49.~~53. No earthworks on the site can be undertaken between 01 May and 30 September in any year, without a 'Request for winter works' approved by Council. All requests must be renewed annually prior to the approval expiring. All winter works will be re-assessed by the consent holder, as required to ensure that adverse effects are not occurring in the receiving environment and approval may be revoked by Council upon written notice to the consent holder.

~~50.~~54. No storage of machinery, hazardous substances, rubbish, construction stockpiling, or any refilling activity shall occur within the area demarcated in accordance with Condition 3532, unless authorised by this consent.

~~51.~~55. The maximum area of exposed earth at any one time throughout the duration of the project when exercising this consent must be no greater than 30 hectares.

Commented [CM13]: Updated in response to AC geotechnical

Commented [CM14]: Updated in response to AC geotechnical

Commented [CM15]: Updated in response to AC geotechnical

Commented [CM16]: Updated in response to AC geotechnical

Advice note: The 30ha limit applies to "bulk" earthworks only and not to "post construction" subdivision earthworks.

~~52.~~56. Earthworks at the site must be progressively stabilised against erosion throughout the earthworks phases of the project and must be sequenced to minimise the discharge of contaminants to surface water in accordance with the certified ESCP.

Advice Note: Stabilisation measures may include:

- *The use of waterproof covers, geotextiles, or mulching;*
- *Top-soiling and grassing of otherwise bare areas of earth;*
- *Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.*

~~53.~~57. The operational effectiveness and efficiency of all erosion and sediment control measures shown on the Erosion and Sediment Control Plans required under Condition 15, must be maintained throughout the duration of earthworks activity, or until the site is permanently stabilised against erosion. A record of any maintenance work must be kept and be supplied to the Council on request.

~~54.~~58. Earthworks must be managed to avoid deposition of earth, mud, dirt or other debris on any public road or footpath resulting from earthworks activity on the subject site. In the event that such deposition does occur, it must immediately be removed. In no instance must roads or footpaths be washed down with water without appropriate erosion and sediment control measures in place to prevent contamination of the stormwater drainage system, watercourses or receiving waters.

Advice Note: In order to prevent sediment laden water entering waterways from the road, the following methods may be adopted to prevent or address discharges should they occur:

- *Provision of a stabilised entry and exit(s) point for vehicles*
- *Provision of wheel wash facilities*
- *Ceasing of vehicle movement until materials are removed*
- *Cleaning of road surfaces using street-sweepers*
- *Silt and sediment traps*
- *Catchpit protection*

~~55.~~59. Immediately upon abandonment or completion of earthworks on the subject site all areas of bare earth associated with the works must be permanently stabilised against erosion to the satisfaction of the Council.

Advice Note: Should any earthworks be completed or abandoned, bare areas of earth associated with the works must be permanently stabilised against erosion. Measures may include:

- *The use of mulching or natural fibre matting.*
- *Top-soiling, grassing and mulching of otherwise bare areas of earth.*
- *Aggregate or vegetative cover that has obtained a density of more than 80% of a normal pasture sward.*

2.1.19 Contaminated Soils

~~56.~~60. Following demolition and removal of the existing dwellings and other buildings (garages, sheds, barns etc.) existing within the site as at the date of grant of consent, surficial soil and debris (to the lesser of 300mm depth or top of natural insitu soils) across the footprint of each former structure, and a halo 2 metres wide on all sides around it, shall be either:

(a) Excavated and disposed offsite to a consented Class 1 landfill if physically/geotechnically unsuitable for reuse; or

(b) Tested by a suitably qualified and experienced contaminated land professional, as defined in the Users' Guide to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health, 2012, to confirm its suitability for reuse onsite or disposal to alternative offsite facilities. All sampling and testing must be undertaken in accordance with the Contaminated Land Management Guidelines No.5: Site Investigation and Analysis of Soils (Ministry for the Environment, revised 2021).

61. In the event of the accidental discovery of contamination during earthworks which has not been previously identified, including asbestos material, the consent holder must immediately cease the works within a 2-metre halo of the contamination, notify Auckland Council, and engage a suitably qualified and experienced contaminated land professional to assess the situation (including possible sampling and testing) and decide on the best option for managing the material.

Advice Note: Asbestos Containing Materials

If you are demolishing any building that may have asbestos containing materials (ACM) in it:

- *You have obligations under the relevant regulations for the management and removal of asbestos, including the need to engage a Competent Asbestos Surveyor to confirm the presence or absence of any ACM.*
- *Work may have to be carried out under the control of a person holding a WorkSafe NZ Certificate of Competence (CoC) for restricted works.*
- *If any ACM is found, removal or demolition will have to meet the Health and Safety at Work (Asbestos) Regulations 2016.*
- *Information on asbestos containing materials and your obligations can be found at www.worksafe.govt.nz.*

If ACM is found on site following the demolition or removal of the existing buildings you may be required to remediate the site and carry out validation sampling. Dependent on the amount of soil disturbance a further consent application may be required.

Commented [CM17]: Advice note added as per recommendation from AC contaminated land

2.1.20 Archaeology

~~57.~~62. Should any Māori archaeological sites be encountered during earthworks and construction works, Te Kawarau a Māki, Ngāti Manuhiri, Ngaati Whanaunga, te Runanga o Ngāti Whatua must be contacted by the consent holder no later than 15 working days after the discovery.

2.1.21 On-Site Wastewater Servicing

Advice Note: The on-site wastewater servicing conditions (63~~6360~~ ~~–~~ 75) are not applicable if the development connects to the public wastewater network.

~~58.~~63. The consent holder must prepare a Wastewater Management Plan (WMP). The WMP must be submitted to Council for certification at least 20 working days prior to the commissioning of the wastewater system. The purpose of the WMP is to manage and reduce risks to the natural environment and to people from hazardous substances stored for wastewater purposes. The WMP must be in general accordance with the draft WMP approved under Condition 1. It must include, but not be limited to:

(a) Identification of the specific activities conducted on the site;

(b) Identification of potential contaminants associated with these activities, including a Hazardous Substance Inventory and associated Material Safety Data Sheets;

(c) Methods used to contain identified contaminants and prevent them contacting stormwater runoff as far as practicable, and methods to manage environmental risks from site activities;

(d) A Spill Response Plan (which includes the provision that all spills over 20 litres, or any spill or environmentally hazardous substances that has entered the stormwater system, a waterbody or has contacted unsealed ground, must be reported immediately to the Auckland Council's 24- Hour Pollution Hotline (09-377-3107)). If untreated wastewater is to be taken off-site, the Spill Response Plan must include management measures to disinfect small spills or drops that may occur during filling (such as the use of sodium hypochlorite spray);

(e) Accurate site drainage plan(s) showing the location of all site catchpits, containment systems, treatment devices and the discharge point(s) of the site stormwater system;

(f) An appropriate auditing programme to ensure site performance with all components of the WMP;

(g) Methods for providing and recording staff training; and

(h) An Operation and Maintenance Plan for the WWTP.

~~59.~~64. The consent holder must construct the proposed turning head and wastewater filling station in accordance with the roading drawings prepared by McKenzie & Co, titled "Wastewater Treated Disposal & Truck Access" as referenced under Condition 1.

~~60.~~65. An acoustic fence must be constructed along the southern boundary of Lot 203 in accordance with the noise assessment titled "Noise Assessment - Delmore Residential Development, Wainui" prepared by SLR and dated December 2025.

The purpose of the acoustic fence is to ensure compliance from the wastewater filling station with the applicable noise standards under the Auckland Unitary Plan, as referenced below.

Time Period	Noise Level
Monday to Saturday (7:00am to 10:00pm)	50dB LA_{eq}
Sunday (9:00am to 6:00pm)	
All other times	40dB LA_{eq}
	75dB LAF_{MAX}

~~61.~~66. The WWTP and pump station must be designed to comply with the applicable noise standards under the Auckland Unitary Plan as referenced in Condition 65~~62~~.

~~62.~~67. The load out area for the wastewater filling station must be designed to drain to a single catchpit. The area must be designed to either pump out or drain the catchpit back to the sewer network, or empty it via vacuum truck, if it becomes contaminated by a spill.

~~63.~~68. The consent holder must undertake regular visual inspections of the unsealed section of Russell Road between the proposed turning head and Upper Orewa Road. If it is identified that a high proportion of fine (dust-generating) material is present, the consent holder must replenish the surface layer with gravel.

Advice note: The purpose of this condition is to manage dust effects as a result of the additional truck movements on Russell Road.

~~64.~~69. The consent holder must monitor the proposed turning head off Russell Road for soil tracking and must undertake remedial action to remove soil if required.

~~65.~~70. The consent holder must implement the landscape design at the Water and Wastewater Treatment Lot (Lot 5002) in general accordance with the landscaping plans approved under Condition 1.

~~66. In the event that an eventual connection is able to be made to the public wastewater network, disposal of untreated wastewater by way of off-site tankering can be undertaken. At least 20 working days prior to any off-site tankering of untreated wastewater occurring, the consent holder must submit a Wastewater Tankering Management Plan to Council. At a minimum, the Wastewater Tankering Management Plan shall include the following:~~

~~(a) The number of dwellings that the tankering will service;~~

~~(b) The expected duration that the dwellings will be serviced by off-site tankering;~~

~~(c) The number and volume of on-site tanks required to accommodate the necessary wastewater volumes;~~

~~(d) A maintenance plan for the on-site tanks and any other associated on-site plant;~~

~~(e) An odour management plan; and~~

71. ~~A traffic management plan for tanker movements associated with removing untreated wastewater from site. The traffic management plan must also include measures to minimise dust from the increase of trucks on Russell Road.~~ At least 20 working days prior to the commencement of any tankering of treated or untreated wastewater from the site, the consent holder shall submit to Council for certification an Off-site Wastewater Disposal Management Plan. That plan should identify:

(a) the circumstances in which wastewater may be removed from the site;

(b) whether the wastewater is treated wastewater, untreated wastewater, or sludge;

(c) the approved receiving facility or facilities;

(d) maximum daily volumes to be removed;

(e) temporary storage arrangements on site;

(f) truck loading procedures;

(g) hours of operation;

(h) spill prevention and spill response measures;

(i) contingency measures in the event the nominated receiving facility is unavailable; and

(j) record-keeping and reporting requirements. This is justified because the application material contemplates both treated and untreated wastewater being removed off site, and identifies third-party disposal pathways rather than a single permanent receiving point.

72. No wastewater shall be tankered from the site except to a lawfully authorised receiving facility that is identified in the certified management plan and has confirmed capacity and acceptance criteria. The consent holder shall maintain current written confirmation of acceptance from each receiving facility.

73. All wastewater removed from the site shall be transported only by operators holding all required approvals, licences and codes of compliance for wastewater transport.

74. The consent holder shall keep a record of every tanker load removed from the site, including:

(a) date and time of collection;

(b) tanker operator;

(c) wastewater type;

(d) load volume;

(e) destination facility; and

(f) evidence of receipt / disposal.

A summary of all off-site wastewater removed from the site shall be provided to Council every three months.

~~67.~~75. If an approved receiving facility cannot accept wastewater, tankering from the site shall cease unless and until wastewater can be directed to another approved facility identified in the certified management plan. The consent holder shall maintain contingency storage and alternative disposal arrangements sufficient to avoid any unauthorised discharge.

Commented [CM18]: Added in response to AC wastewater

2.1.22 On-site Water Treatment

Advice Note: The on-site water treatment condition (76~~69~~) is not applicable if the development connects to the public wastewater network.

~~68.~~76. The consent holder must construct the on-site water treatment infrastructure in general accordance with the "Delmore Water and Wastewater Treatment Plant Design Report" prepared by Apex and approved under Condition 1.

~~69.~~77. Groundwater for domestic supply shall be taken and treated in accordance with the relevant conditions of the groundwater take consent referenced under consent number WAT60456696.

2.1.23 Stormwater

~~70.~~78. Prior to the occupation of dwellings, the consent holder must design and install the private on-site stormwater management devices for all residential lots and JOALs in accordance with Council's standards. These must ensure that the stormwater runoff from the site is managed to meet SMAF1 requirements.

~~71.~~79. The stormwater management device or system must be installed or built generally in accordance with the design specifications provided in the documents referred to in Condition 1 by a suitably qualified

service provider.

~~72.~~80. Within three months of the practical completion of the works for the related dwelling, the consent holder must provide the following to the council:

(a) Written evidence in the form of a validation report that the stormwater management device or system was installed or built generally in accordance with the design specifications provided in the documents referred to in Condition 1, and by a suitably qualified service provider; and

(b) As-built plans of the stormwater management device or system, certified (signed) by a suitably qualified service provider as a true record of the stormwater management system.

2.1.24 Landscape Plans

~~73.~~81. Prior to the completion of earthworks onsite, the consent holder must prepare a finalised set of detailed landscape design drawings and supporting written documentation which have been prepared by a landscape architect or SQEP in relation to landscape matters associated with the roads to vest and drainage reserves. This information must be submitted to Council for certification.

~~74.~~82. The submitted information must be consistent with the consented landscape concept plan(s) referenced in Condition 1 and, at a minimum, must include:

(a) Landscape design drawings, specifications and maintenance requirements including annotated planting plans, plant schedule, pavement plan, furniture plan, as applicable to the final design; and

(b) Evidence that Te Kawarau ā Maki, Ngaati Whanaunga, Ngāti Manuhiri, and te Runanga o Ngāti Whātua have been consulted regarding provision of cultural markers or similar within a road or drainage reserves, and details of any agreed marker.

Advice note: The information may be submitted in a staged manner as relevant to the concurrently authorised subdivision staging (refer to Condition 90~~82~~).

~~75.~~83. Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of neighbourhood parks must be low height (1.2m) and at least 50% visually permeable.

84. Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of any drainage reserves must be either low height (1.2m) or at least 50% visually permeable (maximum height 1.8m). If located above a retaining wall, a maximum 1.2m fence with 50% visual permeability must be provided. Landscape planting may be implemented on the private lot and must be maintained to ensure 50% visual permeability.

85. Any retaining wall(s) and ancillary and supporting structures must be entirely located within the residential lots and/or JOALs and must be clear of the boundaries of the recreational reserves. Retaining walls must be no higher than:

(a) 1m above existing ground level adjacent to Lot 5020; and

(b) 1.5m above existing ground level adjacent to Lot 1800.

A certificate from a licensed cadastral surveyor must be provided certifying compliance with this requirement at the lodgement of the survey plan for approval.

Commented [CM19]: Added in response to AC - parks

2.1.25 Implementation and Maintenance Plan

Commented [CM20]: Note that these planting conditions are currently being updated to respond to landscape and ecology comments

~~76.~~86. The consent holder must prepare and submit to Council for certification, a final Implementation and

Maintenance Plan for proposed Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922, as well as all existing protected consent notice areas on private residential lots. The Plan must include as a minimum:

(a) The details and timing of when re-vegetation planting will be undertaken for Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922 and protected consent notice areas on private residential lots;

(b) A programme and specification for ongoing eradication of pest plants and control of pest animals;

(c) Methods for ensuring maintenance in perpetuity;

(d) Delegation of responsibilities between the consent holder and the Residential Society, as follows:

- The consent holder is responsible for the establishment and maintenance of all new planting as detailed within the Landscape Plans referenced under Condition 1. until 80% canopy closure has occurred and a minimum survival rate of the plants being 90% of the original density through the entire planting area(s) has been achieved over a minimum 5 year defects liability period commencing on the date that the section 224(c) certificate is issued.
- Once all new planting is established, the Residential Society is responsible for the ongoing maintenance and ongoing eradication of pest plants and animals.

Advice note: Pest plant eradication means, that there are no mature, fruiting and / or flowering individuals of weed species present within the covenant area and any weed species present are dead. In addition, there must be no areas where weed species are smothering and / or out competing native vegetation including suppressing the natural regeneration processes. Pest animal control means meeting Council's minimum requirements and national standard best practice methods for control of these species to an acceptable level.

~~77.~~87. The consent holder must submit an annual monitoring report to Council for all new revegetation areas on Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922, and for all existing bush covenant areas on private residential lots, to demonstrate compliance with the certified Implementation and Maintenance Plan. The Monitoring Report must include but is not limited to the following information:

(a) Identification of pest plant and pest animal presence, a description of weed suppression outcomes, and confirmation of control measures undertaken;

(b) Photographic records from fixed monitoring points demonstrating vegetation establishment and progression over time and a description of canopy development and species survival rates;

(c) Recommendations for remedial planting or maintenance actions where performance criteria are not being met and/or where alternative weed control measures are required; ~~and~~

(d) An assessment of whether ≥20% drought-related mortality of any species has occurred with the year that is the subject of the Monitoring Report. If this has occurred for any species the consent holder must review the suitability of the species for planting within the site. Where a species is found not to be suitable, any replacement species must be WF11-consistent and selected by a suitability qualified ecologist and/or landscape architect and implemented within the next planting year; and

~~(d)~~(e) An assessment of whether the required minimum 90% plant survival rate and progression toward 80% canopy closure has been achieved.

The monitoring report is no longer required when it can be demonstrated that the planting has successfully established in accordance with Condition 87~~79~~(e~~d~~).

Commented [CM21]: Updated as a response to DOC feedback.

2.1.26 Implementation and Maintenance of Landscaping and Fencing

~~78.~~88. Prior to occupation of the respective dwellings, the consent holder must implement the on-lot landscape design in general accordance with the landscape plans approved under Condition 1.

3.0 Subdivision (s11)

3.1 General subdivision conditions applying to all stages

Under sections 108, 108AA and 220 of the RMA, this consent is subject to the following conditions:

3.1.1 Consent Holder

~~79.~~89. This subdivision consent shall attach to Vineway Limited as the consent holder. The consent holder may transfer the whole or part of its interest in the consent to any other party, and must provide written notice of the transfer to Auckland Council.

Advice Note: This purpose of this condition is to expressly provide for the subdivision consent to attach to the applicant, in accordance with Section 134 of the Resource Management Act.

3.1.2 Staging of Subdivision

~~80.~~90. The subdivision shall be undertaken in general accordance with the staging plans referenced in Condition 1.

Details relating to the stages are as follows:

Stage 1A

- Stage 1A-1: Lot 2000 (road to vest), Lot 1600-1601 (drainage reserve), Lot 1605 (utility reserve), Lots 1500-1503 (JOAL), Lot 5000-5004 (balance allotments) and Lot 1-18, 20-119, 470, 472-474 and 477-481 (residential allotments);
- Stage 1A-3: Lot 1504 (JOAL), Lot 1901 (balance allotment), and Lot 130-154 (residential allotments);
- Stage 1A-4: Lot 2001 (road to vest), Lot 1604 and 1616 (drainage reserves), Lot 1904 and 1905 (balance allotments), Lot 1505 – 1507 (JOAL), Lot 155-256 (residential allotments);
- Stage 1A-2: Lot 1508 (JOAL), Lot 120 – 129 (residential allotments), Lot 2002 (road to vest), and Lot 1602 (drainage reserve);

Stage 1B

- Stage 1B-1: Lot 2003 - 2004 (road to vest), Lot 1605-1606 (drainage reserve), Lot 1508, 1509, 1515 (JOAL), Lot 5005-5007 (balance allotments), Lot 257 – 299 and 471 (residential allotments);
- Stage 1B-2: Lot 2005-2006 (road to vest), Lot 1510, 1511 and 1513 (JOAL), Lot 1607-1608 (drainage reserve), Lot 1800 (land in lieu of reserve for the purpose of recreation), Lot 5008 (balance allotment), Lot 300 – 358, 371 - 409 (residential allotments);
- Stage 1B-3: Lot 2008 (road to vest) Lot 1514 and 1515 (JOAL), Lot 1609 (drainage reserve), Lot 1908 (balance allotment), Lot 410-467, 600-605 (residential allotments), Lot 5009 (balance allotment);

Stage 2

- Stage 2A-1: Lot 2100 (road to vest), Lot 1522, 1523, 1525 (JOALS), Lot 1621 and 1628 (drainage reserve), Lot 5010-5012 (balance allotment), Lot 606-769 (residential allotments);

- Stage 2C: Lot 2106, (road to vest), Lot 1627, 1629 (drainage reserve,) Lot 1543-1544 (JOAL), Lot 1239-1310, 1320-1353 (residential allotments);
- Stage 2B-3: Lot 2104 (road to vest), Lot 1622-1624 (drainage reserve), Lot 1537-1542 (JOAL), Lot Lot 6000 (commercial superlot), Lot 5015- 5017 and 5500 (balance allotments), Lot 5020 (land in lieu of reserve for the purpose of recreation), Lot 1031-1238 (residential allotments);
- Stage 2B-2: Lot 2105 (road to vest), 1920 (balance allotment), Lot 982-1023 (residential allotments);
- Stage 2B-1: Lot 2103 (road to vest), Lot 1621(drainage reserve), Lot 1534-1535 (JOAL), Lot 950-981 (residential allotments), Lot 5014 (balance allotment); and
- Stage 2A-2: Lot 2102 (road to vest), Lot 1620 and 1621 (drainage reserve), Lot 1527-1533 (JOAL), Lot 3000 and 1910 (balance lot containing protected vegetation), Lot 468-469, 771-951 (residential allotments).

Advice note: Stage 1A-2 involves subdivision of the WWTP lot (Lot 5002). This subdivision stage will not occur until such time that a connection can be made to the public wastewater system and the WWTP is not required.

~~81.~~91. Amendments to the subdivision staging identified in Condition 90~~82~~ may be undertaken, provided that all necessary infrastructure required to service a stage (including roads, wastewater, water supply, stormwater, electricity and telecommunications) have been implemented.

Advice note: Amendments may involve completing the subdivision staging in a different sequence or may involve amendments to the size of the stage.

~~82.~~92. Where variations to staging in accordance with Condition 91~~83~~ are proposed, the consent holder shall submit amended staging plans showing the variations to Auckland Council for certification. The consent holder shall also provide evidence that the stages can be serviced with all necessary infrastructure in accordance with Condition 91~~83~~.

3.1.3 Public Roads

~~83.~~93. The consent holder must construct all new public roads in accordance with the requirements of Auckland Transport as approved via engineering plan approval.

~~84.~~94. All roading ancillary facilities to be vested in Auckland Council must be constructed in accordance with the approved engineering plans.

~~85.~~95. All landscaping within the road reserve and drainage reserves must be implemented in accordance with the approved landscaping plans under Condition 1 and to comply with Auckland Council's latest specifications or relevant Code of Practice for green assets and landscaping.

~~86.~~96. An Engineering Completion Certificate certifying that all proposed roads and the ancillary structures on the roads to be vested in Auckland Council have been constructed in accordance with the approved engineering plans, must be provided in support of the section 224(c) application.

3.1.4 Road Naming

~~87.~~97. The consent holder must provide and install road naming signs in accordance with Auckland Council standards for both public and private roads that serve six or more lots within the subdivision. The names

must be approved by Auckland Council.

Advice Note: The road naming approval must be obtained from the Local Board prior to the submission of the survey plan pursuant to Section 223 of the RMA. The road naming application should provide suggested street names (one preferred plus two alternative names) and must include evidence of consultation with Te Kawarau ā Maki, Ngaati Whanaunga, Ngāti Manuhiri, and te Runanga o Ngāti Whātua).

3.1.5 Transport

Infrastructure Pre-requisites

~~88.~~98. Prior to section 224(c) certification for the first stage of the subdivision that is developed, the consent holder must provide evidence to Council that access to the site has been constructed and is operational.

~~89.~~99. Prior to the occupation of more than 1,325 dwellings across the Delmore site and Ara Hills sites, the intersection of Road 17 and Upper Orewa Road must be constructed as a single-lane roundabout and designed to achieve sight distances in accordance with Austroads Guide to Road Design Part 4B: Roundabouts Park 4B for 60km/h operating speeds.

~~90.~~100. Prior to the opening of the roundabout at Road 17 and Upper Orewa Road, as required by Condition 9~~91~~, the consent holder must:

(a) Upgrade Upper Orewa Road between Road 17 and Wainui Road to provide minimum 1m sealed shoulders on both sides of the road.

(b) Upgrade the Upper Orewa Road / Wainui Road intersection to provide a right turn bay on Wainui Road and a left turn lane on Upper Orewa Road. This includes the widening of Wainui Road to provide minimum 1m sealed shoulders on both sides of the road to the Waterloo Creek bridge.-

(c) Construct a temporary off-road footpath (minimum 1.8m in width and an all-weather surface) along Upper Orewa Road and Russell Road between the Road 17 / Upper Orewa Road intersection and the eastern boundary of the Delmore site.

~~(c)~~(d) Upgrade the intersection of Russell Road / Upper Orewa Road to provide additional road markings in accordance with the Commute drawing titled "Russell Road / Upper Orewa Road upgrade" and dated 15 April 2026.

Advice note: Condition 10~~09~~2(b) upgrades would not be required if the NoR6 road has been constructed through this intersection, or if upgrades have been undertaken by another party.

~~91.~~101. Once development reaches 1,425 dwellings, and prior to the occupation of more than 1,450 dwellings within the Delmore and Ara Hills sites, the consent holder must:

(a) Provide a written report to Council, prepared by a suitably qualified traffic engineer, setting out the following:

- Results of a survey outlining the level of traffic generated from the Delmore site using the Grand Drive interchange.
- Results of a survey outlining the level of traffic generated from the Delmore site using the Upper Orewa access (from Road 17).
- Survey and assessment of performance of the Grand Drive / SH1 interchange. This is to determine if the Level of Service (LOS) has reached "E" for any approach.

Commented [CM22]: Request from Auckland Transport

- If the performance level in Condition 10193(a)(iii) is reached at the time of monitoring, an assessment of traffic effects must be provided, setting out the mitigation options, including physical changes at the Grand Drive interchange, travel and traffic demand management options.

(b) Construct the mitigation options as outlined in Condition 10193(a)(iv), if recommended by the written report.

Transport

92.102. The consent holder must provide new vehicle crossings to serve all residential lots. Vehicle crossings are to be constructed as per the Auckland Transport Standard GD017A-1B or (VX0103 as per the TDM working draft, 14/02/20).

93.103. Concrete pedestrian footpaths with a gradient steeper than 8% must provide high-friction surfacing.

94.104. A pedestrian visibility splay of 2m x 2.5m (2m along the property boundary) must be provided on both sides of all the proposed vehicle crossings. Any obstructions including boundary fencing and/or landscaping within the visibility splay areas must not exceed 900mm in height. If fencing is provided above the 900mm height stipulation, it must be at least 80% visually permeable. Landscaping in the visibility splay area must be trimmed and maintained in perpetuity to comply with the stipulated height by the consent holder.

95.105. All vehicle crossings must be located to ensure a 2m separation distance is achieved between each crossing, or alternatively a combined driveway (6m wide) may be provided.

96.106. Prior to wastewater removal being required on Russell Road, the consent holder must widen Russell Road as per tracking plans to accommodate wastewater collection vehicles.

107. Traffic calming measures shall be provided at 60m intervals on all local roads.

97.108. Speed management devices (eg. speed bumps) must be provided on all JOALS greater than 50m in length, with one device 10m from the road boundary and additionally at each 30m spacing.

Commented [CM23]: Transport request

98.109. Shared accessways (JOALs) shall be designed as either one-way routes or with turning heads to enable waste and delivery vehicle to service all lots. This must be detailed on the roading plans at Engineering Plan Approval stage.

99.110. The following additional details must be provided on the roading plans at Engineering Plan Approval stage:

(a) Detail around the traffic measures proposed for cyclist crossings and pram crossings on side road intersections;

(b) Location and design of bus stops for any future bus routes;

(c) Vehicle tracking diagrams to demonstrate that the road layout, intersections, turning heads, cul-de-sacs, and vehicle crossings are designed to accommodate the appropriate design vehicles in accordance with Auckland Council's Code of Practice and the Transport Design Manual (TDM); and

(d) Evidence that Approach Sight Distance (ASD) and Safe Intersection Sight Distance (SISD) is

achieved at all intersections and at roundabouts the three sight distance criterion laid out in Section 3.2 of Austroads Guide to Road Design Part 4B is achieved. ~~is achieved at all intersections.~~

(e) Evidence that K-values of roads achieve the Austroads requirements.

111. A temporary turning head must be constructed at the termination point of the AT designation 14108 arterial road within Stage 1 of the site in accordance with Auckland Transport's Code of practice.

Advice Note: This should be in a form of a temporary asphalt turning head for vehicles only.

112. Emergency access to Russell Road via Road 1 is to be controlled by an automatic lifting arm installed to restrict general traffic associated with the temporary wastewater off-take. In the event of an incident, closure, or significant congestion at the Grand Drive Interchange, this access is to be made available as an alternative route for Stage 1 traffic. The use of this access during incident scenarios is to be managed in coordination with emergency services and the road controlling authority, with appropriate traffic management measures implemented to ensure safety and maintain network function.

This access arrangement applies until the secondary access is opened at Upper Orewa Road.

~~100.~~113. Sufficient carriageway space is to be provided to ensure vehicle tracking in compliance with the Auckland Code of Practice for Land Development and Subdivision Chapter 3 Transport without the footpath or berm widths going below the minimums in the Code.

3.1.6 Lighting Plan

~~101.~~114. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder must submit a Lighting Plan for the JOALs servicing 10 or more dwellings and roads to vest, prepared by a suitably qualified Lighting Engineer, to Auckland Council. The purpose of this condition is to provide adequate lighting for the safety of people. The Lighting Plan must:

(a) Demonstrate compliance with the relevant standards in E24.6.1 Lighting of the Auckland Unitary Plan (Operative in Part); and

(b) Include proposed locations, lux levels and types of lighting (i.e. manufacturer's specifications once a lighting style has been determined) and any light support structures.

Advice Note: Light pole locations shall be reviewed by the Council traffic engineer.

115. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder must submit a Lighting Plan for dwellings within 20m from riparian corridors and the Nukumea Scenic Reserve (SEA). The lighting plan must include the following measures to minimise light spill and intensity, particularly relevant given the known sensitivity of bats and other native fauna to artificial light at night (ALAN):

(a) Use directional, low-intensity, warm-spectrum LED lighting, selecting luminaires with temperatures of 2,700 Kelvins;

(b) Ensuring light levels are attenuated to below 0.3 lux (horizontal and vertical) when measured at the external boundary of forested areas;

(c) Limiting street lights along subdivision roads;

(d) Directing external light fittings away from forested areas and fitting bulbs that have minimal light spill and emit no upwards light; and

Commented [CM24]: Auckland Transport request

Commented [CM25]: Response to Auckland Transport request in relation to turning head.

Commented [CM26]: Request from Auckland Transport in relation to emergency vehicle access

Commented [CM27]: Request from Auckland Transport

Commented [CM28]: Added from Ac traffic

(e) Mounting light fixtures as low as practical.

~~102.~~116. The Lighting Plans must be implemented as part of the subdivision. The JOAL lighting must be maintained by the Residential Society required to be established under Condition 126~~113~~ thereafter.

3.1.7 Geotechnical

~~103.~~117. The consent holder must construct the earthworks, ~~geogrid~~ reinforced earth batters, ~~soils~~ slopes, shear piles, retaining and palisade walls, soil nails, shear keys, counterfort drains and subsoil drainage in accordance with the recommendations of the Riley Consultants Ltd Geotechnical Investigation Report approved under Condition 1 to ensure the site is stable and suitable for development.

~~104.~~118. A Geotechnical Completion Report (GCR) from a suitably qualified and experienced chartered geo-professional must be prepared and submitted to Council to confirm that all residential and commercial lot~~s~~ are stable and suitable for development when applying for a certificate under section 224(c) for a subdivision stage (or sub-stage). The GCR must include a Building Restriction Zone plan that identifies specific design zones and no-build zones. Development must be undertaken in accordance with the recommendations of the GCR.

The preceding paragraph must be registered as a consent notice on the records of title for all residential and commercial lots to ensure that it is complied with on a continuing basis. ~~The specific name and date of the GCR provided must be referenced in the consent notice.~~

Advice note: The specific name and date of the GCR provided must be referenced in the consent notice. Refer to Auckland Council Code of Practice 2023 (Chapter 2) which details expectations of a geotechnical completion report.

~~105.~~119. Certified a~~A~~s-built details of installed counterfort drains ~~shall~~ must be included within the Geotechnical Completion Report, together with records of counterfort drain commissioning observations and flushing.

Advice Note: The drain commissioning information will provide baseline data for the countefort drain operation and maintenance plan. The as-built drawings should~~all~~ also include locations of the flushing ports and outlet structures.

120. Where counterfort drains are installed within a stage of the development, a C~~c~~ounterfort D~~d~~rain O~~o~~peration and M~~m~~aintenance P~~p~~lan (CDOMP) must~~shall~~ be provided as an attachment to the Geotechnical Completion Report to the Council for certification, incorporating a staged maintenance approach. This ~~shall~~ must include the observations to be made, their frequency and any associated actions to ensure their serviceability. Any subsequent revision of the CDOMP must also be submitted to the Council for certification. The consent holder must meet the costs of the production, certification, monitoring and review of the CDOMP.~~-~~

Advice Note:

- *The council acknowledges that the CDOMP is intended to provide flexibility both for the consent holder and the council for the management of the counterfort drainage and slope stability. Accordingly, the CDOMP may need to be reviewed over time. Any reviews should be in accordance with the stated objectives of the management plan and limited to the scope of this consent.*

Commented [CM29]: Updated in response to AC ecology

Commented [CM30]: Updated in response to AC - geotechnical

Commented [CM31]: Updated in response to AC - Geotechnical

Commented [CM32]: Updated in response to AC - geotechnical

- *Certification of the CDOMP by the council relates only to those aspects of the management plan that are relevant under the Resource Management Act 1991. The certification does not amount to an approval or acceptance of suitability by the council of any elements of the management plan that relate to other legislation, for example, but not limited to, the Building Act 2004, the Heritage New Zealand Pouhere Taonga Act 2014, or the Health and Safety in Employment Act 1992.*

Commented [CM33]: Updated in response to AC - geotechnical

3.1.8 Flood Level Report

~~106.~~121. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall submit a Flood Report prepared by a SQEP to Auckland Council for certification. The report shall:

(a) Identify any residential lots that are affected by the 1 in 100-year overland flow path and any adjacent lots situated within 500mm vertical distance of the surface of the 1 in 100-year overland flow path; and

(b) Recommend minimum finished floor levels for any future habitable buildings on the affected lots, with an appropriate freeboard allowance above the predicted flood level.

Advice note: If the required FFL is inconsistent with the FFLs included within the Architectural Drawings, the FFL under Condition 121~~108~~ will take precedence.

3.1.9 Private Stormwater Infrastructure

~~107.~~122. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall prepare an Operation and Maintenance Plan for all residential lots that include on-lot stormwater infrastructure, including raingardens and stormwater roof tanks.

~~108.~~123. The Operation and Maintenance Plan must be prepared and submitted to Auckland Council for certification. The Plan shall include but not be limited to:

(a) A description of the on-lot stormwater infrastructure, including its location, size, and function; and

(b) Procedures and frequency for inspection, maintenance, and cleaning of the stormwater infrastructure and associated components to ensure continued performance.

3.1.10 Waste

~~109.~~124. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall prepare a Waste Management Plan for all residential lots that ~~will~~ may not receive public kerbside collection services and ~~will~~ may instead rely on ~~private~~ on-site waste collection.

~~110. The Waste Management Plan shall be submitted to Auckland Council for certification and shall:~~
~~111.~~125. ~~Identify the private waste collection service(s) to be used;~~

(a) Detail how waste and recycling will be stored on-site in a manner that is safe, sanitary, and does not create a nuisance; and

(b) Identify the proposed waste collection point(s) and demonstrate that they are accessible, safe, and do not adversely affect traffic, pedestrian access, or neighbouring properties.

The certified Waste Management Plan must be implemented prior to the occupation of any residential dwelling on the lots and maintained thereafter by the Residential Society.

Commented [CM34]: Updated as recommended by AC waste

3.1.11 Residential Society

~~112.~~126. Prior to the issue of a s224(c) certificate for the first subdivision stage, the consent holder must prepare the necessary documentation to create a society, body corporate, association or other body acceptable to the Council (hereafter referred to as the "Residential Society") for management of the Common Infrastructure identified below.

Commented [CM35]: Residential society conditions are currently under review and an update will be provided to council as soon as possible.

Stage 1

Common Infrastructure	Ownership and Management Responsibilities	Lots that must pay a levy to the Common Infrastructure
JOALs	JOALs are to be owned and managed in equal shares by all residential lots that access the JOAL, as identified within the approved Scheme Plan under Condition 1. This shall be a sub-group within the Residential Society. The carriageway, lighting and all other infrastructure (e.g., any required stormwater devices) within the JOAL shall be operated, maintained and, when required, renewed by the relevant JOAL sub-group. All costs shall be borne by that JOAL sub-group. Where rubbish collection is to be via "private service" the JOAL responsibilities shall also include the ongoing retention of the private service contact.	• JOAL 1500: Lots 1 – 25, 472, 474 • JOAL 1501: Lots 26 – 31, 470, 477, 478 • JOAL 1502: Lots 56 – 96, 479 – 481 • JOAL 1503: Lots 97 - 119 • JOAL 1504: Lots 130 – 154 • JOAL 1505: Lots 243 – 256 • JOAL 1506: Lots 155 – 195 • JOAL 1507: Lots 204 – 209 • JOAL 1508: Lots 127 – 129 • JOAL 1508: Lots 277 – 279 and 471 • JOAL 1509: 280 – 299 • JOAL 1510: Lots 309 – 320 • JOAL 1511: Lots 335 – 337 • JOAL 1513: Lots 371 – 376 • JOAL 1514: Lots 451 – 467, 600 – 605 • JOAL 1515: Lots 257 – 259 • JOAL 1515: Lots 410 – 414, 475, 690 •
Wastewater Treatment Plant (5002)	Lot 5002 shall be owned by the consent holder (or its subsidiary) and leased to the Residential Society, until an alternative wastewater solution is available. The WWTP shall be operated, maintained and when required, renewed by the Residential Society. All costs shall be borne by the Residential Society.	All residential lots within Stage 1.
Lot 5001 (Wastewater disposal field and existing consent notice area)	Lot 5001 shall be transferred to the Residential Society at the completion of Stage 1 of the development. The Residential Society must ensure the long-term protection of the ecological values of the bush area in	All residential lots within Stage 1.

	accordance with the consent notice obligations. The Residential Society must monitor the wastewater irrigation lines in accordance with the consent conditions.	
Lot 1901, 1904, 1905 and 1908.	Lots 1901, 1904, 1905 and 1908 are to be transferred to the Residential Society at the completion of Stage 1 of the development. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 1.
Bush covenant areas: Lots 14-17, 76-86, 106-127, 155-167, 204-209, 211-226, 228, 251-256, 243-254, 251-254, 260-268, 277-279, 303-307, 315-318, 352-359, and 471	The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 1.

<u>Stage 2</u>

Common Infrastructure	Ownership and Management Responsibilities	Lots that must pay a levy to the Common Infrastructure
JOALs	JOALs are to be owned and managed in equal shares by all residential lots that access the JOAL, as identified within the approved Scheme Plan under Condition 1. This shall be a sub-group within the Residential Society. The carriageway, lighting and all	• JOAL 1522: Lots 675 – 689 • JOAL 1523: Lots 711 – 751 • JOAL 1525: Lots 755, 756 and 764 – 769 • JOAL 1526: Lots 616 – 656 • JOAL 1529: Lots 853 – 858 • JOAL 1530: Lots 867 – 869 • JOAL 1531: Lots 888 – 892 • JOAL 1532: Lots 919 – 931 and 970

	other infrastructure (e.g., any required stormwater devices) within the JOAL shall be operated, maintained and, when required, renewed by the relevant JOAL sub-group. All costs shall be borne by that JOAL sub-group. Where rubbish collection is to be via "private service" the JOAL responsibilities shall also include the ongoing retention of the private service contact.	• JOAL 1533: Lots 948 – 951 • JOAL 1534: Lots 952 – 966 • JOAL 1535: Lots 971 – 981 • JOAL 1537: Lots 1060 – 1069 • JOAL 1538: Lots 1081 – 1086 • JOAL 1539: Lots 1097 – 1102 • JOAL 1540: Lots 1128 – 1137 • JOAL 1541: Lots 1161 – 1165 • JOAL 1542: Lots 1204 – 1211 and 1214 – 1217 • JOAL 1543: Lots 1278 – 1283 • JOAL 1544: Lots 1294 – 1300 and 1304 – 1310 • JOAL 1550: Lots 609, 610
Lot 1922, 1920 and 1910	Lots 1922, 1920 and 1910 are to be transferred to the Residential Society at the completion of Stage 2 of the development. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 2.
Bush covenant areas: Lots 610-615, 931-948, 952-958, 999-1023, 1031-1047, 1052-1055, 1057, 1058, 1060, 1069, 1070, 1215, 1216, 1218-1238, 1246-1250, 1401, 1270-1272 and 1274-1278	The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. The Residential Society must ensure the long-term protection of the ecological values of the bush areas in accordance with the consent notice obligations. All maintenance must be undertaken in accordance with the Implementation and Maintenance Plan approved under Condition 1.	All residential lots within Stage 2.
Wastewater Treatment Plant (5002)	Lot 5002 shall be owned by the consent holder (or its subsidiary) and leased to the Residential Society, until an alternative wastewater solution is available. The WWTP shall be operated,	All residential lots within Stage 1 and Stage 2.

	maintained and when required, renewed by the Residential Society. All costs shall be borne by the Residential Society.	

~~113.~~127. Membership of the Residential Society shall be compulsory for all owners of lots within the development. This obligation shall be secured on the record title of each residential lot by way of consent notice and covenant in gross in favour of the Residential Society.

~~114.~~128. The consent holder shall provide written evidence to Council that the Residential Society includes the following items:

(a) The ownership and management responsibilities of the Residential Society, including the operation, maintenance, repair and renewal of the Common Infrastructure within the development;

(b) Mechanisms for the raising of funds from members to adequately finance the operation, maintenance, repair and renewal of the Common Infrastructure; and

(c) Decision making and dispute resolution requirements.

3.1.12 Infrastructure Servicing

Advice note: Conditions 129~~116~~ and 130~~117~~ are only applicable if a connection can be made to the public water and wastewater systems.

~~115.~~129. The consent holder must make provision for a wastewater connection to be made to the public wastewater reticulation network to serve all residential lots in accordance with the requirements of the wastewater utility service provider. Certification from the utility provider that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

~~116.~~130. The consent holder must make provision for a water connection to be made to the public water reticulation network to serve all residential lots in accordance with the requirements of the water supply utility service provider. Certification from the utility provider that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

~~117.~~131. The consent holder must design and construct connections to the ~~public~~ reticulated stormwater ~~reticulation~~ network to serve all ~~residential~~ lots in accordance with the McKenzie and Co Stormwater Report and Drawings approved under Condition 1. Where connection to a public stormwater network is proposed, the connection must be designed and constructed to ~~and~~ meet~~ing~~ the requirements of the stormwater utility service provider. Certification from the utility provider that any approved public stormwater connections~~works~~ have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

Commented [CM36]: Updated in response to Healthy Waters request

~~118.~~132. The consent holder must design and construct a stormwater outfall structure as a disposal point for stormwater runoff for all allotments that do not have a connection to the public stormwater reticulation system, generally in accordance with the McKenzie & Co Stormwater Report approved under Condition 1. Certification that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

~~119.~~133. The consent holder must make provision for telecommunications and electricity supply to all residential lots accordance with the requirements of the respective utility operators. Certification from the utility operator that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c).

~~120.~~134. Prior to the occupation of any dwellings with Stage 2 of the development, the consent holder must provide evidence that suitable provision has been made for the disposal of wastewater.

Advice note: Condition 134~~121~~ is not applicable if a connection can be made to the public wastewater system.

135. Prior to the issue of section 224c certification, a legal agreement must be prepared and executed between the Consent Holder (or nominated entity) and Auckland Transport to document the terms and conditions that provides the basis for the Consent Holder to reticulate, own and maintain private reticulation pipes that sit within the vested road reserve.

Advice note: This condition only applies where private infrastructure is required to be located within the vested road reserve.

Commented [CM37]: Response to AT feedback

3.1.13 Erosion and Sediment Control

~~121.~~136. Prior to the commencement of any Civil-Construction or Subdivision earthworks at the site, an Erosion and Sediment Control Plan, specific to that stage of subdivision, must be prepared in accordance with Auckland Council Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, June 2016, Incorporating Amendment 3 (GD05), and submitted to the Council for written certification. Earthworks activity on that stage of the site must not commence until the Council has certified that that the ESCP satisfactorily meets the requirements of GD05. The plan must contain sufficient details to address the following matters:

(a) Specific erosion and sediment control measures for the earthworks (location, dimensions, capacity) including the location of any sediment retention ponds, decanting earth bunds, super silt fences, silt fences, clean and dirty water diversion bunds and stabilised construction entrances, in accordance with GD05;

(b) Supporting calculations and design drawings, as necessary;

(c) Details of construction methods;

(d) Monitoring and maintenance requirements;

(e) Catchment boundaries and contour information as necessary; and

(f) Details relating to the management of exposed areas (e.g. grassing, mulching).

3.1.14 Landscaping

Commented [CM38]: New conditions added on request from Auckland Council - parks

137. Prior to the issue of the section 223 application under the RMA (at Engineering Plan Approval stage), the consent holder must submit a detailed streetscape landscaping plan(s) for rain gardens/ street trees/ street gardens for approval by the Manager Parks Planning. In particular, the plans must:

(a) Be prepared by a suitably qualified landscape architect.

(b) Be in general accordance with the Landscape Plans, prepared by Greenwood Associates, and referenced under Condition 1.

(c) Show all planting including details of intended species, location, plant sizes at time of planting and likely heights on maturity, tree pit specifications, the overall material palette, location of streetlights and other service access points.

(d) Ensure that selected species can maintain appropriate separation distances from paths, roads,

street lights and vehicle crossings in accordance with the Auckland Transport Code of Practice.

(e) The provision of root barrier solutions for any encumbered street tree locations.

(f) Include planting methodology.

(g) Comply with the Auckland Code of Practice for Land Development and Subdivision: Chapter 7: Landscape.

Advice note: Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval.

138. Prior to the issue of the section 223 application under the RMA At (at Engineering Plan Approval stage), the consent holder must submit a detailed landscaping plan(s) for stormwater ponds and drainage reserves for approval by the Manager Parks Planning. The plans must:

(a) Be prepared by a suitably qualified landscape architect.

(b) Be in general accordance with the Landscape Plans, prepared by Greenwood Associates, and referenced under Condition 1.

(c) Show all planting including details of intended species, location, plant sizes at time of planting and likely heights on maturity, tree pit specifications, and the overall material palette.

(d) Include planting methodology.

(e) Demonstrate a topographic overlay to illustrate proposed gradient levels within the reserve.

(f) Demonstrate a flood overlay identifying flood-prone areas within the reserve.

(g) Demonstrate all outfalls and retaining walls, including visual assessments within the reserve.

(h) An annotated pavement plan and related specifications, detailing proposed site levels and the materiality and colour of all proposed hard surfacing.

(i) Comply with the Auckland Code of Practice for Land Development and Subdivision: Chapter 7: Landscape.

Advice note: Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval.

139. Prior to issue of section 224(c) certification, all street landscaping must be implemented in accordance with the approved streetscape plans and to the satisfaction of the Manager Parks Planning and landscaped in accordance with the Auckland Code of Practice for Land Development and Subdivision Chapter 7: Landscape, and in particular the following:

(a) The street must be cleared of any construction material, rubbish and surplus soil, and must be maintained in a neat and tidy condition.

(b) Should site factors preclude compliance with any of these conditions, the Manager Parks Planning must be advised in writing as soon as practicable and, in any case, prior to planting, and an alternative soil improvement methodology proposed by the consent holder to the satisfaction of Manager Parks Planning.

(c) Grassing must only be undertaken when the weather is suitable i.e. mild, dull and moist, and when the ground is moist and workable. Where delays occur in the agreed programme which prevents areas being planted, the consent holder must inform the Manager Parks Planning immediately.

140. Prior to the issue of the 224(c) certificate, the consent holder will provide to the Development Engineer and Manager Parks Planning as-built plans for landscape works (hard and soft) within all proposed

parks, reserves and streets to be vested in the following format:

(a) For vested assets from a new development, as-built plans must be provided in digital format (DWG, DXF or GIS shape files on CD or via e-mail) as well as a pdf copy of the signed as-built plan(s).

(b) The following requirements apply to digital formats:

(i) All dimensions are to be in millimetres, and all levels and lengths in metres.

(ii) All locational data must be plotted in New Zealand Transverse Mercator 2000 (NZTM 2000) coordinates in terms of New Zealand Geodetic Datum 2000 (NZGD 2000) datum as approved by Land Information New Zealand (LINZ).

(c) All graphical data to be located/plotted to the following accuracy:

(i) X & Y coordinates +/-100mm

(ii) Z coordinates +/-50mm (e.g. lid level) in terms of the NZTM 2000 coordinates

(iii) Invert levels +/- 20mm.

(iv) Digital plans must show all required information, including specific asset information shown in the Legend of the as-built files. If external reference files, overlay or non-standard font shape files are required for this, then these should also be provided.

(d) The as-built plan (generated from the digital format) and structural drawings must include a signed certification statement by a Licenced Cadastral Surveyor or a Registered Surveyor responsible for the as-built.

(e) The as-built plans must be submitted on standard ISO metric plan sheets, drawn at scales 1:100, 200, 250, 500 or 1:1000 as appropriate or as specified by the Council. The information should fit on one sheet where possible. If this is not possible at A3 size, multiple plan sheets must be submitted with an index sheet. On agreement with Auckland Council, hard copy plans may be saved and submitted in portable document format (pdf) for ease of transmission.

(f) Existing assets must be validated by providing asset information demonstrating appropriate dimensions of the existing known assets via sketch, aerial photo, and location of the assets.

(g) Existing assets and assets to be removed or abandoned must be shown on as-built plans.

(h) Copies of the following documents are required, where these assets will be maintained by Auckland Council.

(i) All assets | Operation and maintenance manuals or asset owner manuals, and any other documentation provided by a supplier for use by an asset owner, e.g. warranty, guarantee.

(ii) Additional documentation will be required for project records. These will be specified in project contract documents or Auckland Council project management manuals.

141. Prior to the issue of the section 224(c), the consent holder must provide for the approval of the Manager Parks Planning a Maintenance Plan, for all planting and landscaping to be established in the road reserve. The Maintenance Plan must include:

(a) Vegetation maintenance policies for the proposed planting, in particular, details of maintenance methodology and dates / frequencies.

(b) Details of watering, weeding, trimming, cultivation, pest and disease control, checking of stakes and ties, pruning and other accepted horticultural operations to ensure normal and healthy plant

establishment and growth; and

(c) Vandalism eradication policies.

142. The consent holder must undertake maintenance for all planting and landscaping within the road reserve in accordance with the approved Maintenance Plan for a two-year period commencing on the date that the section 224(c) certificate is issued. Any maintenance issues deemed unsuitable by the Manager Parks Planning during this period must be remedied by the consent holder at their expense. If any damage/theft to the planting occurs during the maintenance period, the consent holder must replace damaged/stolen plants with the same species and height.

143. Following the issue of the completion certificate under s224(c), the consent holder must submit a Monitoring Report to the Manager Parks Planning, for approval every 3 months for the duration of the two-year maintenance period. The Monitoring Report must include but is not to be limited to the following information in respect of all planting and landscaping established in the road reserve:

(a) Success rates, including growth rates and number of plants lost (including an analysis of the distribution of losses);

(b) State of protection barriers where required;

(c) Canopy maturity, beginnings of natural ecological processes - natural regeneration in understorey, use by native birds, etc;

(d) A running record of fertilisation, animal and weed pest control and replacement of dead plants;

(e) Details on the condition of, and recommendations for maintenance of, the fencing and

(f) Recommendations for replacement of dead plants and implementation of these recommendations (remediation work);

Any recommended remediation work must include a start date for replanting.

The first measure of the survival rate of plants must not be measured any sooner than 12 months following planting.

Advice Note: This condition requires monitoring reports to be submitted for two years following planting. This condition will be deemed satisfied upon a satisfactory final inspection after the maintenance period and subsequent bond release.

144. Prior to section 224(c) for the relevant stage, the consent holder must form the recreation reserves (Lot 1800 and Lot 5020) to a mowable grassed surface, including final shaping, topsoiling, grassing, and removal of weeds and rubbish.

Advice Note: No planting, park furniture, fixtures, structures, shared paths, or other hard or soft landscape works are required as part of this consent.

3.2 Stage 1A

3.2.1 Survey Plan Approval (s223) Condition – Stage 1A

~~122.~~145. The consent holder must submit a survey plan in general accordance with the approved ~~resource consent~~ subdivision scheme plan approved under Condition 1 for Stage 1A. The survey plan must show all lots to vest to Auckland Council (including roads and reserves), all easements and

amalgamation conditions, required by this subdivision consent.

Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.

~~123.~~146. The rights of way and all services easements labelled on the proposed scheme plans approved under Condition 1 must be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The consent holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title.

~~124.~~147. The survey plan must include easements in favour of Auckland Council for all overland flow paths that traverse private lots, in accordance with the requirements of the Stormwater Code of Practice (SW CoP).

~~125.~~148. The survey plan must include an easement in favour of Auckland Council for the public pathway on Lot 1905 to ensure public access is maintained in perpetuity.

~~126.~~149. Lots 2000 - 2002 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the ~~vesting~~ 5010 of the road.

~~127.~~150. Lots 1601-1604 and 1616on the scheme plans approved under Condition 1 must be vested to Auckland Council as land in lieu of reserve – for drainage purposes.

3.2.2 Consent Notices

~~128.~~151. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

Bush covenant lots

~~129.~~152. Lots 14-17, 76-86, 106-127, 155-167, 204-209, 211-226, 228, 251-256, 243-254, 251-254 contain vegetation and freshwater features that are required to be maintained and protected in perpetuity. This comprises the area to be protected as labelled 'bush covenant' on the approved scheme plans under Condition 1.

- No person must cut, damage, fell, willfully injure or destroy any part (including the roots) of any native vegetation present within this area, or conduct any excavation, earthworks, construction, or storage of material or debris within the canopy span of such vegetation without the prior written approval of Auckland Council.
- No person may do anything that would prejudice the health or ecological value of the area to be protected, their long-term viability and/or sustainability.
- The owners must ensure the vegetation and freshwater features are maintained in accordance with the Implementation and Maintenance Plan. This includes the eradication of all pest plants and the control of all pest animals within the areas protected.
- No person may place any building and/or structure within the covenant area.

Geotechnical Stability

~~130.~~153. Development on all residential lots must be undertaken in accordance with the

recommendations of the Geotechnical Completion Report required by Condition 118~~105~~.

Advice Note: The specific name and date of the Geotechnical Completion Report provided must be referenced in the consent notice.

Operation and Maintenance of Stormwater Infrastructure

~~131.~~154. The owners of all residential lots must comply with the certified Operation and Maintenance Plan relating to on-lot stormwater infrastructure, required by Condition 122~~109~~.

Minimum Finished Floor Levels

~~132.~~155. For development on residential lots that are affected by the 1 in 100-year overland flow path, the means of conveying unobstructed overland flow must be provided and maintained. There must be no obstruction of the overland flow with any fencing, object, impermeable landscaping, building, or structure.

~~133.~~156. Development on residential lots that are affected by the 1 in 100-year overland flow path and any adjacent lots situated within 500mm vertical distance of the surface of the 1 in 100-year overland flow path must be undertaken in accordance with the recommendations of the Flood Level Report required by Condition 121~~108~~.

Certification from a SQEP shall be provided to Council, prior to the issue of a Code Compliance Certificate, confirming that the finished floor level complies with this condition.

Residential Society

~~134.~~157. The owners of all residential lots must belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.

3.3 Stage 1B

3.3.1 Survey Plan Approval (s223) Condition – Stage 1B

~~135.~~158. The consent holder must submit a survey plan in general accordance with the approved ~~resource consent~~ subdivision scheme plan approved under Condition 1 for Stage 1B. The survey plan must show all lots to vest to Auckland Council (including roads and reserves), all easements and amalgamation conditions, required by this subdivision consent.

Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.

~~136.~~159. The rights of way and all services easements labelled on the proposed scheme plans approved under Condition 1 must be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The consent holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title.

~~137.~~160. The survey plan must include easements in favour of Auckland Council for all overland flow paths that traverse private lots, in accordance with the requirements of the Stormwater Code of Practice (SW CoP).

~~138.~~161. Lots 2003, 2005 and 2008 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the vesting of the road.

~~139.~~162. Lots 1605, 1606 and 1609 on the scheme plans approved under Condition 1 must be vested to Auckland Council as land in lieu of reserve – for drainage purposes.

~~140.~~163. Lot 1800 shall be transferred to Auckland Council as land in lieu of reserve (for the purpose of recreation) if by the time of application for the survey plan for Stage 1B to be approved under section 223 the consent holder has entered into an agreement with Auckland Council for the sale and purchase of Lot 1800.

~~141.~~164. If no agreement is in place in accordance with Condition 163~~141~~ by the time of application for the survey plan for Stage 1B-2 to be approved under section 223, then Lot 1800 shall be developed into residential lots in accordance with the following plans:

- Scheme plan titled "Alternative Plan for Lots 359 – 370, 1512 Being Subdivision of Lot 1800 DP XXXXXX Stage 1B-1", dated 18 December 2025.
- Architectural plans prepared by Terra Studio titled "A-S1-1-87, A-S1-1-88, A-S1-1-89, A-S1-1-90"

~~142.~~165. Lot 1800 must be free of easements and encumbrances and with no utility devices or structures on the land or on any of its road frontages or berms, unless agreed in writing with Auckland Council.

3.3.2 Consent Notices

~~143.~~166. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

~~144.~~167. If additional lots are included as a result of Condition 164~~142~~, the consent holder must register the below consent notices on the record of title, where relevant.

~~145.~~168. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

Bush covenant lots

~~146.~~169. Lots 260-268, 277-279, 303-307, 315-318, 352-359, and471 contain vegetation and freshwater features that are required to be maintained and protected in perpetuity. This comprises the area to be protected as labelled 'bush covenant' on the approved scheme plans under Condition 1.

- No person must cut, damage, fell, willfully injure or destroy any part (including the roots) of any native vegetation present within this area, or conduct any excavation, earthworks, construction, or storage of material or debris within the canopy span of such vegetation without the prior written approval of Auckland Council.
- No person may do anything that would prejudice the health or ecological value of the area to be protected, their long-term viability and/or sustainability.
- The owners must ensure the vegetation and freshwater features are maintained in accordance with the Implementation and Maintenance Plan. This includes the eradication of all pest plants and the control of all pest animals within the areas protected.
- No person may place any building and/or structure within the covenant area.

Geotechnical Stability

~~147.~~170. Development on all residential lots must be undertaken in accordance with the recommendations of the Geotechnical Completion Report required by Condition 118~~105~~ above.

Advice Note: The specific name and date of the Geotechnical Completion Report provided must be referenced in the consent notice.

Operation and Maintenance of Stormwater Infrastructure

~~148.~~171. The owners of all residential lots must comply with the certified Operation and Maintenance Plan relating to on-lot stormwater infrastructure.

Minimum Finished Floor Levels

~~149.~~172. Development on lots that contain or are located adjacent to Overland Flow Paths (as identified on the survey plan) must be undertaken in accordance with the recommendations of the Flood Level Report required by Condition 121~~108~~.

Certification from a SQEP shall be provided to Council, prior to the issue of a Code Compliance Certificate, confirming that the finished floor level complies with this condition.

Residential Society

173. The owners of all residential lots must belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.

Reserves

174. Residential lots adjoining Lot 1800 (recreation reserve) must ensure that retaining walls and ancillary supporting structures are located entirely within the residential lot and clear of the boundary of the recreation reserve. The retaining wall must be no higher than 1.5m above existing ground level adjacent to Lot 1800. Any fencing, hedging or planting along boundaries or within 2m of boundaries of Lot 1800 must be either low height (1.2m) and at least 50% visually permeable. Council is exempt from sharing costs.

Commented [CM39]: Request from Auckland Council - parks

Advice Notes:

- *Landowner approvals: All works in X Reserve/Park will require Landowner Approval prior to any works being undertaken. Approval requests can be sent to landadvisors@aucklandcouncil.govt.nz*
- *Tree asset owner approvals: Any tree removals or works affecting vegetation on X Reserve/Park land or existing street trees will require Tree Asset Owner Approval from the Community Facilities Urban Forest Specialist Team. Approval requests can be sent to treemanager@aucklandcouncil.govt.nz.*

3.4 Stage 2

3.4.1 Survey Plan Approval (s223) Condition – Stage 2

~~150.~~175. The consent holder must submit a survey plan in general accordance with the approved ~~resource consent~~ subdivision scheme plan approved under Condition 1 for Stage 2. The survey plan must show all lots to vest to Auckland Council (including roads and reserves), all easements and

amalgamation conditions, required by this subdivision consent.

Advice note: The survey plan may be for the whole subdivision stage, or a sub-stage.

~~151.~~176. The rights of way and all services easements labelled on the proposed scheme plans approved under Condition 1 must be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The consent holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title.

~~152.~~177. The survey plan must include easements in favour of Auckland Council for all overland flow paths that traverse private lots, in accordance with the requirements of the Stormwater Code of Practice (SW CoP).

~~153.~~178. The final survey plan for Stage 2 must include an easement in favour of Auckland Council for the public pathways identified on Lot 3000 to ensure public access is maintained in perpetuity.

~~154.~~179. Lot 5020 shall be transferred to Auckland Council as land in lieu of reserve (for recreation purposes) if by the time of application for the survey plan for Stage 2B-3 to be approved under section 223 the consent holder has entered into an agreement with Auckland Council for sale and purchase of Lot 5020.

180. If no agreement is in place in accordance with Condition 179~~170156~~ by the time of application for the survey plan for Stage 2B-3 to be approved under section 223, then Lot 5020 will remain as a balance Lot for the purposes of a neighbourhood park to meet the need for open space to the community it is located within and have registered a consent notice for that purpose.

Advice Note: If a sale and purchase agreement is not entered into, the intended outcome for park and open green space, will still be achieved by the consent holder through the provision of a privately owned and managed open space made available for public use via a common entity.

~~155. will transfer to the Residential Society and the management and maintenance of the reserve shall be included as part of the Residential Society obligations as outlined in 113.~~

Commented [CM40]: Request from Auckland Council - parks

~~156.~~181. Lots 2100, 2102-2106 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the vesting of the road.

~~157.~~182. Lots 161-620, 1621, 1623, 1624, 1627 and 1629 on the scheme plans approved under Condition 1 must be vested to Auckland Council as land in lieu of reserve – for drainage purposes.

3.4.2 Consent Notices

~~158.~~183. Pursuant to section 221 of the RMA, the following consent notices must be registered against the relevant records of title on a continuing basis. The consent notice must be prepared by Auckland Council's solicitor and registered at the consent holders' expense.

Bush covenant lots

~~159.~~184. Lots 610-615, 931-948, 952-958, 999-1023, 1031-1047, 1052-1055, 1057, 1058, 1060, 1069, 1070, 1215, 1216, 1218-1238, 1246-1250, 1401, 1270-1272 and 1274-1278 contain vegetation and freshwater features that are required to be maintained and protected in perpetuity. This comprises the area to be protected as labelled 'bush covenant' on the approved scheme plans under Condition 1.

- No person must cut, damage, fell, willfully injure or destroy any part (including the roots) of any native vegetation present within this area, or conduct any excavation, earthworks, construction, or storage of material or debris within the canopy span of such vegetation without the prior written approval of Auckland Council.
- No person may do anything that would prejudice the health or ecological value of the area to be protected, their long-term viability and/or sustainability.
- The owners must ensure the vegetation and freshwater features are maintained in accordance with the Implementation and Maintenance Plan. This includes the eradication of all pest plants and the control of all pest animals within the areas protected.
- No person may place any building and/or structure within the covenant area.

Geotechnical Stability

~~160.~~185. Development on all residential lots must be undertaken in accordance with the recommendations of the Geotechnical Completion Report required by Condition 118~~105~~.

Advice Note: The specific name and date of the Geotechnical Completion Report provided must be referenced in the consent notice.

Operation and Maintenance of Stormwater Infrastructure

~~161.~~186. The owners of all residential lots must comply with the certified Operation and Maintenance Plan relating to on-lot stormwater infrastructure, required by Condition 122~~109~~.

Minimum Finished Floor Levels

~~162.~~187. Development on lots that contain or are located adjacent to Overland Flow Paths (as identified on the survey plan) must be undertaken in accordance with the recommendations of the Flood Level Report required by Condition 121~~108~~.

Certification from a SQEP shall be provided to Council, prior to the issue of a Code Compliance Certificate, confirming that the finished floor level complies with this condition.

Residential Society

188. The owners of all residential lots shall belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.

Domestic Pets

189. The owners and/or occupiers of lots within Stage 2 of the development must not keep any mustelids, rodents, or cats on the lot at any time.

Commented [CM41]: Response to DOC feedback to address cat ban in stage 2 of the development.

Reserves

190. Residential and commercial lots adjoining Lot 5020 (recreation reserve) must ensure that retaining walls and ancillary supporting structures are located entirely within the residential lot and clear of the boundary of the recreation reserve. The retaining wall must be no higher than 1m above existing ground level adjacent to Lot 5020. Any fencing, hedging or planting along boundaries or within 2m of boundaries of Lot 5020 must be either low height (1.2m) and at least 50% visually permeable. Council

is exempt from sharing costs.

Advice Notes:

- *Landowner approvals: All works in X Reserve/Park will require Landowner Approval prior to any works being undertaken. Approval requests can be sent to landadvisors@aucklandcouncil.govt.nz*
- *Tree asset owner approvals: Any tree removals or works affecting vegetation on X Reserve/Park land or existing street trees will require Tree Asset Owner Approval from the Community Facilities Urban Forest Specialist Team. Approval requests can be sent to treemanager@aucklandcouncil.govt.nz.*

Commented [CM42]: Request from Auckland Council - parks

4.0 Streamworks Conditions (s13)

Pre-commencement

4.1.1 Streamworks Management Plan to be Provided

~~163.~~191. At least 20 working days prior to the commencement of any works within wetlands or streams, a Stream Works Management Plan (SWMP), must be submitted to Auckland Council for certification. The purpose of the SWMP is to provide a finalised streamworks methodology and management measures that enable effects of streamworks to be managed during construction in accordance with best practice.

The SWMP must include as a minimum but is not limited to:

(a) A plan showing the specific areas where streamworks are to occur;

(b) Management measures to demonstrate how erosion and sediment controls will avoid sediment or sediment laden water entering the stream in accordance with best practice;

(c) Management of contaminants to water (e.g. hydrocarbons, construction materials);

(d) An explanation of how and measures to ensure maintenance of fish passage during and after the streamworks is achieved;

(e) Methodology for diverting upstream flows during the streamworks, including how sufficient flow will be maintained at all times below the site of the works to maintain in-stream biota, and the location and nature of any temporary diversion structures;

(f) A detailed methodology for the installation of permanent structure(s); and

(g) Details of final streambed remediation or stabilisation upon completion of stream works.

~~164.~~192. Any changes to the SWMP must be submitted to Auckland Council for re-certification with supporting information demonstrating that the changes to the SWMP meet Condition 191~~166~~, incorporate best practice methodologies for managing effects from the streamworks and that the adverse effects from the streamworks remain the same or less.

193. The methodology for the installation of the short-term surface water diversions must be in general accordance with the memorandum "Delmore – Methodology for Culvert Works within Stream", Appendix D, Earthworks Report, McKensie & Co dated 15 December 2025.

~~165.~~194. Earthworks Report prepared by McKenzie & Co referenced under Condition 1 and dated December 2025.

~~166.~~195. Prior to the commencement of any streamworks (including reclamation of ponds), a Native Fish Capture and Relocation Plan (NFCRP) must be submitted to the Council for certification. The NFCRP must be prepared by a suitably qualified and experienced Freshwater Ecologist and must include the following detail;

(a) Methodologies to capture fish within the impact stream, or justification there is no habitat for native fish present at the time of construction;

(b) Hand search of the base sediments of the stream bed and banks for native fish that may have burrowed into the soils;

(c) Fishing effort;

Commented [CM43]: Response to DOC feedback

Commented [CM44]: Added as per recommendation from AC temporary surface water diversion

(d) Details of the relocation site;

(e) Storage and transport measures including prevention of predation and death during capture;

(f) Euthanasia methods for diseased or pest species;

(g) Confirmation on the habitat availability of the relocation site to support fish at the time of streamworks; and

(h) An accidental discovery protocol for aquatic fauna which require specialised handling and relocation effort that is not otherwise covered in the standard methodologies (i.e. regionally threatened species as per the Conservation Status of Freshwater Fishes in Tāmaki Makaurau / Auckland). This includes a protocol to implement the following actions:

- Immediately cease streamworks (including dewatering) upon accidental discovery of any unexpected aquatic fauna and notify the Council.
- Ensure aquatic fauna are left in a suitable environment where they will be unharmed while the NFCRP is updated.
- Update the NFCRP to address handling and relocation of the unexpected aquatic fauna to be submitted to Council for re-certification.
- Only re-commence the capture and relocation upon re-certification of the NFCRP.

Work in progress conditions

~~167.~~196. All streamworks must be undertaken in accordance with the certified SWMP required by Condition 191~~166~~. All required control measures and methodologies must be in place prior to the streamworks commencing and be maintained for the duration of the streamworks activity.

Commented [CM45]: Response to DOC feedback

~~168.~~197. Native fish capture and relocation must be undertaken in accordance with the certified NFCRP, and must only be undertaken by a suitably qualified and experienced freshwater ecologist. The freshwater ecologist must also be onsite during the dewatering process to ensure that any remaining native fish that is not caught during de-fishing are salvaged.

~~169.~~198. The temporary diversion cut must be designed to provide stable stream bed conditions to avoid scouring and erosion both upstream and downstream of the diversion and any other instability of any land or water body.

~~170.~~199. During periods of flow greater than the capacity of any stream diversion certified under condition 191~~166~~ above, a stabilised flow path up to the 100-year flood event must be provided to ensure no scour or erosion occurs and so that flows can pass safely around or through the area of works with minimum nuisance and damage and with minimal sediment generation or discharge.

Post-Construction Conditions

~~171.~~200. Within 20 working days following completion of the installation of the structure, the consent holder must provide certified (signed) as-built plans that confirm that the structure has been constructed in accordance with the approved plans to Auckland Council.

Advice Note: The consent holder must engage at their own expense a suitably qualified professional engineer to prepare and certify these plans.

~~172.~~201. If any of the routine monitoring or visual inspections identify that provision for fish passage has been reduced, or the culverts are damaged, the consent holder must undertake maintenance, or

remediation works as soon as practicable to remedy the issues identified.

~~173.~~202. Within 20 working days following completion of works associated with the new road culvert crossings, the consent holder must submit to Council the information required by regulations 62 and 63 of the National Environmental Standard for Freshwater (2020).

~~174.~~203. Within 20 working days following completion of works associated with the new road culvert crossings, the consent holder must submit to Council a Fish Passage Monitoring and Maintenance Plan (FPMMP). The FPMMP must specify the ongoing maintenance measures of the culvert structures to ensure fish passage is maintained and must include the following:

(a) Fish passage must be maintained through the culvert structure, and monitoring, maintenance and remediation measures must be undertaken in general accordance with the FPMMP;

(b) If any monitoring or visual inspections identify that provision for fish passage has been reduced, or the culvert structure is damaged, the Consent Holder must undertake maintenance or remediation works as soon as practicable to remedy the issues identified;

(c) The consent holder must maintain a record of all monitoring and maintenance works undertaken on the culvert structure including photos and evidence of any maintenance works undertaken. If requested, the consent holder must provide this record to the Council within 10 working days of the date of request.

5.0 Water Permit for Dewatering and Diversion of Groundwater (s14)

Notice of Commencement of Excavation

~~175.~~204. The Council must be advised in writing at least ten working days prior to the date of the commencement of excavation for the relevant sub-stage of development.

Advice note: For the purpose of compliance with conditions of consent, "the Council" refers to the council monitoring inspector unless otherwise specified. To identify your allocated officer please email monitoring@aucklandcouncil.govt.nz.

Design and Construction

~~176.~~205. The design and construction of the excavations must be undertaken in accordance with the recommendations and analysis contained within the Geotechnical Report approved under Condition 1.

Damage Avoidance

~~177.~~206. All excavation, dewatering systems, retaining structures and works associated with the diversion or taking of groundwater, must be designed, constructed and maintained so as to avoid damage to land, buildings, structures and services on the site or adjacent properties, unless otherwise agreed in writing with the asset owner.

~~178.~~207. At least 20 working days prior to the commencement of bulk earthworks for any stage or sub-stage of the development, a Groundwater and Settlement Monitoring and Contingency Plan (GSMCP) prepared by a SQEP, must be submitted to Council for certification. Any later proposed amendment of the GSMCP must also be submitted to Council for re-certification. The purpose of the GSMCP is to set out the practices and procedures to be adopted to ensure compliance with the consent conditions and shall include, at a minimum, the following information:

(a) A monitoring location plan, showing the location and type of all monitoring stations including groundwater monitoring bores, ground, building, inclinometer and retaining wall deformation pins;

(b) Details of any buildings/structures that require detailed pre-condition surveys, groundwater and ground surface monitoring frequency (in accordance with Schedule B, Schedule C and Schedule D in Attachment 2 of the conditions);

(c) All monitoring data, the identification of services susceptible to damage and all building/service condition surveys undertaken to date;

(d) A bar chart or a schedule, showing the timing and frequency of condition surveys, visual inspections and all other monitoring required by this consent, and a sample monitoring report template (monitoring reports are to be provided at 2-monthly intervals);

(e) Completed Schedule A for alert and alarm level triggers (refer Attachment 2 of the conditions), including reasons if changes are proposed, for example, as a result of recommendations in the building condition surveys or data obtained from pre-dewatering monitoring; and

(f) Details of contingency actions to be implemented if alert or alarm levels are exceeded.

~~179.~~208. All construction, dewatering, monitoring and contingency actions ~~shal~~must~~]~~ be carried out in accordance with the approved GSMCP. No bulk excavation (that may affect groundwater levels) or

other dewatering activities shall commence until the GSMCP is certified by the Council.

~~180.~~209. All excavation, dewatering, retaining structures and works associated with diversion or taking of groundwater, mustsshall be designed, constructed and maintained so as to avoid damage to buildings, structures and services on the site or adjacent properties, unless otherwise agreed in writing with the asset owner.

Pre-Excavation Services Condition Survey

~~181.~~210. Prior to the commencement of excavation, a photographic condition survey (recording evidence of existing observable damage) of any structures within the influence zone of the proposed excavation, must be undertaken by a SQEP and a written report must be prepared and reviewed by the SQEP responsible for overviewing the monitoring.

Advice note: This condition does not apply to any service where written evidence is provided to Council that the owner of that service has confirmed they do not require a condition survey.

~~182.~~211. Prior to the commencement of excavation, a condition survey of the potentially affected stormwater services must be undertaken in consultation with the relevant service provider.

Advice note: This condition does not apply to any service where written evidence is provided to the Council that the owner of that service has confirmed they do not require a condition survey.

External Visual Inspections during Dewatering

~~183.~~212. External visual inspections of the surrounding ground and neighbouring structures within the influence zone of any excavation must be undertaken for the purpose of detecting any new external damage or deterioration of existing external damage. Inspections must be carried out weekly during active excavation, and then monthly until completion of the dewatering. A photographic record must be kept, including time and date, of each inspection and all observations made during the inspection, and must be of a quality that is fit for purpose. The results of the external visual inspections and an assessment of the results must be reviewed by the SQEP responsible for overviewing the monitoring.

Advice note: This condition does not apply to any land, building or structure where written evidence is provided to the Council confirming that the owner of the land, building or structure does not require visual inspections to be carried out.

Monitoring

~~184.~~213. Groundwater monitoring must be undertaken as shown in the approved GSMCP. The monitoring frequency may be changed if approved by the Council. Any change must be specified in the GSMCP.

~~185.~~214. Ground surface and building deformation monitoring stations must be established as required by the GSMCP. The monitoring frequency may be changed, if approved by the Council. The consent holder must request termination of ground surface settlement and building settlement monitoring from Council, supported with a letter of justification for the termination, prepared by a SQEP.

~~186.~~215. Retaining wall deflection stations and inclinometers (where deemed appropriate) for the measurement of lateral wall movement, must be installed along the top of retaining walls where groundwater is anticipated to be encountered.

~~187.~~216. Monitoring of the retaining wall deflection stations and inclinometers must be undertaken and recorded in accordance with the GSMCP and must be carried out using precise levelling, or by string lines between markers. The monitoring frequency may be changed, if approved by the Council, through the GSMCP.

Alert and Alarm Level Actions

~~188.~~217. The activity must not cause any settlement or movement greater than the alarm level thresholds specified in the GSMCP (required by Condition 207~~181~~).

~~189.~~218. In the event of any alert level being exceeded, the consent holder must:

(a) Notify the Council within 24 hours;

(b) Re-measure all monitoring stations within 50m of the affected monitoring locations to confirm the extent of apparent movement;

(c) Ensure the data is reviewed, and advice provided, by a SQEP, on the need for mitigation measures or other actions necessary to avoid further deformation. Where mitigation measures or other actions are recommended, those measures must be implemented;

(d) Submit a written report, prepared by the SQEP responsible for overviewing the monitoring, to the Council within ten working days of alert level exceedance. The report must provide an analysis of all monitoring data (including wall deflection) relating to the exceedance, actions taken to date to address the issue, recommendations for additional monitoring (i.e. the need for increased frequency or repeat condition survey(s) of building or structures), and recommendations for future remedial actions necessary to prevent alarm levels being exceeded.

(e) Measure and record all monitoring stations within 50m of the location of any alert level exceedance every two days until such time that the written report referred to above has been submitted to the Council.

~~190.~~219. In the event of any alarm level being exceeded at any ground deformation pin, retaining wall deflection pin or inclinometer, the consent holder must:

(a) Immediately halt construction activity, including excavation, dewatering, or any other works that may result in increased deformation, unless halting the activity is considered by a SQEP to be likely to be more harmful (in terms of effects on the environment) than continuing to carry out the activity.

(b) Notify the Council within 24 hours of the alarm level exceedance being detected and provide details of the measurements taken.

(c) Undertake a condition survey (this could comprise either a detailed condition survey or an external visual inspection at the discretion of the SQEP responsible for overviewing the monitoring) by a SQEP or suitably qualified building surveyor (SQBS) of any building or structure located adjacent to any monitoring station where the alarm level has been exceeded.

(d) Take advice from the author of the alert level exceedance report (if there was one) on actions required to avoid, remedy or mitigate adverse effects on ground, buildings or structures that may occur as a result of the exceedance.

(e) Not resume construction activities (or any associated activities), halted in accordance with paragraph (a) above, until any mitigation measures (recommended in accordance with

paragraphs (d) above) have been implemented to the satisfaction of a SQEP.

(f) Submit a written report, prepared by the SQEP responsible for overviewing the monitoring, to the Council, on the results of the condition survey(s), the mitigation measures implemented and any remedial works and/or agreements with affected parties within 10 working days of re-commencement of works.

Completion of Dewatering - Building, Structure and Services Condition Surveys

~~191.~~220. Between six and twelve months after completion of construction phase dewatering, a detailed condition survey of all previously surveyed stormwater services must be undertaken by a SQEP, and a written report must be prepared. The report must be reviewed by the SQEP responsible for overviewing the monitoring and then submitted to Council, within one month of completion of the survey.

The condition survey report must make specific comment on those matters identified in the pre-excavation condition survey. It must also identify any new damage that has occurred since the pre-dewatering condition survey was undertaken and provide an assessment of the likely cause of any such damage.

Advice note: This condition does not apply to any Services where written evidence is provided to Council confirming that the owner of that building, structure, or Service does not require a condition survey to be undertaken.

Additional Surveys

~~192.~~221. Additional condition surveys of any building, structure, or service within the area defined by the extent of groundwater drawdown or ground movement, must be undertaken, if requested by the Council, for the purpose of investigating any damage potentially caused by ground movement resulting from dewatering or retaining wall deflection. A written report of the results of the survey must be prepared and/or reviewed by the SQEP responsible for overviewing the monitoring. The report must be submitted to the Council.

~~193.~~222. The requirement for any such additional condition survey will cease six months after the Completion of Dewatering, unless ground settlement is observed during the Dewatering period. In such circumstances the period where additional condition surveys may be required will be extended until monitoring shows that movement has stabilised and the risk of damage to buildings, structures and services as a result of the dewatering is no longer present.

Access to Third Party Property

~~194.~~223. Where any monitoring, inspection or condition survey in this consent requires access to property/ies owned by a third party, and access is declined or subject to what the consent holder considers to be unreasonable terms, the consent holder must provide a report to the Council prepared by a SQEP identifying an alternative monitoring programme. The report must describe how the monitoring will provide sufficient early detection of deformation to enable measures to be implemented to prevent damage to buildings, structures or services. Written approval from the Council must be obtained before an alternative monitoring option is implemented.

Contingency Actions

~~195.~~224. If the consent holder becomes aware of any damage to buildings, structures or services potentially caused wholly, or in part, by the exercise of this consent, the consent holder must:

(a) Notify the Council and the asset owner within two working days of the consent holder becoming

aware of the damage.

(b) Provide a report prepared by a SQEP (engaged by the Consent Holder at their cost) that describes the damage; identifies the cause of the damage; identifies methods to remedy and/or mitigate the damage that has been caused; identifies the potential for further damage to occur and describes actions that must be taken to avoid further damage.

(c) Provide a copy of the report prepared under (b) above, to the Council and the asset owner within ten working days of notification under (a) above.

Advice Note: It is anticipated the Consent Holder will seek the permission of the damaged asset to access the property and asset to enable the inspection/investigation. It is understood that if access is denied the report will be of limited extent.

Building, Structure, and Services Surveys and Inspections

~~196.~~225. A copy of all condition surveys and photographic records required by this consent must be provided to the Council upon request.

Notice of Completion

~~197.~~226. The Council must be advised in writing within ten working days of when the construction phase dewatering has been completed for the relevant sub-stage of development.

6.0 Stormwater Discharge Permit (s15)

6.1.1 Minor modifications

~~198.~~227. In the event that any minor modifications to the stormwater management works are required, that will not result in an application under section 127 of the RMA, the following information must be provided:

(a) Plans and drawings outlining the details of the modifications; and

(b) Supporting information that details how the proposal does not affect the capacity or performance of the stormwater management system.

All information must be submitted to Auckland Council, prior to implementation.

6.1.2 Raingardens

~~199.~~228. The detailed design of all proposed raingardens shall be carried out in accordance with Auckland Council's GD01 – Guidance Document for Stormwater Management Devices in the Auckland Region and Auckland Council's Stormwater Code of Practice (Version 4).

~~200.~~229. The raingardens shall be designed to:

(a) Provide water quality treatment in accordance with the requirements of GD01;

(b) Achieve stormwater retention and detention volumes as required to meet the hydrology mitigation requirements for the development; and

(c) Maintain the design intent as presented in the application, including integration into the streetscape or landscape design where relevant.

Evidence demonstrating compliance with these requirements shall be submitted to and approved by Auckland Council prior to lodgement of Engineering Plan Approval.

6.1.3 Operation and Maintenance ~~Plan~~

~~201.~~230. An Operation and Maintenance Plan (OMP) for all stormwater management devices proposed to be vested in Council shall be submitted to Auckland Council Healthy Waters Operations Team for certification at the time of Engineering Plan Approval. The OMP must comply with Healthy Waters Operation and Maintenance Plan Template.

6.1.4 Post-Construction Conditions

~~202.~~231. As-Built certification and plans of the stormwater management works, which are certified (signed) by a chartered professional engineer as a true record of the stormwater management devices, must be provided to Auckland Council within 20 working days of the completion of the stormwater management works.

~~203.~~232. The As-Built plans must display the entirety of the stormwater management system, and must include:

(a) The surveyed location (to the nearest 0.1m) and level (to the nearest 0.01m) of the discharge structure, with co-ordinates expressed in terms of NZTM and LINZ datum;

(b) The location, dimensions and levels of any overland flow paths including cross sections and long

sections;

(c) Plans and cross sections of all stormwater management devices, including confirmation of the water quality volume, storage volumes and levels of any outflow control structure; and

(d) documentation of any discrepancies between the design plans and the As-Built plans if modified in accordance with Condition 227~~201~~.

7.0 Wastewater Discharge Permit (s15)

Advice Note: The Wastewater Discharge Permit applies to treated wastewater being discharged on the site. They are not applicable if the development connects to the public wastewater network, or untreated wastewater is taken off-site.

~~204.~~233. The WWTP shall be designed and constructed in general accordance with the "Delmore Wastewater Treatment Plant Design Report" prepared by Apex and approved under Condition 1.

~~205.~~234. Conditions 235~~209~~ - 276~~244~~ must be complied with on a continuing basis whilst the WWTP is in operation.

7.1.1 Wastewater Treatment Plant

~~206.~~235. The site must be operated and managed in accordance with the Wastewater Management Plan (WMP) approved under Condition 1 while the WWTP is operational. During this period:

(a) The WMP must be reviewed and updated after 12 months from the date of commissioning of the WWTP, to ensure all components of the WMP are still relevant;

(b) The WMP must be kept on site and accessible at all times;

(c) The Hazardous Substance Inventory, associated Material Safety Data Sheets, and Spill Response Plan must be kept up to date and maintained onsite at all times;

(d) Suitable spill kits must be made available onsite at all times; and

(e) The consent holder must report all spills over 20 litres, or any discharge of environmentally hazardous substances, including wastewater to the environment, to Auckland Council within 24 hours of the spill occurring.

7.1.2 Monitoring

~~207.~~236. Prior to the exercise of this wastewater discharge permit, the consent holder shall install a flow meter or flow meters to record the daily volume of wastewater discharged to each of the discharge locations.

~~208.~~237. A record of the volume of wastewater discharged daily at each of the discharge locations shall be kept by the consent holder at all times. The consent holder shall forward the record for the previous year to Auckland Council upon request.

~~209.~~238. The land infiltration trench and irrigation fields shall be monitored and maintained by a suitably qualified individual to ensure it continues to perform as intended.

~~210.~~239. Maintenance of the land infiltration trench and irrigation fields shall be carried out at a minimum of 3 monthly and a record of any maintenance carried out shall be kept on site and available for review upon request by the council. At a minimum, maintenance shall include:

- Flushing of irrigation lines;
- Check that any sequencing valves are operating as intended;
- A walkover of the irrigation fields to check for ponding, runoff, or broken lines;
- Inspection of the land infiltration trench for weeds or other potential sources of blockages; and

- Check for odour.

All maintenance procedures shall be listed in the Wastewater Management Plan and/or Operations and Maintenance Plan.

Receiving Soils Monitoring Plan

240. At least 20 working days prior to discharge commencing, the consent holder shall submit to Council for certification a Receiving Soils Monitoring Plan (RSMP) for all irrigation areas and land treatment areas. The plan shall identify:

(a) Baseline soil sampling locations and depths;

(b) Parameters to be monitored, including at least total nitrogen, nitrate-nitrogen, ammonium-nitrogen, Olsen phosphorus or equivalent plant-available phosphorus, pH, electrical conductivity, sodium adsorption ratio or sodicity indicator, organic matter, and soil permeability/infiltration characteristics;

(c) Sampling frequency;

(d) Trigger levels for management response; and

(e) Corrective actions if adverse trends are identified.

Baseline and ongoing soil monitoring

241. The consent holder shall:

(a) Undertake baseline soil monitoring before the first discharge to each irrigation area; and

(b) Thereafter undertake soil monitoring at least annually for the first 5 years, and thereafter at a frequency approved by Council based on demonstrated performance.

242. If monitoring identifies nutrient accumulation, declining infiltration, salinity/sodicity effects, or other deterioration in soil condition attributable to the discharge, the consent holder shall investigate and implement remedial action.

Commented [CM46]: Added in response to AC wastewater

~~211.~~

7.1.3 Volume

~~212.~~243. During the summer period (December to February) the daily average volume of treated wastewater discharged on site must not exceed a total of 101.5m^3/day (as a 3 month rolling average from December to February), made up of an average of:

(a) 38.5m^3/day to the land infiltration trench; and

(b) 63m^3/day to land irrigation.

The remainder of the treated wastewater must be trucked off-site to be disposed of at an appropriate facility.

~~213.~~244. Outside the summer period (March to November), the daily average volume of treated wastewater discharged on site to the irrigation field (or the land infiltration trench, or a combination of both), must not exceed 257m^3/day (as a 9 month rolling average from March to November).

7.1.4 Treated Wastewater

~~214.~~245. Outside of the summer period (March to November), as measured immediately prior to discharge to the land infiltration trench, the treated wastewater discharged to the land infiltration trench must comply with the following daily mass loading limits:

Parameters	12-month median daily equivalent
Total Nitrogen [mg/L]	0.22
Ammoniacal Nitrogen (mg/L)	0.065
cBOD5 [mg/L]	0.44
Total Suspended Solids [mg/L]	0.87
Total Phosphorus [mg/L]	0.015
Escherichia-coli [CFU/100mL]	<4.0
Enterococci [cfu/100mL]	<4.0

Advice note: For the purposes of this condition (March through November), to determine compliance with the consent limits, the daily total volume of treated wastewater discharged to the Land Infiltration Trench shall be taken from a totalised value as provided by the flow meter and as recorded from midnight to midnight in line with the requirements of Condition 236~~210~~.

The concentration of the parameters detailed in the table above used to calculate mass loadings shall be as sampled and tested in accordance with Condition 256~~226~~ by a suitably qualified and experienced person/individual/professional and tested by an IANZ accredited laboratory.

The basis for calculation shall be as follows:
Daily mass loading (kg/d) = (Totalised Daily flow (m3/d) x 1,000) x (Parameter Concentration (mg/L) / 1,000,000)

~~215.~~246. Inside of the summer period (December to February), as measured immediately prior to discharge to the land infiltration trench, the treated wastewater discharged to the land infiltration trench must comply with the following daily mass loading limits.

Parameters	12-month median daily equivalent
Total Nitrogen [mg/L]	0.038
Ammoniacal Nitrogen (mg/L)	0.012
cBOD5 [mg/L]	0.08
Total Suspended Solids [mg/L]	0.15
Total Phosphorus [mg/L]	0.0027
Escherichia-coli [CFU/100mL]	<4.0
Enterococci [cfu/100mL]	<4.0

Advice note: For the purposes of this condition, to determine compliance with the consent limits, the daily total volume of treated wastewater discharged to the Land Infiltration Trench shall be taken from a totalised value as provided by the flow meter and as recorded from midnight to midnight in line with the requirements of Condition 236~~210~~.

The concentration of the parameters detailed in the table above used to calculate mass loadings shall be as sampled and tested in accordance with Condition 256~~226~~ by a suitably qualified and experienced person/individual/professional and tested by an IANZ accredited laboratory.

The basis for calculation shall be as follows:
Daily mass loading (kg/d) = (Totalised Daily flow (m3/d) x 1,000) x (Parameter Concentration (mg/L) / 1,000,000).

~~216.~~247. Should three consecutive samples return results above the median mass load limits for the parameters detailed in Condition 245~~216~~ or Condition 246~~217~~ (depending on the time of the year), the consent holder shall notify Auckland Council within 5 working days. The consent holder must then conduct an investigation into the cause, supported by a report to be supplied to Auckland Council. The report shall outline the actions being undertaken to address and remedy the cause of the exceedance and detail whether further monitoring is required.

~~217.~~248. The UV dose must be greater than 16mWs/cm2 95% of the time, while discharging.

~~218.~~249. Chlorine must not exceed 3 mg/L as Free Available Chlorine at the point of discharge to land irrigation.

Advice note: Condition 249~~220~~ relates solely to land irrigation, Condition 266~~234~~ applies to the infiltration trench.

~~219.~~250. The consent holder shall maintain sufficient on-site holding capacity at all times to avoid unauthorised discharge, including during delays to tanker collection or temporary closure of any receiving facility. No wastewater shall be loaded to or stored in a manner that could result in overtopping, leakage, or emergency discharge to land or water.

Commented [CM47]: Added in response to AC wastewater

7.1.5 Treated Wastewater Monitoring

~~220.~~251. Prior to the exercise of this consent, the consent holder must establish adequate facility and access for wastewater quality sampling of the treated wastewater before the wastewater discharges to the land application area.

~~221.~~252. The consent holder must continuously monitor treated wastewater discharge flows and volume, with data linked to the wastewater treatment plant SCADA system.

~~222.~~253. The consent holder must ensure and be able to demonstrate that a UV dose of a minimum of 16mWs/cm^2 is delivered by the UV disinfection facility 95% of the time (calculated on the basis of a 15-minute average, while discharging) over each calendar month.

~~223.~~254. The consent holder must take 24-hour flow proportioned samples of the treated wastewater on a fortnightly basis from the treated wastewater compliance monitoring point and analyse for the parameters set out below.

Parameters	Unit

Total Nitrogen	(mg/L)
Ammoniacal Nitrogen	(mg/L)
Nitrate Nitrogen	(mg/L)
Nitrite Nitrogen	(mg/L)
Soluble cBOD5	(mg/L)
Total Suspended Solids	(mg/L)
Dissolved Reactive Phosphorus	(mg/L)
Total Phosphorus	(mg/L)
Escherichia-coli	(cfu/100mL)
Enterococci	(cfu/100mL)
Temperature	°C
Electrical Conductivity	□S/cm
Total Residual Chlorine	(mg/L)
pH	-

~~224.~~255. No more than 12 samples out of any 24 consecutive fortnightly samples shall exceed the specified limit.

~~225.~~256. The treated wastewater compliance monitoring point shall be at a location within the treatment plant compound, immediately following the final wastewater treatment plant step. All wastewater quality analyses must be undertaken by an IANZ accredited or equivalent laboratory. All methods used must be appropriate for the wastewater analyses undertaken.

7.1.6 Discharge to Irrigation Field

257. The irrigation fields shall be designed in general accordance with the *"Delmore Water and Wastewater Treatment Plant Design Report"* (dated December 2025, by Apex).

258. The consent holder must submit the detailed design of the irrigation fields to Auckland Council before installation. The detailed design must include, at a minimum:

(a) A final layout of the overall irrigation fields and irrigation zones;

(b) A layout showing buffer distances from watercourses, buildings, bores and other features requiring buffer separation from the irrigation drip lines; and

–Details of the irrigation system design, including dripline type, emitter type, emitter spacing and lateral spacing.

~~(c)~~

~~(d)~~(c)

259. Before operation of any irrigation area, the consent holder shall provide to Council:

(d) As-built plans of all irrigation lines, valves, zones and buffers;

(e) Certification from a SQEP that the irrigation system has been installed in accordance with the certified design; and

(f) Confirmation that all buffer setbacks to bores, watercourses, buildings and other sensitive

features have been achieved.

260. No treated wastewater shall be applied to land irrigation areas when soils are saturated, when rainfall conditions are such that ponding or runoff is likely.

261. No treated water shall be applied to land within 40 metres of any bore used for abstraction of water for human consumption.

~~226.~~262. The total nutrient loading into the irrigation field must not exceed the following application rates:

Nutrient	Loading
Total Nitrogen	220kg/Ha.year
Total Phosphorous	80 kg/Ha.year
Biological Oxygen Demand	600kg/Ha.day

~~227.~~ The maximum loading rate to the irrigation fields shall not exceed 3mm/day.

~~228.~~

~~229.~~263. ~~Irrigation at the disposal must not result in ponding or runoff.~~

264. A buffer zone of a minimum of 15 metres must be maintained between the discharge of wastewater in the irrigation field and any surface water body.

265. The consent holder must maintain a monthly record of:

(a) the volume discharged to each irrigation zone;

(b) the nutrient concentrations used for loading calculations; and

(c) the resulting nitrogen and phosphorus loading rate for each zone and for the irrigation field as a whole.

These records shall be provided to Council on request and summarised annually.

Commented [CM48]: Updated in response to AC - wastewater

~~230.1. The consent holder must submit the detailed design of the irrigation fields to Auckland Council before installation. The detailed design must include, at a minimum:~~

~~(a) A final layout of the overall irrigation fields and irrigation zones;~~

~~(b)~~(a) ~~A layout showing buffer distances from watercourses, buildings, bores and other features requiring buffer separation from the irrigation drip lines; and~~

~~(c)~~(a) ~~Details of the irrigation system design, including dripline type, emitter type, emitter spacing and lateral spacing.~~

7.1.7 Discharge to Land Infiltration Trench

~~231.~~266. No chlorine dosing must take place into the discharge to the land infiltration trench.

~~232.~~267. The discharge trench must be fenced off and signposted to discourage access to the area.

~~233.~~268. The infiltration trench shall be monitored and maintained by a SQEP to ensure it continues to perform as intended. A record of any maintenance carried out shall be kept on site and available for review upon request by the council.

7.1.8 Performance Monitoring

~~234.~~269. Within one month of the first exercise of this wastewater discharge permit, the consent holder must supply Auckland Council with a Producer Statement/Certificate of Compliance from a SQEP, certifying that the Wastewater Treatment Plant, irrigation fields and land contact infiltration trench have been constructed as required by this consent.

7.1.9 Receiving Environment Monitoring

Monitoring Locations

~~235.~~270. The consent holder must undertake surface water quality monitoring, and ecological surveys as described in Conditions 271~~239~~ - 274~~242~~ at the general locations within the unnamed tributary of the Orewa River, as follows:

(a) A control site, 'US', situated approximately 100m upstream from the land contact infiltration trench discharge.

(b) An impact site, 'DS-1', situated approximately 50m downstream from the land contact infiltration trench discharge.

(c) A second impact site, 'DS-2', situated approximately 50m downstream of the main channel's confluence with a tributary.

Surface Water Quality Monitoring

~~236.~~271. Surface water quality sampling must be undertaken:

(a) For a period of at least 12 months prior to commencement of discharge, at quarterly intervals, to establish baseline conditions and seasonal variability.

(b) Following the commencement of the discharge, at quarterly intervals.

(c) Once the development has been operating at design capacity for a minimum of two years, the sampling frequency may be reduced to once every three years, in consultation with Council, provided monitoring demonstrates no significant discharge-related reduction in surface water quality and no incidents having been reported under Condition 247~~218~~.

~~(c)~~(d) The survey data must be provided to Auckland Council within 20 working days of the survey being carried out.

Commented [CM49]: Updated in response to DOC feedback

~~237.~~272. All surface water quality samples must be tested for the following parameters:

(a) pH

(b) Total suspended solids

(c) Total ammoniacal nitrogen

(d) Nitrate-nitrogen

(e) Total nitrogen

(f) Dissolved reactive phosphorous

(g) Total phosphorous

(h) Escherichia coli

(i) Enterococci

(j) Soluble carbonaceous five-day biochemical oxygen demand ($cBOD_5$)

All sample analyses must be undertaken by an IANZ accredited or equivalent laboratory.

Ecological Monitoring

~~238.~~273. Ecological surveys must be undertaken:

(a) Once, prior to the commencement of the discharge, during summer (between December and February).

(b) Annually, following the commencement of the discharge, during summer (between December and February).

(c) Once the development has been operating at design capacity for a minimum of two years, the sampling frequency may be reduced to once every three years, in consultation with the Consent Authority, provided monitoring demonstrates no significant discharge-related deterioration in ecological condition and no incidents having been reported under Condition 247~~218~~.

~~(c)~~ The survey data must be provided to Auckland Council within 20 working days of the survey being carried out.

(d)

~~239.~~274. Each ecological survey must include:

(a) A qualitative assessment of physical habitat characteristics.

(b) Collection and analysis of macroinvertebrate samples.

(c) Overnight fish trapping.

Incident Reporting

~~240.~~275. Where surface water quality sampling and/or ecological surveys identify a deterioration in water quality and/or ecological health that is attributable to the WWTP discharge, the consent holder shall:

(a) Immediately investigate the cause and extent of the deterioration.

(b) Provide a report to the Council within 20 working days of becoming aware of the deterioration, including recommended actions.

(c) Implement any remedial measures required to address discharge related effects.

Monitoring Report

~~241.~~276. The consent holder must prepare an Annual Environmental Monitoring Report (AEMR) to be submitted to Council by each anniversary of consent commencement. The AEMR must include:

(a) All monitoring results required by Conditions 271~~239~~ - 274~~242~~.

(b) A comparison of monitoring results against baseline conditions (including seasonal variability) and relevant guideline values.

Commented [CM50]: Update in response to DOC feedback

~~(c)~~ An assessment as to whether any observed changes are attributable to the WWTP discharge, including any reporting required under Condition 275~~243~~.

(c)

7.1.10 Spill Response and Emergency Management

277. The consent holder shall maintain spill kits and emergency response procedures at the loading area and along the tanker loading interface. In the event of any spill, leak, tanker rollover, hose failure, or other accidental discharge, the consent holder shall:

(a) immediately stop the discharge if safe to do so;

(b) contain and recover the spill;

(c) prevent any wastewater entering the stormwater system or watercourses;

(d) notify Council as soon as practicable; and

(e) provide a written incident report within a specified period.

7.1.11 Annual Report

278. Upon completion of commissioning of the wastewater treatment plant and when the plant approaches normal operation, the consent holder shall engage a suitably qualified and independent wastewater professional to undertake an annual audit of:

(a) Treatment plant performance;

(b) Compliance with discharge limits;

(c) Irrigation and infiltration field performance;

(d) Maintenance records;

(e) Alarm history;

(f) Incidents, spills, odour complaints, and corrective actions; and

(g) Adequacy of on-site discharge capacity relative to actual flows.

Commented [CM51]: Request from AC - wastewater

8.0 Air Discharge Permit (s15)

Advice Note: The Air Discharge Conditions are not applicable if the development connects to the public wastewater network.

8.1.1 Odour Management Plan

~~242.~~279. The consent holder must prepare and submit to Auckland Council a Final OMP for certification. The OMP must incorporate a series of monitoring, management and operational procedures, methodologies and contingency plans, and together shall accurately record all information required to comply with the conditions of this consent.

~~243.~~280. The OMP must be in general accordance with the Draft OMP provided under Condition 1 and must include the following:

(a) Identification of all point sources for discharges of contaminants into air, including a map and schematic diagram showing the location of each source;

(b) Procedures to minimise discharges of contaminants into air (including odour), including details of the inspection, maintenance, monitoring and contingency procedures in place for the wastewater treatment plant and the trucking of untreated wastewater off-site;

(c) The operating parameters of odour control equipment and the frequency and scope of the regular checks to be performed on emissions control equipment; including testing of the carbon bed saturation;

(d) Procedures for the monitoring of odour, including details of inspection procedures, recording requirements and contingency measures;

(e) The identification of staff responsibilities; and

(f) The procedures for the receipt, recording and handling of air quality complaints received.

~~244.~~281. The OMP must be reviewed on an annual basis and any subsequent changes to the certified OMP must be submitted to the council for certification prior to implementation. The council will advise the Consent Holder in writing if any aspects of the OMP are considered to be inconsistent with achieving the provisions of this consent.

Advice Note: The council acknowledges that the OMP is intended to provide flexibility both for the consent holder and the council for the management of the air discharges. Accordingly, the OMP will be reviewed over time. Any reviews should be in accordance with the stated objectives of the management plan and limited to the scope of this consent.

8.1.2 Air Discharges Limits

~~245.~~282. All processes associated with the management of wastewater must be operated, maintained, supervised, monitored and controlled in accordance with the OMP in accordance with Condition 279~~245~~ - 280~~246~~ to ensure that all emissions authorised by this consent are maintained at the minimum practicable level.

~~246.~~283. Discharges of contaminants into air from the site must not cause:

(a) Odour that is noxious, dangerous, offensive or objectionable effect beyond the boundary of the Site, in the opinion of an enforcement officer.

(b) Visible emissions (other than water vapour/steam or heat haze) that cause a dangerous, offensive or objectionable effect, in the opinion of an enforcement officer.

Advice Note: Air discharge limits

Condition 283~~249~~ is to be assessed by suitably trained council enforcement officers in accordance with the procedures outlined in the Good Practice Guides for Odour (Ministry for the Environment, 2016), including consideration of the FIDOL factors (frequency, intensity, duration, offensiveness and location) for amenity effects (dust, odour and visible emissions).

8.1.3 Untreated Wastewater to be Taken Off-Site

~~247.~~284. The consent holder must design and construct an odour control system for air that is displaced from the tankers during filling. The odour control system must be designed so that the discharge will not cause odour that is noxious, dangerous, offensive or objectionable to any residential dwellings.

~~248.~~285. The consent holder must design and construct an odour control system for vented emissions from the holding tank. The odour control system must be designed so that the discharge will not cause odour that is noxious, dangerous, offensive or objectionable to any residential dwellings.

~~249.~~286. Within one month of the installation of the odour control systems, the Consent Holder must provide to the Council a report from an appropriately qualified person, which verifies that the design and installation of the odour control system has been undertaken in accordance with Conditions 284~~250~~ and 285~~251~~.

8.1.4 Wastewater Treatment Plant

~~250.~~287. Air discharges from solids screening and storage and sludge dewatering and storage must be extracted to an emission control system (including an activated carbon scrubber) and discharged from a stack at least 3m above ground level or the apex height of the nearest building within 20 metres, without obstruction of the vertical discharge of air.

~~251.~~288. Within one month of the WWTP commencing treatment, the Consent Holder must provide to the Council a report from a SQEP, which verifies that the design and installation of the WWTP and odour control system (including the odour extraction and treatment system) has been undertaken in accordance with Condition 287~~253~~.

8.1.5 Monitoring and Reporting Conditions

~~252.~~289. Within 3 months of exercising this resource consent, The consent holder must:

(a) Operate and maintain a weather station on the site to measure and record the air temperature, wind direction and wind velocity on a continuous basis (at no less than 10-minute intervals). The weather data must be retained for at least the duration of the resource consent.

(b) Weather data of any period must be provided to Auckland Council within 5 days of a request.

(c) The weather station must be located on the site in a location which, as far as is practicable, is unaffected by surrounding structures or vegetation or other features for the purpose of ensuring the most accurate measurements as practicable on the site.

(d) The weather station must be installed and operated in accordance with AS/NZS 3580.14:2014 (Methods for sampling and analysis of ambient air - Meteorological monitoring for ambient air quality monitoring applications).

290. Within two months of the first operation of the wastewater treatment plant and commencement of tanker filling activities (whichever occurs first), the consent holder must engage a SQEP to undertake a post-commissioning odour assessment.

The assessment must:

(a) Include field-based odour observations at and beyond the site boundary under representative operating conditions for both the WWTP and tanker filling activities;

(b) Be carried out in general accordance with the Ministry for the Environment's Good Practice Guide for Assessing and Managing Odour (2016);

(c) Identify any odour that is, in the opinion of the SQEP, offensive or objectionable beyond the boundary of the site; and

(d) Recommend corrective actions where necessary to avoid future odour effects.

Within 20 working days of completing the assessment, the consent holder must provide the odour assessment report to the Council and implement any corrective actions identified in the report within the timeframe specified by the SQEP.

Commented [CM52]: New odour condition added in based on recommendation from AC air quality

~~253.~~291. The Council must be notified as soon as practicable in the event of any significant discharge to air, which results or has the potential to result in a breach of air quality conditions or adverse effects on the environment. The following information must be supplied:

(a) Details of the nature of the discharge including any wind conditions as recorded under condition 289~~255~~ during the incident timeframe.

(b) An explanation of the cause of the incident.

(c) Details of remediation action taken.

Advice Note: Significant discharges to be notified to council in accordance with this condition include abnormal discharges arising from unexpected failures of the WWTP (including emission control systems). An email to monitoring@aucklandcouncil.govt.nz should be sent detailing the nature of the issue and what contingency measures are to be implemented to minimise potential air quality effects.

~~254.~~292. All air quality complaints that are received must be recorded and if requested by Council, provided to Council within one working day of the complaint. The recorded complaint details must include:

(a) The date, time, location and nature of the complaint.

(b) The name, phone number and address of the complainant, unless the complainant elects not to supply these details.

(c) Weather conditions, including wind speed and direction, at time of the complaint.

(d) Any remedial actions undertaken.

9.0 Archaeological Authority

Commented [CM53]: This will be updated to reflect HNZPT amendments, as per discussions with council

~~255.~~293. All works must be undertaken in accordance with the Archaeological Management Plan (AMP) prepared by Clough and Associates titled "Delmore Proposed Residential Development, Upper Ōrewa, Auckland" dated December 2025 (AMP). Any changes to the AMP require the prior written agreement of Heritage New Zealand Pouhere Taonga.

~~256.~~294. A copy of the AMP (and any updates to these documents) shall be provided to Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga.

~~257.~~295. Any activity undertaken at the site under the archaeological authority must conform to accepted archaeological practice.

~~258.~~296. Within 12 months of the completion of the on-site archaeological work, the authority holder shall ensure that a final report, completed to the satisfaction of Heritage New Zealand Pouhere Taonga and following the Archaeological Report Guideline (AGS12 2023), is submitted to Heritage New Zealand Pouhere Taonga for inclusion in the Heritage New Zealand Pouhere Taonga Archaeological Reports Digital Library.

(a) One hard copy and one digital copy of the final report are to be sent to the Heritage New Zealand Pouhere Taonga Senior Archaeologist.

(b) Digital copies of the final report must also be sent to: the NZAA Central Filekeeper, Auckland Museum, Auckland Council, and Tangata Whenua.

~~259.~~297. Prior to any works commencing, the authority holder must ensure that all contractors working on the project are briefed on site by the approved person, who may appoint a SQEP to carry out the briefing on their behalf, on:

(a) The possibility of encountering archaeological evidence;

(b) How to identify possible archaeological sites during works;

(c) The archaeological work required by the conditions of this authority; and

(d) Contractors responsibilities with regard to notification of the discovery of archaeological evidence to ensure that the authority conditions are complied with.

~~260.~~298. Prior to the start of any on-site archaeological work, the authority holder must ensure that Heritage New Zealand Pouhere Taonga is advised of the date when work will begin. This advice must be provided at least two (2) working days before work starts. The authority holder must also ensure that Heritage New Zealand Pouhere Taonga is advised of the completion of the on-site archaeological work, within five (5) working days of completion.

~~261.~~299. All earthworks that may affect any archaeological sites must be monitored by the approved person who may appoint a person to carry out the monitoring on their behalf.

~~262.~~300. In addition to any tikanga agreed to between the authority holder and Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga provided with the authority application, the following shall apply:

(a) If any kōiwi (human remains) are encountered, all work should cease within 5 metres of the discovery. The Heritage New Zealand Pouhere Taonga Senior Archaeologist, New Zealand Police and [name of Tangata Whenua] must be advised immediately in accordance with Guidelines for

Kōiwi Tangata/Human Remains (AGS8 2010) and no further work in the area may take place until future actions have been agreed by all parties;

(b) Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga shall be informed if any possible taonga or Māori/Moriori artefacts are identified to enable appropriate tikanga to be undertaken, so long as all statutory requirements under the Heritage New Zealand Pouhere Taonga Act 2014 and the Protected Objects Act 1975 are met;

(c) Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga shall be provided with a copy of any reports completed as a result of the archaeological work associated with this authority and be given an opportunity to discuss it with the s45 approved person if required.

~~263.~~301. Annually, from the date of issue of this authority, Site Record Forms are to be updated or submitted to the NZAA Site Recording Scheme, and the authority holder must submit to the Heritage New Zealand Pouhere Taonga Senior Archaeologist and Ngāti Manuhiri, Te Kawarau ā Maki, te Runanga o Ngāti Whātua, and Ngaati Whanaunga a written report containing a summary of the progress of the project.

Attachment 1 – Table of Plans and Reports

Commented [CM54]: This will need to be updated but best to leave until later.

Report title and reference	Author	Rev	Dated
Ecological Impact Assessment	Viridis	N/A	18/12/2025
Arboricultural Assessment	Peers Brown Miller	1	19/12/2025
Draft Stormwater Management Plan	McKenzie & Co	C	2/07/2025
Preliminary Site Investigation	Williamson Water and Land Advisory	4	16/12/2025
Geotechnical Report	Riley Consultants	1.0	19/12/2025
Geotechnical Supplementary Memo	Riley Consultants	N/A	19/12/2025
Geomorphic Risk Assessment	Morphum	N/A	20/11/2025
Geomorphic Risk Assessment Supplementary Memo	Morphum		19/12/2025
Archaeological Assessment	Clough & Associates Ltd	N/A	12/2025
Landscape Assessment Report	Greenwood Associates	0	18/12/2025
Water, Wastewater and Utilities Report	McKenzie & Co	G	22/12/2025
Stormwater Report	McKenzie & Co	H	22/12/2025
Earthworks Report and Drawings	McKenzie & Co	F	15/12/2025
Roading and Access Report	McKenzie & Co	H	15/12/2025
Noise Assessment	SLR	1.0	18/12/2025
Urban Design Assessment	Barker & Associates	N/A	19/12/2025
Upper Orewa Concept Structure Plan	Barker & Associates	N/A	12/2025
Integrated Transportation Assessment	Commute	N/A	22/12/2025
Flood Assessment Report	McKenzie & Co	D	18/12/2025
Water and Wastewater Design Report	Apex Water Limited	-	
Wastewater Disposal Memorandum	Vineway Limited	N/A	18/12/2025
Wastewater Discharge Assessment	Viridis	N/A	19/12/2025
Air Discharge Assessment	AirMatters	6	19/12/2025
Hazardous Substances Assessment	Williamson Water and Land Advisory	N/A	16/12/2025
Hydrology Assessment	Williamson Water and Land Advisory	2	18/12/2025

Architectural Plans			
Architectural Drawings	Terra Studios	B	-
Landscape Plans			
Landscape Plans	Greenwood Associates	-	19/12/2025
Planting Implementation and Maintenance Plan	Greenwood Associates	-	18/12/2025
Engineering Plans			
Stage 1 Raingarden Plans	McKenzie & Co	E	22/12/2025
Stage 1 Earthworks Drawings	McKenzie & Co	L	22/12/2025
Stage 1 Site Clearing	McKenzie & Co	H	22/12/2025
Stage 1 Erosion and Sediment Control	McKenzie & Co	E	22/12/2025
Stage 2AB Earthworks Drawings	McKenzie & Co	I	22/12/2025
Stage 2CDE Earthworks Drawings	McKenzie & Co	M	22/12/2025
Stage 1 Roading Drawings	McKenzie & Co	G	22/12/2025
Stage 2 Roading Drawings	McKenzie & Co	G	22/12/2025
Stage 1 Stormwater Drawings	McKenzie & Co	F	22/12/2025
Stage 2AB Stormwater Drawings	McKenzie & Co	F	22/12/2025
Stage 2AB Site Clearing	Mckenzie & Co	F	22/12/2025
Stage 2AB Sediment Erosion	McKenzie & Co	E	22/12/2025
Stage 2CDE Stormwater Drawings	McKenzie & Co	D	22/12/2025
Stage 2 CDE Site Clearing	McKenzie & Co	F	22/12/2025
Stage 2 CDE Sediment Erosion	McKenzie & Co	D	22/12/2025
Stage 1 Wastewater, Water & Utilities Drawings	McKenzie & Co	B	22/12/2025
Stage 2 Wastewater, Water & Utilities Drawings	McKenzie & Co	B	22/12/2025
Scheme Plans			
Stage 1 Scheme Plan	McKenzie & Co	I	22/12/2025
Stage 2 Scheme Plan	McKenzie & Co	G	22/12/2025

Attachment 2: Inputs to the Groundwater and Settlement Monitoring and Contingency Plan

Schedule A: Alarm and Alert Levels			
Movement		**Trigger Thresholds (+/-)**	
		Alarm	**Alert**
a)	Differential vertical settlement between any two Ground Surface Deformation Stations (the **Differential Ground Surface Settlement Alarm or Alert Level**):	TBC	TBC
b)	Total vertical settlement from the pre-excavation baseline level at any Ground Surface Deformation Station (the **Total Ground Surface Settlement Alarm or Alert Level**):	TBC mm	TBC mm
c)	Differential vertical settlement between any two adjacent Building Deformation Stations (the **Differential Building Settlement Alarm or Alert Level**)	TBC	TBC
d)	Total vertical settlement from the pre-excavation baseline level at any Building Deformation Station (the **Total Building Settlement Alarm or Alert Level**)	TBC mm	TBC mm
e)	Total lateral deflection from the pre-excavation baseline level at any retaining wall deflection station (the **Retaining Wall Deflection Alarm or Alert Level**):	TBC mm	TBC mm

Schedule B: Groundwater Monitoring Frequency					
Bore Name	**Location**		**Groundwater level monitoring frequency (to an accuracy of 10 mm)**		
	Easting (mE)	Northing (mN)	From bore construction until one month before Commencement of Construction Phase Dewatering	Two weeks before Commencement of Construction Phase Dewatering to Completion of Construction Phase Dewatering	From Completion of Construction Phase Dewatering until 3 months later
GWBH	TBC	TBC	Weekly (for at least two weeks)	Weekly	Monthly

Schedule C: Ground Surface and Building Monitoring			
Monitoring Station and type*	**Frequency**		
	Pre-Commencement of Excavation	**Commencement to Completion of Excavation**	**Post- Completion of Excavation**
Ground: TBC	Twice to a horizontal and vertical accuracy of +/-2 mm (achieved by precise levelling)	Weekly	Monthly for 6 months
Buildings: TBC	Twice to a horizontal and vertical accuracy of +/-2 mm (achieved by precise levelling)	Weekly	Monthly for 6 months

Schedule D: Retaining Wall Monitoring Frequency				
Frequency				
Pre-Commencement of Excavation	**Commencement of Excavation to one month after Completion of Excavation**		**From Completion of Excavation until 3 months later**	
Pre-Commencement of Dewatering	**Retaining Wall Deflection Stations**	**Inclinometers**	**Retaining Wall Deflection Stations**	**Inclinometers**
N/A - can only be installed after installation and immediately prior to excavation commencing	Once for every 2 metres depth (on average) of excavation, and, in any case, at a minimum of once weekly.	Once for every 2 metres depth (on average) of excavation, and, in any case, at a minimum of once fortnightly.	Fortnightly	Monthly

Attachment 3: Groundwater Diversion and Dewatering Definitions

Commented [CM55]: Request from AC groundwater

Word	Definition
Alarm Level	Specific levels at which actions are required as described in the relevant conditions.
Alert Level	Specific levels at which actions are required as described in the relevant conditions.
Bulk Excavation	Includes all excavation that affects groundwater excluding minor enabling works and piling less than 1.5 m in diameter.
Commencement of Excavation	Commencement of Bulk Excavation or excavation to create perimeter walls.
Completion of Construction	Means when the Code Compliance Certificate (CCC) is issued by Auckland Council
Completion of Excavation	Means the stage when all Bulk Excavation has been completed
Condition Survey	Means an external visual inspection or a detailed condition survey (as defined in the relevant conditions).
Damage	Includes Aesthetic, Serviceability, Stability, but does not include Negligible Damage. Damage as described in the table below.
External visual inspection	A condition survey undertaken for the purpose of detecting any new external Damage or deterioration of existing external Damage. Includes as a minimum a visual inspection of the exterior and a dated photographic record of all observable exterior Damage.
GSMCP	Means Groundwater and Settlement Monitoring and Contingency Plan
Monitoring Station	Means any monitoring instrument including a ground or building deformation station, inclinometer, groundwater monitoring bore, retaining wall deflection station, or other monitoring device required by this consent.
RL	Means Reduced Level.
Seasonal Low Groundwater Level	Means the annual lowest groundwater level – which typically occurs in summer.
Services	Include fibre optic cables, sanitary drainage, stormwater drainage, gas and water mains, power and telephone installations and infrastructure, road infrastructure assets such as footpaths, kerbs, catch-pits, pavements and street furniture.
SQEP	Means Suitably Qualified Engineering Professional
SQBS	Means Suitably Qualified Building Surveyor

Building Damage Classification Table

Category of Damage	**Normal Degree of Severity**	**Description of Typical Damage** *(Building Damage Classification after Burland (1995), and Mair et al (1996))*	**General Category** *(after Burland – 1995)*
0	Negligible	Hairline cracks.	**Aesthetic**

1	Very Slight	Fine cracks easily treated during normal redecoration. Perhaps isolated slight fracture in building. Cracks in exterior visible upon close inspection. Typical crack widths up to 1 mm.	**Damage**
2	Slight	Cracks easily filled. Redecoration probably required. Several slight fractures inside building. Exterior cracks visible, some repainting may be required for weather-tightness. Doors and windows may stick slightly. Typically crack widths up to 5 mm.	
3	Moderate	Cracks may require cutting out and patching. Recurrent cracks can be masked by suitable linings. Brick pointing and possible replacement of a small amount of exterior brickwork may be required. Doors and windows sticking. Utility services may be interrupted. Weather tightness often impaired. Typical crack widths are 5 mm to 15 mm or several greater than 3 mm.	**Serviceability Damage**
4	Severe	Extensive repair involving removal and replacement of walls especially over door and windows required. Window and door frames distorted. Floor slopes noticeably. Walls lean or bulge noticeably. Some loss of bearing in beams. Utility services disrupted. Typical crack widths are 15 mm to 25 mm but also depend on the number of cracks.	
5	Very Severe	Major repair required involving partial or complete reconstruction. Beams lose bearing, walls lean badly and require shoring. Windows broken by distortion. Danger of instability. Typical crack widths are greater than 25 mm but depend on the number of cracks.	**Stability Damage**

Note: In the table above, the column headed “Description of Typical Damage” applies to masonry buildings only and the column headed “General Category” applies to all buildings.

Delmore Fast Track Application

To: Auckland Transport – Stormwater

From: Lachlan Van der Meij – McKenzie & Co (MKC)

Date: 15 April 2026

Re: Auckland Transport Stormwater Memorandum

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Transport (stormwater) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
Section 10.3 of the Flood Assessment Report (Appendix 35) states that "An adaptive time step based on a maximum Courant of 4 and a minimum Courant number of 1 was adapted". Please clarify if this approach was agreed with Healthy Waters.	The raw model has been provided to Healthy Waters and they are still reviewing.	
It appears that only the NZTA culvert was blocked in the culvert block scenarios. Can the applicant please clarify the culverts proposed in this	A culvert blockage scenario in line with the SWCoP requirements has been modelled and included in	

development were assessed for blockage scenarios? We note that this is a requirement in the Stormwater Code of Practice.	the documentation. Please see drawing 3725-0-4540 attached. This demonstrates that all lots are free of flooding and freeboard requirements of the SWCoP are achieved.	
It is not clear where the inflow nodes for the model are located; are catchments PRE12-1, PRE29-2, and PRE33-1 the only ones that have inflow nodes at the bottom of the subcatchment? 1. Section 7 states "Inflow nodes have been applied at the top of sub-catchment boundaries". 2. Section 10.5 states that "The hydrological inflow is configured to account for actual sub-catchment slope based on equal area terrain method., and each node is positioned at the highest point of its corresponding sub-catchment to ensure the full time of concentration is accurately represented in the model". 3. Section 10.5 also states that "For catchments PRE12-1, PRE29-2, and PRE33-1, the time of concentration has been calculated using the equal area method based on the potential flow length and slope. The inflow nodes have been applied at the bottom of the respective sub-catchments."	1. Yes the PRE-XX catchments are applied at the bottom of the catchment as this is external inflow conditions and applied at the bottom with the tc calculated. 2. The inflow BC for the internal catchments has been updated to account for the time of concentration after a review and discussion with Healthy Waters. Please see drawing 3725-0-4500 with nodes showing this information. 3. Correct as per point 1.	4.
While the Flood Assessment Report (Appendix 35) refers to drawing 3725-0-4500 for a Catchment Plan, it is not clear which document this is located	Drawing 3725-0-4500 has been included for reference. The Hydrological inflow configurations were added to this drawing to address the above query.	

in. Can the applicant please clarify which document this drawing is located in. Additionally, can the applicant please ensure that this drawing shows the inflow nodes? The intent for this comment is to verify that flows within roads are correctly represented.		
1. It is not clear what the Culvert Plans (Appendix 33) are intended to demonstrate: 1.1. The longsections have a ground profile through them; is this intended to be the ground embedment? 1.2. The elevation views often do not show culverts at the lowest point of the channel. In particular: 1.2.1. Culverts 4 and 11 are not located in the lowest point in the channel. 1.2.2. Culverts 5, 8, and 9 appear to be located underground (or completely embedded) i.e., with no area to allow flow. 1.2.3. It is not clear how flow is proposed to enter Culvert 9 as it appears to be completely embedded. 1.2.4. Culvert 10 is missing from the elevation view.	1.1 - No, the ground profile has been shown to show the grade of the existing channel for freshwater ecology reasons (fish passage, maintaining similar grades across existing wetland, etc.). 1.2 - The cross section is taken through the middle of the proposed culverts, the ground will be locally re-shaped around the inlet and outlets, as part of the culvert, headwall, and rip rap install. Plans have been updated to reflect this. 1.2.1 – Inlet and outlets are located at the base of the channels. As above, the ground will be locally re-shaped around the inlet and outlets, as part of the culvert, headwall, and rip rap installation. 1.2.2 - As above the ground will be locally re-shaped around the inlet and outlets, as part of the culvert, headwall and rip rap installation. 1.2.3 - Culvert 9 has been extended slightly to remove this concern. 1.2.4 - Noted and updated.	

3. It is not clear what the culvert dimensions are for Culvert 10. The Flood Assessment Report states it to be a 1,900 mm circular culvert, however the calculations in Appendix B of the Stormwater Report state it to have a span of 2,100 mm and a rise of 2,100 mm and the culvert plans state it to have a 2,100 mm diameter. Can the applicant please clarify what dimensions the culvert is to have, and what was used in the model?	Reporting, modelling / calculations and plans have been updated to ensure consistency across all culverts. To answer this particular question, the culvert is circular with a diameter of 2100Ø.	
4. Section 10 (Culvert Crossings) in the applicant's Stormwater Report (Appendix 32) states that "All culverts have been designed to comply with the SWCOP v4", however this is not demonstrated. Can the applicant please provide an assessment of all proposed culverts demonstrating compliance with all the requirements of section 4.3.9.8? We note that section 6.6 of the SMP (Appendix 34) states that "Attenuation of the 1% AEP event is proposed through the throttling of flows that will occur behind the proposed culverts". Considering this, demonstration of compliance to the SW CoP is critically important. 1. We note that culvert calculations are provided in Appendix B of this document, however they are not complete. They also demonstrate that the headwater depth for culverts 3, 4, 5, 8, 9, 10, 11, and 12 appears to exceed the 3.0 m permitted in the SwCOP.	A damming assessment of all culverts has been undertaken by Flow State Consulting (FS). We understand discussions are currently being undertaken between FS and Auckland Transport's stormwater specialist. A memo will be provide on this separately.	

5. It appears that many of the culverts may be a classifiable dam according to the Building (Dam Safety) Regulations 2022, as the headwater above embedment (Appendix B of the Stormwater Report) exceeds 4 m. However, it is not clear what the volume of water impounded by the culverts is. Can the applicant please clarify which culverts will be classifiable dams under the Building Act 2004 or the Building (Dam Safety) Regulations 2022? Can the applicant then also please demonstrate that these classifiable dams meet the requirements of the Stormwater Code of Practice, the Building Act 2004, and the Building (Dam Safety) Regulations 2022? Note that if there is overlap of requirements, as per section 4.3.9.8.a of the Stormwater Code of Practice, the more stringent requirement will take precedence over the Stormwater Code of Practice requirements.	See above.	
6. It is not clear why the embedment depths have been selected. We note that the culvert calculations in Appendix B of the Stormwater Report (Appendix 32) reports that culvert 8, which has a rise of 1,000 mm has an embedment of 600 mm. We also note that section 10 of this report states that "All culverts are proposed to be embedded 25% into the existing stream bed". However, section 11.6 of the Flood Assessment Report (Appendix 35) states that "All proposed culverts	Except for Culvert 9, all box culverts have an embedment of at least 350mm, and circular culverts are embedded at least 25% to ensure fish passage is provided. Culvert 9 is located along wetland and is required to match the existing topography and upstream invert level to ensure the existing wetland is not impacted. In some cases, additional embedment has been provided to attenuate flows during storm events. Wording and inconstancies within the reporting have been updated to suit the above.	

within the Delmore development are embedded a minimum of 35% of their total height. It is unclear which requirement should be met; however, many culverts do not meet this requirement. For example, Culvert 3 has a rise of 4,000 mm but an embedment of 350 mm, which is 9%. Can the applicant please clarify what embedment depths are provided, and why these values were selected?		
7. It is not clear if fish passage is required. Can the applicant please clarify if fish passage is required for the proposed culverts?	Comment from the ecologist (Viridis) from a response to the freshwater ecology queries is below: Yes, appropriate fish passage is required for the species present, which include (based on trapping and eDNA); redfin bully, longfin and shortfin eel, banded kōkopu, and giant bully. The proposal improves overall fish passage by removing 17 existing farm culverts that currently restrict connectivity and replacing them with 12 new culverts designed to maintain natural stream conditions. Most new culverts are short (<30 m), sized at ~1.3× stream width, and embedded (25% for pipes or ~350 mm for box culverts), supporting natural bed continuity and fish movement. Culverts 7, 9, and 10 are exceptions due to site constraints (e.g., wetland levels and wide, flat terrain). These are located high in the catchment where fish communities are dominated by strong climbers (eels and banded kōkopu). While passage	

	may be reduced during high flows, conditions during normal/low flows, and the short culvert lengths, are expected to provide adequate passage. Overall, removal of existing barriers and improved culvert design is expected to enhance fish passage across the site.	
8. It appears that not all culverts extend beyond the road reserve. Can the applicant please revisit the Culvert Plans (Appendix 33) and revise the culvert locations.	All culverts have been amended to ensure they extend past the road reserve. Plans have been updated to reflect this.	
9. It is not clear how many culverts can be accessed on both sides for maintenance. Can the applicant please clarify how the culverts can be accessed on both sides and update their Culvert Plans (Appendix 33) to demonstrate this?	Access to both sides of culverts has been provided. Plans have been updated to reflect this.	
10. OLFP: 1. Can the applicant please clarify what the red polygon in the legend represents. It appears to indicate where the depth-velocity product exceeds 0.4 m2/s, however this is not stated.	Updated drawings (series 4610) have been attached that clearly indicate all layers in the legend.	
2. The OLFP section (section 9.8) of the Stormwater Report (Appendix 32), and in the Stormwater Management Plan (section 6.7 of Appendix 34) does not discuss OLFP's within the road. While some OLFP analyses are provided in the drawings, there appears to be locations of obvious danger to pedestrians (e.g., around corners) that have depth-velocity products	A memo addressing the OLFP's across the site and focusing on these concerns has been prepared and amended to this response.	

exceeding 0.4 m2/s. Notably, section 12 within the Stage 2 OLFP drawings (Appendix 33) reports a depth velocity product of 0.43 m2/s, and this section is close to a corner between Road 20 and 18 – an area of obvious danger to pedestrians. Can the applicant please provide a discussion of the OLFP analysis provided in their drawings, and demonstrate that the requirements of Table 3 of the Road Drainage chapter of AT's TDM are met?		
3. In the OLFP drawings it is not clear where pedestrian crossings are proposed. Considering that pedestrian crossings will be places of obvious danger to pedestrians, can the applicant please clearly identify these in their drawings?	See 2 above.	
4. There is currently no assessment of the depth-velocity, and therefore flood hazard for locations where OLFP's overtop the roads. Can the applicant please provide this, ensuring that the requirements of Table 3 of the Road Drainage chapter of AT's TDM are met?	See 2 above.	

List of Attachments:

Mckenzie & Co Drawing 3725-0-4540

Mckenzie & Co Drawing 3725-0-4500

Mckenzie & Co Drawing series 3725-1-4800

Mckenzie & Co Drawing series 3725-0-4610

Mckenzie & Co Technical Memo – Internal OLFP Analysis

Mckenzie & Co Stormwater Report

Mckenzie & Co Flooding Report

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 22:

Traffic Engineer

Delmore Fast Track Application

To: Auckland Council – Traffic Engineering

From: Leo Hills – Commute

Date: 15 April 2026

Re: Traffic Engineering Response Memorandum

1.0 Technical Specialist Memo - Traffic Engineering- Philips Augustine- Auckland Council Senior Traffic Engineer

From:	Philips Augustine
Qualifications & Relevant Experience:	I hold the qualification of a Master's in Transportation Engineering and have 10 Years of experience in traffic engineering and assessments. I am full member of Engineering New Zealand & Institution of Engineers (India). I have prepared expert evidence and technical assessments for resource consent applications, notices of requirements for designation and fast-track applications and have appeared as an expert witness before consent on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23-04-2026

2.0 Original Specialist Review Memo

Major points referred to in the previously submitted draft memo are as follows:

1. AUP_E27.6.2(8) Loading Bay (T113-115) & AUP_PC79DV_E27.6.2.(8) Mini Loading Bay (T111B)
   Non-compliance is not in a position to support.
2. AUP_E27.6.3.3 Access and Manoeuvring (heavy vehicle tracking)
   Non-compliance is not in a position to support.
3. AUP_E27.6.3.7 Lighting
   Non-compliance needs further clarification.

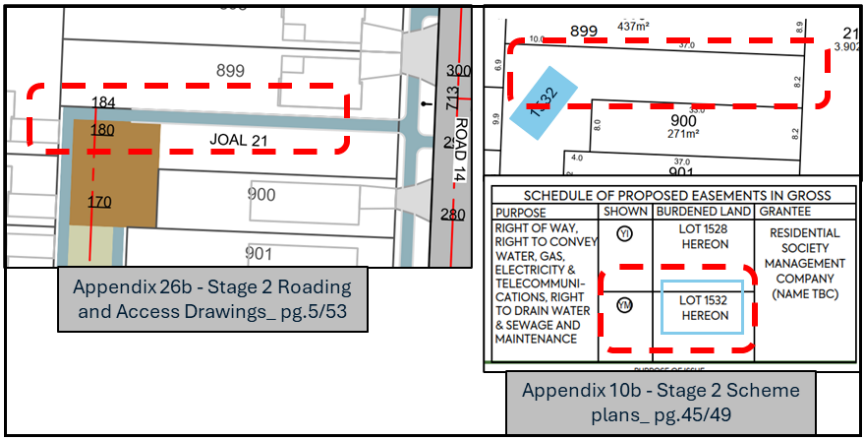
4. AUP_E27.6.4.3 Passing Bay
   Non-compliance is not in a position to support.
5. AUP_E27.6.4.3 Speed Management
   Non-compliance needs further clarification.
6. SISD for lots 183-186 and similar
   Non-compliance is not in a position to support.
7. One-way routes (two vehicle crossing) or with turning heads (D-area)
   Non-compliance is not in a position to support.
8. Western section of road 5 consists of several closely packed vehicle crossings (VC) with a combined width of 6.0m
   Non-compliance is not in a position to support.
9. The VC of JOAL 3 to NOR 6 will be removed
   The safety trigger needs further clarification.
10. AUP_PC79DV_E27.6.6, Primary Pedestrian Access (PPA) & multiple JOALs are designed with a single-sided PPA
    Non-compliance is not in a position to support.
11. Secondary parking space with <5.0m in front of the garage
    Non-compliance needs further clarification.
12. Conditions:
    #102-Lighting- Additional inputs
    #New- Vehicles can access JOAL 6 via Road 1 instead of NOR 6
    #New- 2° parking in front of the garage door, only if a minimum spacing of 5.0m
    #New- minimum of 3.0x5.4m2 and 5.5x5.4m2 free internal dimensions of single and double garages without any other design overlaps.

3.0 Updated Response to Applicant's Memo

Response after assessing further information for the applicant is as follows:

1. AUP_E27.6.2(8) Loading Bay (T113-115) & AUP_PC79DV_E27.6.2.(8) Mini Loading Bay (T111B)
   No further comments
   The applicant provided details has assessed and considered acceptable.
   The JOAL design has been updated by providing areas for loading bay usage in the form of a loading bay or a turnable area according to the number of units, user mode, geometric design and accessibility. The proposed location and dimensions (via. desktop scaled and scheme design) are considered acceptable.
   A **condition** will be added to provide signage and surface marking to ensure the efficient usage of the specified loading bay.
   Additional point for further information:
   a. Inconsistency noted: loading bay of stage 1- Joal 11 is adjacent to lot 207 (report)/ adjacent to lot 204 (plan).

b. Inconsistency noted, as per the scheme plan of JOAL 21 and lot 899.



2. AUP_E27.6.3.3 Access and Manoeuvring (heavy vehicle tracking)
   Not supportive and needs further information.
   The applicant noted that an updated vehicle tracking design was submitted on the 20th of April. However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.
3. AUP_E27.6.3.7 Lighting
   Not supportive and needs further information.
   The applicant noted that *"Amendments to the condition wording is addressed in Section 1.3".* However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision. The condition needs to be finalised in the RC stage.
4. AUP_E27.6.4.3 Passing Bay
   No further comments.
   The applicant provided details has assessed and considered acceptable.
   As per the assessment, JOAL's 34,5A is still considered an infringement. However, it can be considered less than minor due to the low number of lots and other design factors.
   JOAL's 2,6 & 8 are further widened to 5.0m minimum excluding PPA (ref: Appendix 26a - Stage 1 Roading and Access Drawings_ pg.48/51), and corners within a minimum of 5.5m width. This is considered as an acceptable solution.
5. AUP_E27.6.4.3 Speed Management
   No further comments.
   The proposed condition #108 can be considered acceptable as per "Appendix 44_Proposed Conditions_post lodgement updates (1)"_ pg.27/75.
6. SISD for lots 183-186 and similar
   Not supportive and needs further information.
   The applicant noted that an updated assessment & plans were submitted on the 20th of April. However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.
   A condition for low-level plantation will not resolve the safety issue, as no one will know the dimensions of the exact affected area, and if any road crash happens due to the visibility issue, RC conditions will not be referred to as well. The same has been highlighted in the draft memo.
7. One-way routes (two vehicle crossing) or with turning heads (D-area).
   a. No further comments
      The updated design of stage 1- JOAL 34 and 5A doesn't consist of a turnable head. However,

considering the low number of lots, vehicle access, and availability of grass berm at the site frontage, this can be considered acceptable.
The updated design of stage 1- JOAL 2, 6 and stage 2- JOAL 35 consist of a turnable head. This is considered acceptable.

b. Not supportive and needs further information.
The updated design of stage 1- JOAL 34 and 5A doesn't consist of a turnable head. As per the assessment, the applicant agreed with AT's request for the same. However, this is not updated in the design. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.

8. Western section of road 5 consists of several closely packed vehicle crossings (VC) with a combined width of 6.0m
No further comments.
The applicant provided details has assessed and considered acceptable.
A separate JOAL #42 has been included in the updated design, which connects lots 694-708. Hence, the initially proposed closely packed vehicle crossing towards the cycle path and road 5 is terminated. This is considered a better safety outcome.
9. The VC of JOAL 3 to NOR 6 will be removed
No further comments.
The applicant provided details has assessed and considered acceptable.
The updated design terminates the vehicle crossing at NOR 6 and proposes a new connection through roads 1 & 2. This will help to maintain a good inter-reaction time for the users and can avoid any sudden slowdown or queuing effect on NOR 6.
10. AUP_PC79DV_E27.6.6, Primary Pedestrian Access (PPA) & multiple JOALs are designed with a single-sided PPA.
No further comments.
The applicant provided details has assessed and considered acceptable.
As per the further assessment, noted that the minimum PPA connectivity is provided apart from JOAL 39, where a 1.2m wide PPA was noted instead of 1.4m. However, this can be considered less than minor as the JOAL serves only 6 units, which is just above the threshold, low traffic volume, good visibility, etc.
11. Secondary parking space with <5.0m in front of the garage
No further comments.
The applicant provided details has assessed and considered acceptable.
The applicant confirmed that a minimum of 5.0m will be maintained for any potential 2° parking between the garage door and property boundary as per the AUP requirement.
12. Conditions:
    a. 102-Lighting- Additional inputs.
    Not supportive and needs further information.
    As per the applicant correspondence, "*A separate email has been sent to Auckland Council – Traffic to clarify the areas this relates to*". However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.
    Noted the condition #144 (Reg: Appendix 44_Proposed Conditions_post lodgement updates_ pg.28/75), where an advice noted been added: "*Light pole locations shall be reviewed by the Council traffic engineer".* Recommendation is to include it as a part of the condition instead of an advice note or provide a finalised light design.

b. #New- Vehicles can access JOAL 6 via Road 1 instead of NOR 6.
No further comments.
The design has been updated by incorporating the required changes. Hence, this condition is no longer required.

c. #New- 2° parking in front of the garage door, only if a minimum spacing of 5.0m.
No further comments.
The applicant's confirmation of a minimum 5.0m is achieved between the garage door and property boundary for potential 2° parking. Hence, this condition is no longer required.

d. #New- minimum of 3.0x5.4m2 and 5.5x5.4m2 internal dimensions of single and double garages without any design overlaps with laundry equipment and internal garage doors.
Not supportive and needs further information.
The referred minimum dimension to be finalised in the RC stage is critical from a traffic point of view. This is purely based on previous experience. The council traffic engineer will not be included in the BC stage for any further discussion. Hence, highly recommend adding this condition.
Request to clarify what exactly the complicity?

4.0 Outstanding Issues

Outstanding issues are as follows:

Response to Further Information Requests / Technical Comments (cross-referred)

a. Inconsistency noted: loading bay of stage 1- Joal 11 is adjacent to lot 207 (report)/ adjacent to lot 204 (plan).
b. Inconsistency noted, as per the scheme plan of JOAL 21 and lot 899.
c. AUP_E27.6.3.3 Access and Manoeuvring (heavy vehicle tracking)
Not supportive and needs further information.
The applicant noted that an updated vehicle tracking design was submitted on the 20th of April. However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.
d. AUP_E27.6.3.7 Lighting
Not supportive and needs further information.
The applicant noted that *"Amendments to the condition wording is addressed in Section 1.3".*
However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision. The condition needs to be finalised in the RC stage.
e. SISD for lots 183-186 and similar
Not supportive and needs further information.
The applicant noted that an updated assessment & plans were submitted on the 20th of April. However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.
A condition for low-level plantation will not resolve the safety issue, as no one will know the dimensions of the exact affected area, and if any road crash happens due to the visibility issue, RC conditions will not be referred to as well. The same has been highlighted in the draft memo.

f. One-way routes (two vehicle crossing) or with turning heads (D-area).
Not supportive and needs further information.
The updated design of stage 1- JOAL 34 and 5A doesn't consist of a turnable head. As per the assessment, the applicant agreed with AT's request for the same. However, this is not updated in the design. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.

Response to Recommended / Amended Conditions

g. 102-Lighting- Additional inputs.
Not supportive and needs further information.
As per the applicant correspondence, "*A separate email has been sent to Auckland Council – Traffic to clarify the areas this relates to*". However, no details have been received to date. As referred in the draft memo, until these details are provided, I'm not in a position to make a final decision.

h. #New- minimum of 3.0x5.4m2 and 5.5x5.4m2 internal dimensions of single and double garages without any design overlaps with laundry equipment and internal garage doors.
Not supportive and needs further information.

i. New condition as a part of the proposed loading bay.
The consent holder must ensure to provide signage and pavement paring for all proposed loading bays as per AT-TDM.

5.0 Conclusion

Overall, the proposed development is considered generally acceptable from a traffic engineering perspective. However, several technical inconsistencies and missing design details identified in Section 4.0, specifically regarding vehicle tracking, safe intersection sight distances (SISD), and lighting specifications, remain outstanding conditions. Consequently, a final recommendation cannot be made until the applicant provides the necessary information to ensure compliance with the AUP requirement.

Delmore Fast Track Application

Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (traffic engineering) in relation to the above fast-track application (as lodged). This response addresses:

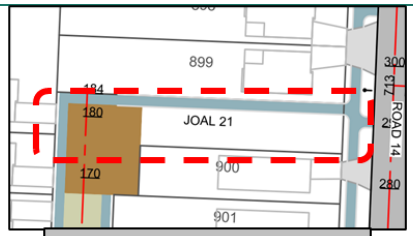
- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.1 Response to Further Information Requests / Technical Comments

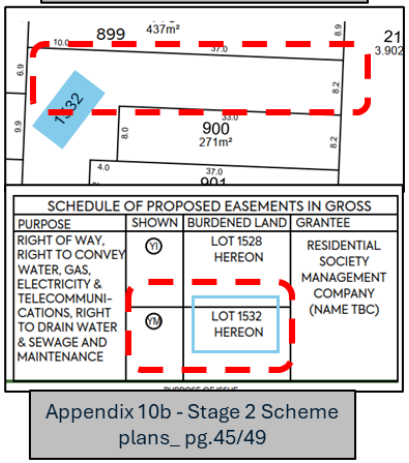
Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
6.2 Loading bays within JOALS Based on AUP_ E27.8.2(7) assessment criteria, the non-compliance of E27.6.2(8) loading bay has been reviewed. Considering the large residential nature of proposal, no safe loading bay arrangement can be noted on site apart from parking on JOAL- which blocks adjacent driveways, mainly the loading bay can be utilised for residential delivery type of customers including furniture movement- as no loading bay is available- users may parking unsafe & create more obstructions, no existing on-street loading bay is noted in the vicinity of the site, it's illegal to park on the kerb side of JOAL [as per right to establish and maintain driveway- 2(c) of Schedule 5 to the Property Law Act 2007], no specified location can be noted where informal or another site in the immediate vicinity can be utilised for loading bay without breaking the law, provision of loading bay will be always	Based on the feedback, loading zones / turning heads have been added to the JOAL's as follows: <u>Stage 1</u> <u>JOAL 01</u> • Lot 474 boundary adjusted - loading bay (full) added to the north. <u>JOAL 02</u> • Lot 478 and 470 boundary adjusted - truck turning enabled.	**Stage 1** **JOAL 01** No further comments. Noted proposed loading zone adjacent to lot 474 with 3.5*11.5m dimensions (ref: Appendix 10a - Stage 1 Scheme Plans_ pg.3/45, Appendix 26a - Stage 1 Roading and Access Drawings_ pg.4/51). This is considered acceptable. **JOAL 02** No further comments. Noted proposed turning area adjacent to lot 478 with ~22.0m length (ref: Appendix 10a - Stage 1 Scheme Plans_ pg.3/45, Appendix 26a

useful for a large community like Delmore, the provision of a designated loading bay will always support efficient usage, I am not in a position to support the non-compliance of the loading bay. Additionally, the parking of heavy vehicles will block the VC of the adjacent lot. Any furniture delivery or house relocation will take more than a minimal time. This has been discussed in the previous stage, and the applicant team agreed to provide the required loading bay prioritising at the JOALs with a high number of dwellings and length.	JOAL 03 • Loading zone (full) provided in South - Lot 96 boundary adjusted. JOAL 06 • Lot 373 boundary adjusted to enable a loading zone to be provided (full). JOAL 11 • Lot 207 boundary adjusted to provide a full loading bay. JOAL 40 • No boundary adjustments. • 2 loading bays added adjacent lot 142. Stage 2 JOAL 21 • Lot 900 boundary adjusted to enable truck turning. JOAL 35	- Stage 1 Roading and Access Drawings_ pg.4/51). This is considered acceptable. JOAL 03 No further comments. Noted proposed loading bay adjacent to lot 96 with 8mx5.2m (ref: Appendix 10a - Stage 1 Scheme Plans_ pg.8/45, Appendix 26a - Stage 1 Roading and Access Drawings_ pg.6/51). This is considered acceptable. JOAL 06 No further comments. Noted proposed loading bay adjacent to lot 96 with 4.5mx9.3m (ref: Appendix 10a - Stage 1 Scheme Plans_ pg.36/45, Appendix 26a - Stage 1 Roading and Access Drawings_ pg.5/51). This is considered acceptable. JOAL 11 No further comments. Noted proposed loading bay adjacent to lot 204 with 6.0mx6.8m (ref: Appendix 10a - Stage 1 Scheme Plans_ pg.20/45, Appendix 26a - Stage 1 Roading and Access Drawings_ pg.8/51). This is considered acceptable. *Further clarification:* *Minor inconsistency, as per applicant response, the loading bay is adjacent to lot 207 (report). However, on further*

	• Lot 1214 boundary adjusted to enable truck turning.	*assessment, it is adjacent to lot 204 (plan). Request to do necessary changes.* JOAL 40 No further comments. Noted proposed loading bay adjacent to lot 142 with ~8.0mx5.6m (ref: Appendix 10a - Stage 1 Scheme Plans_ pg.14/45, Appendix 26a - Stage 1 Roading and Access Drawings_ pg.6/51). This is considered acceptable. Stage 2 JOAL 21 No further comments. Noted proposed truck turning area adjacent to lot 900 with ~15mx12m dimensions (ref: Appendix 10b - Stage 2 Scheme plans_ pg.45/49, Appendix 26b - Stage 2 Roading and Access Drawings_ pg.5/53). This is considered acceptable. *Further clarification:* *Request to update the inconsistency in the scheme plan of JOAL 21 and lot 899.*



Appendix 26b - Stage 2 Roading and Access Drawings_ pg.5/53



Appendix 10b - Stage 2 Scheme plans_ pg.45/49

JOAL 35

No further comments. Noted proposed truck turning area adjacent to lot 1214 with ~10mx10mm dimensions (ref: Appendix 10b - Stage 2 Scheme plans_ pg.27/49, Appendix 26b - Stage 2 Roading and Access Drawings_ pg.8/53). This is considered acceptable.

6.3 Mini Loading Bay As per AUP_PC79DV_E27.6.2.(8) Mini Loading Bay (T111B), 1 mini loading bay is required for >9 dwellings up to 5,000m2 without individual pedestrian access directly from the arterial road. The applicant staged the provision of 1 mini loading bay at JOAL 1- Stage 1 (Appendix 42_Rules Assessment_ pg.16/27). However, no details can be noted in the plans or in ITA. Based on AUP_PC79DV_ E27.8.2(7) assessment criteria, the non-compliance of E27.6.2(8) mini loading bay has been reviewed. Considering no site-specific constrains noted, the reduction in loading spaces will contribute to the efficient use of land growth or intensification, the safety triggers formed due to the unsafe/ illegal parking of heavy vehicles, associated visibility issues, residential nature, no available on-street public loading bay in the nearby vicinity, no informal arrangement noted within the site, the provision of a designated loading bay will always support efficient usage, I am not in a position to support the non-compliance of the mini loading bay. Additionally, the parking of heavy vehicles will block the VC of the adjacent lot. Any furniture delivery or house relocation will take more than a minimal time. Right to establish and maintain driveway- schedule 5, section 2c- ROW to be kept clear at all times. This has been discussed in the previous stage, and the applicant team agreed to provide the required loading bay prioritising at the JOALs with a high number of dwellings and length.	See above. Of note, the only JOAL that technically requires a mini / small loading bay is JOAL 1 as under the Court Order version of PC79 only JOALS with over 9 dwellings AND where the only vehicle access for residential activities is from an arterial road. A full loading zone now provided on JOAL 1.	No further comments. applicant provided details are acceptable.

6.4 Heavy vehicles As per AUP_E27.6.3.3, heavy vehicles as per RTS 18 tracking curves are to comply. As per ITA_ PG.111/342 and "Appendix 42_Rules Assessment" _ pg.18/27, the applicant stated that it complies. However, the proposed heavy vehicle tracking overlaps with kerb build-outs at multiple locations at JOALs and major intersections. Additionally, the assessment is not available for multiple intersections. This can't be reviewed at the EPA stage and consists of major safety issues and ongoing maintenance for Auckland Transport (AT). The applicant team needs to provide updated details. No specific details on waste management are provided at this time, aside from conditions #111-112. Also noted, JOALs with no grass berm, it will make the future residents use the formed road surface or footpath to keep the bins for collection. Noted, this scenario is happening in many locations. However, it's not ideal. As it is a new design and in the planning stage, we do recommend making enough space for bin placement at the berm side (instead of paved road or footpath) and a wider D-area supported by vehicle atrcking. With respect to the non-compliance and non-availability of the heavy vehicle tracking, I'm not in a position to support the current design.	The roading kerbs have been adjusted and the footpath / berms are now clearly shown on the JOAL's. Revised vehicle tracking will be provided on the updated roading plans on the 20 April.	No details received yet. With respect to the non-compliance and non-availabilisty of the heavy vehicle tracking, **I'm not in a position to support the current design.**
6.5 Lighting As per AUP_E27.6.3.7, lighting is required where there are 10 or more spaces that are likely to be used during hours of darkness. This needs to be in accordance with AUP_E24 & E27.	Greenwoods had provided indicative light locations within the JOALs, however a lighting plan is included as a condition to provide a detailed plan and confirmed locations. Amendments to the condition	No details provided yet. I'm not in a position to support this unless this has been clarified and resolved.

As per ITA_ PG.113/342, the applicant stated, this is provided in "Greenwood's JOAL lighting plan". However, as per "Appendix 42_Rules Assessment" _ pg.12/27, the applicant staged, this can be conditioned. As per the assessment, the details are inconsistent. Required to provide clarification. Apart from that, considering the large scale of residential development with a large number of JOALS and pedestrian paths. I reviewed condition 102 (Appendix 44_Proposed Conditions_ pg.25/63) and recommend adding minor changes- lighting to cover pedestrian path/active modes, which are separate from JOALs/ roads, and JOALs lighting locations are also to be reviewed by the applicant & council traffic engineer.	wording is addressed in Section 1.3 below.	
6.6 Passing Bay As per AUP_E27.6.4.3, 1 passing bay per 50m where the vehicle access width is <5.5 is required. As per ITA_ pg.51,91,113/342, the applicant stated that all vehicle access consists of a minimum of 5.5m width, and as per "Appendix 42_Rules Assessment"_ pg.20/27, the applicant stated that all JOALs over 50m in length have 5.5m width. Hence, no passing bay requirement is triggered. However, passing bay triggers noted as per below locations: • JOAL 34_ stage 1- 5.0m width/ 60m length • JOAL 5A_ stage 1- 4.0m width/ 50.5m length • JOAL 2,6,8_ stage 1- 5.0m width/ 89.5m length Noted, some locations considered with 5.5m by incorporating primary pedestrian access (PPA) adjacent to vehicle access (VA). However, this is not considered a safe approach. It triggers more safety issues, with reversing to	In terms of the three JOALS: • JOAL 34 – this JOAL serves three dwellings. As such passing is unlikely to need to occur. • JOAL 5A – This JOAL (boundary to boundary) is only 42m long as the long section is taken from the centre of the road whereas the JOAL length is taken from the boundary. No passing bay required. • JOAL 2 - this JOAL serves 8 lots and has been widened on the corner to accommodate two-way movements of over 5.5m	JOAL 34 No further comments. Considering the low number of users, this can be considered acceptable. JOAL 5A No further comments. Considering the low number of users & space in front of unit 278 this can be considered acceptable. JOAL 2, 6, 8 No further comments. Joal 2 further widened to 5.0m minimum excluding PPA (ref: Appendix 26a - Stage 1 Roading and Access Drawings_ pg.48/51), and corners within minimum of 5.5m width. This design element is still considered as

public roads, the curvy alignments of JOALS, and expected pedestrians (including kids) exposed to live traffic. Unless more details are provided, I'm not in a position to support the current design.	thus providing passing bay (tracking to be provided). • JOAL 6 – this JOAL serves 6 lots and has been widened on the corner to accommodate two-way movements to provide a passing bay (tracking to be provided). • JOAL 8 - this JOAL has been widened on the corners to accommodate two-way movements greater than 5.5m and thus passing bay (tracking to be provided).	non-compliance. However, considering the low number of units and a minimum 5.0m width of vehicle access, the non-compliance can be considered acceptable.
6.7 Speed Management As per AUP_E27.6.4.3, speed management treatment is required within 10m from the road boundary and additionally at each 30m spacing. As per ITA_ pg.114/342 and "Appendix 42_Rules Assessment"_ pg.21/27, vertical traffic calming will be provided in JOALs as required. However, no speed management is provided in the JOAL design. Unless more details are provided, I'm not in a position to finalise the decision. Request to provide further details for assessment.	A condition is proposed for speed management within the JOALs is proposed as follows: *Speed management devices (eg. speed bumps) must be provided on all JOALS greater than 50m in length, with one device 10m from the road boundary and additionally at each 30m spacing.*	No further comments The condition #108 can be considered acceptable as per "Appendix 44_Proposed Conditions_post lodgement updates (1)"_ pg.27/75.
6.8 Single Sided PPA As per ITA and associated plans, multiple JOALs are designed with a single-sided PPA. Noted that the non-compliance of PPA has been considered in the applicant-provided	Single sided PPA is not contrary to the new Consent Order PC79. Most JOALs in New Zealand only have a footpath on one side of the JOAL and this is considered sufficient for pedestrian	No further comments. The updated design is considered acceptable.

assessment. As per the assessment, no site-specific constraints are noted; heavy vehicles will be accessed on site, and no specific speed management measures are identified. These are considered high safety triggers. The majority of the sites consist of public road frontage (which are designed by public footpaths). As an example, JOAL 8 at stage 1B-3 consists of a 1.5m wide PPA on a single side which connects units 604 & 605. No details of the PPA for units 451-603 are provided, and I'm unsure if there will be a separate PPA towards NOR 6 & ROAD 06 from these dwellings. A condition will be added to provide a direct PPA from all dwellings with public footpath frontage.	access to dwellings given the low speed / low volume of the JOALS. Plans have been updated to more clearly show the pedestrian paths on the JOALS.	
6.9 SISD As per ITA_ pg.203/342, SISD is compromised due to a massive area of lots 183-186 between road 1, 8 & Joal 9. The applicant provided a callout for a low-level plantation/ structure (similar to condition #96). However, this cannot be considered acceptable due to a less practical point of view; no one will know the exact extent of the affected area, as no dimensions are marked, and the authority will not be referring to the RC conditions even if a fatal crash happens. Any heavy vehicle movement or parking (as no loading bay is proposed) through this corridor will further stimulate the safety trigger. However, the proposed mitigation measure and low SISD can't be considered acceptable from a traffic point of view.	The area around lots 183-186 has been reviewed and the dwellings further refined to achieve the full SISD. This will be on plans provided on 20 April. For these lots, a consent notice can be added that requires low level planting in the identified areas to be maintained in perpetuity. This is a common approach for subdivisions in Auckland.	Need further information. No details provided as referred to the date 20th April. Request to provide more details, including the SISD calculation and associated updated plans. A condition for low-level plantation will not resolve the safety issue, as it will be difficult to follow by the landowner.

6.10 JOAL turning heads As per condition #100, all JOALs must have either one-way routes (two vehicle crossing) or with turning heads (D-area) to enable and will be checked at the EPA Stage. However, stage 1 (JOALs 34, 5a, 02, 6, road 10) and stage 2 (JOALs 35, 38) don't have one-way routes (two vehicle crossing) or turning heads. The EPA stage will be too late to assess the potential for heavy vehicle tracking, including rubbish bin collections and construction vehicles. Not providing these facilities may result in a reverse maneuver to the public road, which will further trigger non-compliance with AUP_E27_ E27.6.3.4 and active mode safety (at the public road) due to visibility issues. Hence, the current design with no turning head can't be considered acceptable from a traffic point of view. *Note: Rubbish bin collection and management needs to be considered further.* *While the standard council collection vehicle is the 10.3m truck, AC notes that we have the capability to do on-site collections, for which we do have a smaller-than-standard truck fleet for on-site collections as needed. This is something to be discussed with AC- Waste Solutions.*	See section 6.2 above. Turning heads have been reviewed as follows: <u>Stage 1</u> **JOAL 34:** This JOAL only serves 3 lots. As such, rubbish is expected to be collected on-street. **JOAL 5a:** This JOAL only serves 4 dwellings and is only 50m in length. As such, rubbish is expected to be collected on-street. **JOAL 2:** Turning for 8m truck now provided **JOAL 6:** Turning for 8m truck now provided **Road 10:** Temporary turning head to AT requitements now provided (in road reserve) <u>Stage 2</u> **JOAL 35:** Turning for 8m truck now provided. **JOAL 38:** This JOAL only serves 6 dwellings and is only 45m in length. As such rubbish expected to be collected on-street.	**Stage 1** **JOAL 34, 5a, 2, 6:** No further comments. The applicant provided details considered acceptable. **Road 10** Need further information. No details provided in the design plan. This is still considered unresolved. (ref: Appendix 26a - Stage 1 Roading and Access Drawings_ pg.7/51) **Stage 2** **JOAL 35:** No further comments. The applicant provided details considered acceptable.
6.11 Road 5 Crossings	Following a review of this comment, together within associated meetings,	No further comments.

The western section of road 5 consists of several closely packed vehicle crossings (VC) with a combined width of 6.0m, which directly interfere with the safety of cycle users. No specific assessment is provided in the ITA, and noted condition #96 for low-level plantations. However, this doesn't provide an ideal outcome and is still considered a safety trigger for cycle users as they need to cross multiple VCs within a short span of length. Apart from that, Road 5 is considered a collector road and is expected to have high future AADT and public transport connections. Hence, the current design with multiple VCs at the collector road 5 corridor can't be considered acceptable from a traffic point of view.	this section of Road 5 has been completely re-designed to replace 18 single driveways (all with reversing out) with two two-way JOAL driveways with all vehicles forward in / forward out. These drawings will be provided by 20 April.	The updated design with additional JOAL 42 is considered acceptable (ref: Appendix 26b - Stage 2 Roading and Access Drawings_ pg.3/53)
6.12 JOAL 3 NOR6 Road As per the discussion between AT/ applicant, it was confirmed that the VC of JOAL 3 to NOR 6 will be removed. However, the revised civil plans "Appendix 26_ Roading Drawings Stage 1_ pg.4/50" still consist of JOAL 3 connection with the NOR6 road instead of Road 1. A condition will be added to ensure JAOL 3 will be connected only through Road 1.	The Roading drawings have been updated to clearly show the JOAL 3 (and 3A) connecting to Road 2 and Road 1 only and NOT NoR 6 road. These drawings will be provided by 20 April.	No further comments. The updated design terminates the vehicle crossing at NOR 6 and proposes a new connection through road 1 & 2 (ref: Appendix 26a - Stage 1 Roading and Access Drawings_ pg.3 & 6/51)
6.13 Primary Pedestrian Access (PPA) As per AUP_PC79DV_E27.6.6, Primary Pedestrian Access (PPA) required 1.4 to 1.8m width depending on the number of dwellings/ lots (in this case). As per ITA, the PPA width varies from 0 to 1.8m with some mountable, non-mountable and at-grade/ shared. Based on AUP_PC79DV_ E27.8.2(8) assessment criteria, the non-compliance of E27.6.6 PPA has been reviewed. Considering no site specific constrains can be	The non-compliance with PC79 is provided in Appendix B of the ITA. Of note, since this was written, the Consent Order version from the Environment Court has been made available. Critically: • PPA only required for over 5 rear dwellings (6-19).	No further comments. Reviewed the further assessment and considered acceptable.

noted, general requirement of 1.5m width for a person next to a wheelchair & 2 people communicating in sign language, 1.4m width for a person with a bin, 1.2m width for a person walking with a person assisting", the proposed large residential development with additional infrastructure (including parks, active mode), future MoE- school project which motivates the use of PPA, heavy vehicle movements including deliveries & rubbish collection, bin placement movements by pedestrians, the proposed at-grade 0-1.0m wide PPA is not ideal for the proposed development. Hence, the current design can't be considered acceptable from a traffic point of view.	• The formed width (adjacent to access) is now 1.4m for 19 lots only served by the JOAL and 1.8m for greater than 19 lots. Specifically for the 0-1.0m wide PPA in the JOALS: • JOAL 5A: 1m provided serving 4 rear lots so COMPLIES • JOAL 13: 1m provided serving 4 rear lots so COMPLIES • JOAL 30: 1m provided serving 5 rear lots so COMPLIES • JOAL 34: No PPA provided serving 0 rear lots so COMPLIES • JOAL 18: No PPA provided serving 0 rear lots so COMPLIES • JOAL 20: No PPA provided serving 0 rear lots so COMPLIES • JOAL 23: No PPA provided serving 0 rear lots so COMPLIES • JOAL 31: No PPA provided serving 0 rear lots so COMPLIES • JOAL 32: No PPA provided serving 0 rear lots so COMPLIES • JOAL 33: No PPA provided serving 0 rear lots so COMPLIES • JOAL 39: 1.2m provided serving 6 rear lots so DOES NOT COMPLY	

	• JOAL 23: No PPA provided serving 3 rear lots so COMPLIES As such all JOALs except 39 now fully comply with PC79 (Consent Order version) regarding footpath width. In this regard, JOAL 39 serves one dwelling more than PC79 permits to having no footpath. The footpath provided is 1.2m vs 1.4m required. Overall, this minor non-compliance is considered acceptable.	
6.14 Parking Length The spacing between the garage door and the property boundary (for secondary parking). The AUP_E27 refers to a 5.0m parking space depth. However, noted JOALS and primary pedestrian access (PPA) closer to the site boundary. In reality, vehicles may end up parking on PPA or JOALs partly, no secondary vehicle will be parked very close to the garage door and usually maintain 300-500mm spacing for easy access and protection. It also reduces the intervisibility/ inter-reaction between users and pedestrians may be exposed to the live lane and or may end up in a rear-end crash. The same issues have been discussed in the previous stage, and the applicant has confirmed that 5.2/ 6.1m/ 6.9m will be maintained between the garage door and property boundary. However, a minimum of 5.5m is considered ideal (ADM Design Guidance_ Design and Location of Primary Pedestrian Access	The 5m setback meets the Unitary Plan parking dimension and is therefore considered acceptable.	No further comments. Applicant confirms that all 2° parking space in front of the garage door consist of a minimum of 5.0m. This is considered acceptable.

in Residential Zones_ Version 1). Currently, not all the designs consist of detailed dimensions, and manual scaling may create errors. Unless more details are provided, I'm not in a position to finalise the decision. Request to provide further details for assessment. A condition will be added to ensure parking restriction for limited spacing for 2° parking.		

1.2 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)	Applicant Response	Council Specialist Response
#102. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder must submit a Lighting Plan for the pedestrian path/active modes- which are separate from JOALs/ roads, JOALs servicing 10 or more dwellings and roads to be vested, prepared by a suitably qualified Lighting Engineer, to the Auckland Council. The purpose of this condition is to provide adequate lighting for the safety of people. The Lighting Plan must: (a) Demonstrate compliance with the relevant standards in E24.6.1 Lighting of the Auckland Unitary Plan (Operative in Part); and (b) Include proposed locations, lux levels and types of lighting (i.e. manufacturer's specifications	Condition has been partially accepted and updated within the condition set. A separate email has been sent to Auckland Council – Traffic to clarify the areas this relates to.	No details provided yet. I am not in a position to support this unless this has been clarified and resolved. Noted the condition #144 (Reg: Appendix 44_Proposed Conditions_post lodgement updates_ pg.28/75), where an advice noted been added: *"Light pole locations shall be reviewed by the Council traffic engineer".* Recommendation is to include it as a part of the condition instead of an advice note or provide a finalised light design.

once a lighting style has been determined) and any light support structures. (c) Lighting design (light pole location) to be reviewed by the council traffic engineer.		
#New The consent holder must ensure vehicles can access JOAL 6 via Road 1 instead of NOR 6.	The condition is no longer needed as the updated plans clearly show access for JOAL 6 via Road 1. To be provided 20 April.	No further comments. As per the updated design, this condition is no longer required.
#New The consent holder must ensure that the spacing between the garage door and the site boundary for each lot cannot be used as secondary parking, where a minimum 5.0m spacing is not achieved. A restriction should be placed on the title to notify owners that vehicle parking is not permitted.	See 6.14 above. The 5m setback meets the Unitary Plan parking dimension and therefore considered acceptable. Furthermore, some cars may be less than 5m and easily fit within the space. It is also noted that the Auckland Council - Vehicle Use and Parking Bylaw 2025 regulates where cars can and cannot park (ie on roads and footpaths).	No further comments. As per the applicant's confirmation that a minimum of 5.0m is achieved between the garage door and property boundary for potential 2° parking, this condition is no longer required.
#New The consent holder must ensure to maintain a minimum of 3.0x5.4m2 and 5.5x5.4m2 internal dimensions of single and double garages without any design overlaps with laundry equipment and internal garage doors. The consent holder must ensure to avoid any internal garage doors (including pedestrian garage doors and storage space doors) opening into the internal garage space. Instead, a sliding door or a door that opens into the inside of the house should be considered.	This condition appears overly complex and unnecessary. The exact measurements of the garage will be determined at building consent stage.	Not supportive. The referred minimum dimension to be finalised in the RC stage is critical from a traffic point of view. This is purely based on previous experience. The council traffic engineer will not be included in the BC stage for any further discussion. Hence, highly recommend adding this condition. Request to clarify what exactly the complicity?

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 23:

Waste

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo - Waste

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Elizabeth Driver – Senior Waste Planning Advisor – Waste Planning – Waste Solutions
Qualifications & Relevant Experience:	I hold the qualification(s) of **Master of Arts** and have **7** years of experience in **waste policy advice.** I have prepared expert evidence and technical assessments for resource consent applications, plan changes and fast-track applications.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	Elizabeth Driver
Date:	24/03/2026

3.0 Executive Summary / Principal Issues

N/A

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Assessment of Environmental Effects
- Appendix 42 – Rules Assessment
- Appendix 43 – Objectives and Policies Assessment
- Appendix 44 – Proposed Conditions
- Appendix 47 – Management Plan Overview
- Appendix 11 – Landscape Drawings
- Appendix 24 – Integrated Transport Assessment

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

N/A

6.0 Specialist Assessment

6.1. The proposed waste management for this site is generally suitable and I support the application overall.

6.2. Council collections of rubbish, recycling and food scraps should be suitable for residential units at this site. There is sufficient clear, unobstructed kerbside space for bins to be placed out for collection along council roads. Note council can also provide on-site collections where needed, provided we have a signed access waiver and collection vehicle tracking is approved if there is a requirement to drive onto JOALs. This would be assessed following a site visit once the site is built.

6.3. Ratepayers will also be entitled to use the council inorganics collection.

6.4. On-site storage of bins, including screening, is suitable.

6.5. All plans and conditions associated with this application need to be neutral in terms of waste service provider type and flexible in terms of methodology, to future proof the consent should service provider or methodology need to change for any reason. To this end, applicant to please amend the following wording:

- Appendix 47 Management Plan Overview: "*Provides details for on-lot bin storage areas, public waste and private waste collection, proposed retaining walls, lighting, fencing, and on-lot landscaping."* – request remove the word 'private'.
- Appendix 24 Integrated Transportation Assessment: "*All waste is expected to be accommodated on-street via public or private on JOAL collection*" – request remove the word 'private'.
- Appendix 44 Proposed Conditions: "*3.1.10 Waste 111. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall prepare a Waste Management Plan for all residential lots that will not receive public kerbside collection services and will instead rely on private waste collection. 112. The Waste*

Management Plan shall be submitted to Auckland Council for certification and shall: (a) Identify the private waste collection service(s) to be used" – request remove the word 'private' and any distinction between public vs. private collections: the distinction should simply be kerbside vs. on-site, without mention of who will supply the service.

- Any other references to private waste collections in any other plans.

6.6. The JOALs should be constructed to safely facilitate waste collections including sufficient vehicle tracking including turnaround areas, and a berm should be provided for bins to be placed out for collection without obstructing footpaths for pedestrian and road user safety. I defer to the council traffic engineer to check that all collection vehicle tracking, manoeuvring, stopping and entering/exiting of the site is acceptable.

6.7. Note that in the event that council determines it can feasibly provide waste services to a property, ratepayers will be charged for council waste services (per separately rated unit).

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

Based on the information available I support the application.

9.0 Proposed Conditions

I do not support the proposed waste conditions in Appendix 44 Proposed Conditions (3.1.10 Waste 111. & 112.) I suggest that the following amendments be considered to the conditions below.

Proposed Waste Conditions	Commentary
3.1.10 Waste 111. Prior to the issue of a s224(c) certificate for a subdivision stage (or sub-stage), the consent holder shall prepare a Waste Management Plan for all residential lots that ~~will~~ may not receive public kerbside collection services and ~~will~~ may instead rely on ~~private~~ on-site waste collection. 112. The Waste Management Plan shall be submitted to Auckland Council for certification ~~and shall:~~ ~~(a) Identify the private waste collection service(s) to be used;~~	We do not advise making a distinction between public vs. private collections. The distinction should simply be kerbside vs. on-site, without mention of who will supply the service. When consent and/or condition wording mentions private collections this constrains future changes to service provision. There needs to be flexibility in case of changes for any reason. Council collections are not limited to kerbside collections – we can provide on-site collections where needed, feasible and appropriate. We can drive onto JOALs provided we have a signed

(~~ba~~) Detail how waste and recycling will be stored on-site in a manner that is safe, sanitary, and does not create a nuisance; and (~~eb~~) Identify the proposed waste collection point(s) and demonstrate that they are accessible, safe, and do not adversely affect traffic, pedestrian access, or neighbouring properties. The certified Waste Management Plan must be implemented prior to the occupation of any residential dwelling on the lots and maintained thereafter by the Residential Society.	access waiver. Further, council's rating policy is that we will charge for council waste services essentially by default and only provide an exemption if we make an assessment that we cannot feasibly service the site.

10.0 Supporting Documents

Residential Design Element – R7 – Design for Waste, Auckland Design Manual

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 24:

Terrestrial Ecology

Delmore Fast Track Application

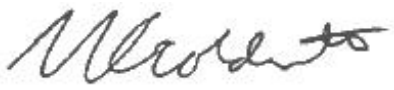
To: Auckland Council – Terrestrial Ecology

From: Mark Delaney, Viridis. Where a different technical expert has provided input into the response this is recorded.

Date: 15 April 2026

Re: Terrestrial Ecology Response Memorandum

1.0 Technical Specialist Memo – Terrestrial Ecology

From:	Nick Goldwater – Senior Principal Ecologist, Wildland Consultants
Qualifications & Relevant Experience:	I hold the qualification(s) of: Master of Environmental Science (Ecology) and have 18 years of experience in preparing ecological assessments and ecological management plans. I am a full member of the New Zealand Ecological Society, New Zealand Plant Conservation Network, and Auckland Botanical Society. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	29 April 2026

2.0 Original Specialist Review Memo

During my review of the original application documents, I identified the following information gaps.

- No information was provided on the potential effects of terrestrial and freshwater receiving environments should the wastewater treatment system suffer a serious failure. No assessment of alternatives has been considered.
- Operational effects were insufficiently addressed, particularly domestic cats and artificial light at night.
- No information was provided regarding how existing areas of SEA will be protected and managed in perpetuity. Methods to control predators were too vague and sit within the Planting Implementation and Maintenance Plan.

3.0 Updated Response to Applicant's Memo

Operational effects relating to domestic cats and artificial night at light have been acknowledged by the applicant and measures have been recommended to address cat ownership and minimise light close to the Nukumea Reserve. I agree that under normal conditions maintenance of the wastewater dripline within the covenanted area will likely have negligible effects on indigenous habitats. However, I disagree with the applicant's ecologist position that a proposed offset to address the potential operational effects of treated wastewater on the covenanted area is not justified. This is because the possibility of a significant system failure cannot be excluded, and the actions required to address such a failure could result in damage to the covenant area.

Greater clarification has been provided regarding ecological management across the site (pest control, planting, legal protection, etc).

4.0 Outstanding Issues

Response to Further Information Requests / Technical Comments

All issues raised in my initial review have been responded to. There is only one area of disagreement, which relates to the proposed offset site. Consent conditions could also be added and strengthened in relation to offsetting and domestic pets (see my comments below).

Response to Recommended / Amended Conditions

The proposed conditions (114 to 116) to manage light effects are appropriate.

In condition 31, regarding forest birds, a clause should be added that requires a setback of 20 metres from an active nest during vegetation clearance.

Regarding the proposed offset area (equivalent to the covenanted area within the irrigation field) I suggest adding a new condition that includes the following provisions:

- An offset area of equivalent or greater size and ecological value must be identified and legally protected in perpetuity (preferably by QEII covenant) before discharge commences.
- Weed and pest animal management required for both the covenanted area and the offset area in perpetuity.
- Three-yearly ecological monitoring of both areas, with reports to Auckland Council within three months of each monitoring anniversary

Advice note: *The offset area should be located as close to the site as possible and within the same ecological district.*

I have drafted a new condition 189 below re: ban on domestic cats and other pest animals.

> Condition No. 189
> (i) The owners and/or occupiers of lots within Stage 2 of the development must not keep, harbour, or allow any domestic cat, mustelid (including ferrets, stoats, and weasels), or rodent on any residential lot, JOAL, road reserve, drainage reserve, or open space within the development at any time.
> (ii) Prior to the issue of the first section 224(c) certificate for Stage 2, the consent holder must ensure that the cat and pest animal prohibition required under Condition 189(i) is:
> (a) Registered as a consent notice on the record of title for all residential lots within Stage 2, binding on the owner and all subsequent owners and occupiers in perpetuity; and
> (b) Incorporated as a standing obligation within the Residential Society constitution or equivalent incorporating document, such that membership of the Residential Society requires acknowledgement of and compliance with the prohibition.
> (iii) The Residential Society must develop and implement an education and communication strategy for informing prospective purchasers, new residents, and existing residents of the cat and pest animal prohibition, including at the point of sale, at settlement, and on an ongoing basis.
> (iv) Signage requirements must be installed at key entry points to the development and adjacent to bush covenant areas, drainage reserves, and wetland areas notifying residents and visitors of the prohibition.
> (v) The Residential Society shall maintain a register of complaints and confirmed breaches, which shall be provided to Auckland Council upon request.

(vi) Where the Residential Society becomes aware of a cat, mustelid, or rodent being kept on a residential lot in breach of Condition 189(i), the Residential Society must:

(a) Notify the owner and/or occupier of the lot in writing within five working days of becoming aware of the breach, requiring remediation within a specified timeframe of no more than 15 working days;

(b) Notify Auckland Council of the breach and the steps being taken to address it within five working days; and

(c) Record the breach, the notification, and the outcome in the register required under Condition 189(v).

5.0 Conclusion

The applicant's ecologist has provided substantive responses to most issues raised in my initial review and most matters have been satisfactorily resolved. The commitment to prepare a separate Ecological Management Plan (EMP) as a condition of consent appropriately addresses my concerns regarding large-scale ecological revegetation, noting that key elements of the EMP should be included as conditions.

One area of disagreement remains regarding the biodiversity offset for the wastewater irrigation field. While day-to-day operational effects have been adequately addressed, the possibility of a significant system failure cannot be excluded, and legal protection of an equivalent bush area in perpetuity is a proportionate safeguard. A condition of consent to give effect to this has been recommended.

Subject to the conditions being amended accordingly, and to include an enforceable cat and pest animal prohibition across both stages, external review of the EMP and Fauna Management Plan (FMP), and outstanding FMP updates, I consider the ecological matters can be adequately addressed through updated consent conditions.

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Terrestrial Ecology) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

In this memorandum I refer to the areas of existing vegetation within the site currently subject to a protective covenant secured by consent notice interchangeably as either "covenant area" or "consent notice area".

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
Comments / information requests regarding assessing values		
Point 1: It does not appear that each ecological feature identified at the site has been appropriately assessed using Tables 4 and 6 of the EIANZ guidelines. Instead, ecological values have been assigned on a more qualitative basis.	The EcIA states that ecological values were determined in general accordance with the EIANZ Ecological Impact Assessment Guidelines (EcIAG), and that wording was used deliberately. The EcIA applies the EcIAG framework in substance, rather than reproducing Tables 4 to 6 in a prescriptive, feature-by-feature tabulated format. The EcIAG does not prescribe a single presentation format but requires that ecological values and effects are derived through a transparent and evidence-based process.	The additional information is useful to explain how ecological values were considered. No further comments.

	The EcIA meets this requirement. Ecological features were described in detail based on desktop review, field observations and targeted survey work, including vegetation, fauna and habitat assessments. These descriptions address the key EcIAG considerations, including habitat condition, representativeness, ecological context, connectivity, and species values. Ecological values were then assigned using structured expert judgement informed by these attributes. While Table 4 attributes were not explicitly tabulated, the relevant factors were clearly considered and documented. Similarly, although Table 5 was not explicitly reproduced, the EcIA records the conservation status of species identified or potentially present and uses this information, together with habitat suitability and survey results, to inform ecological value. The assessment therefore considers the same matters as those set out in the EcIAG species value framework. Importantly, the EcIA applies the core EcIAG methodology by combining ecological value with magnitude of effect using a standard matrix approach (Table 3), with resulting levels of effect summarised in Table 17. This demonstrates that the assessment is not purely qualitative, but is based on a structured and transparent evaluation of ecological value and effects. The subsequent fauna and flora response memorandum (26 March 2026) applies a more explicit tabulated assessment of terrestrial habitats against AUP Schedule 3	

	SEA criteria. This assessment is based on the same underlying survey data and is consistent with the ecological value framework applied in the EcIA, reinforcing the conclusions reached in relation to ecological values, effects, and net biodiversity outcomes.	
Point 2: The SEA assessment identified that areas of indigenous dominant vegetation were SEA quality on the basis of the "stepping-stones, migration pathways and buffers" criterion only. However, whether these areas meet the "threat status and rarity" criterion depends on the fauna survey which is commented on.	The SEA assessment concluded that areas of indigenous-dominant vegetation meet the "stepping-stones, migration pathways and buffers" criterion, reflecting their role in providing localised ecological connectivity within a modified landscape. The assessment also considered the "threat status and rarity" criterion, which is applicable but was determined not to be met. This conclusion is supported by the results of both flora and fauna surveys undertaken for the site. No indigenous vegetation types present on the site are classified as threatened ecosystems, and no plant, animal or fungi species with a Department of Conservation national conservation status of Threatened or At Risk were recorded within these habitats. The habitats present are consistent with modified, secondary or regenerating vegetation typical of the wider area and do not support species or ecosystem types that would trigger the threat status and rarity criterion. The available survey information confirms that the "threat status and rarity" criterion is not met, and that the identification of SEA values is appropriately limited to the connectivity-based criterion. Further detail regarding fauna survey methodology and results is provided in response to the relevant fauna survey comments below.	The rationale provided is acceptable, noting that some degree of subjectivity is involved in assessing the stepping stone criterion. No further comments.

	It is noted that the proposal includes revegetation and habitat enhancement measures that will increase the extent and quality of indigenous vegetation across the site, including both existing vegetation and new planting. Over time, this is expected to improve ecological values, including those relevant to the "threat status and rarity" criterion.	
Point 3: The SEA assessment map does not show all areas of indigenous dominant vegetation as SEA with no explanation.	All areas of indigenous-dominant vegetation identified within the site were considered as part of the SEA assessment. The mapping presented reflects those areas that meet one or more of the AUP Schedule 3 criteria, rather than all areas where indigenous vegetation is present. The area identified in the review (Figure 1) was assessed but was not mapped as SEA. This is because, in contrast to other areas on the site, it does not make a meaningful contribution to the "stepping-stones, migration pathways and buffers" criterion. In particular, it is relatively small and isolated, does not adjoin or buffer other areas of indigenous vegetation, and is located within a highly modified context adjacent to gorse and plantation forestry. As such, it does not provide a significant ecological linkage or buffering function within the wider landscape. In comparison, the areas identified as SEA are those that contribute to ecological connectivity at a broader scale, including linkages to adjacent covenant areas, mapped SEA, and the wider ecological network associated with Nukumea Scenic Reserve. These areas are also of a larger	The response provides useful clarification. No further comments.

	extent, which enables them to perform a more meaningful ecological function in terms of connectivity. The mapping therefore reflects a deliberate assessment of ecological function, context, and scale, rather than a simple representation of all indigenous vegetation present.	
Point 4: Wetland vegetation types were not included in the SEA assessment. Noted that all natural inland indigenous dominant wetlands meet subfactor 2(d) and qualify as SEA.	Wetland habitats within the site were identified, delineated and assessed in detail within the freshwater ecology section of the EcIA, consistent with standard practice and the relevant regulatory framework for natural inland wetlands (including NPS-FM and wetland delineation protocols). The focus of the SEA assessment presented in the terrestrial section and subsequent memo was therefore on terrestrial habitat types. While it is acknowledged that natural inland indigenous-dominant wetlands can meet the AUP Schedule 3 "threat status and rarity" criterion (subfactor 2(d)), this is not applicable to the wetlands present on the site. The EcIA demonstrates that these wetlands are highly modified systems, typically dominated by exotic pasture grasses and common rush/sedge assemblages, with limited indigenous flora diversity and low structural complexity. On this basis, they are not appropriately characterised as indigenous-dominant wetlands, and do not meet the threshold for SEA identification under this criterion. Additionally, it is noted that the proposal includes wetland revegetation and habitat enhancement measures that will increase the extent and quality of indigenous vegetation within wetlands. Over time, this is	The rationale provided is useful. Regardless of whether the wetlands are classified as SEAs, there will be net gain in wetland extent and value. No further comments.

	expected to improve ecological values to qualify them as SEAs. Notwithstanding this, the wetlands have been appropriately assessed in terms of ecological value, function and effects, including through application of the Wetland Ecological Evaluation (WEV) framework and development of a wetland offsetting package. The proposal retains and enhances the majority of wetland areas within the site, with only a small proportion subject to disturbance, and includes substantial wetland restoration and creation resulting in a net gain in wetland extent and ecological function. Accordingly, whether or not these wetlands are considered within an SEA framework does not alter the conclusions of the EcIA in respect of ecological effects, mitigation, or overall biodiversity outcomes.	
Point 5: Across fauna survey disciplines documentation of conditions is inconsistent. A table summarising visit dates, personnel, and weather conditions is needed.	Survey methodologies, timing and conditions are described within the relevant sections of the EcIA and supporting fauna and flora survey documentation for each survey discipline. This approach is consistent with standard EcIA practice, where survey-specific information is generally presented alongside the corresponding methods and results. While a single consolidated summary table is not a prescribed requirement under the EIANZ EcIA Guidelines, a summary of survey effort has been prepared (refer Table 1 appended) to assist with clarity. This table consolidates key information on survey timing, personnel and conditions across disciplines. The absence of a	The new appended information is useful. No further comments.

	consolidated table in the initial memoranda does not affect the robustness of the survey design or the conclusions of the EcIA. The ecological assessment is based on multiple survey methods undertaken over appropriate timeframes and supported by repeated site visits, targeted specialist surveys and supplementary observations. The level of survey effort is considered sufficient to characterise ecological values and inform the assessment of effects. Further detail regarding individual survey methodologies, effort and findings is provided in response to the specific fauna survey comments below.	
Point 6: Additional BOAM plots would have been expected in good quality, representative forest/scrub so that the benchmark values could be appropriately derived.	The vegetation plot sampling undertaken within areas of proposed vegetation removal is consistent with the BOAM methodology and relevant guidance (Maseyk et al. 2015, 2018), and is appropriate for quantifying the characteristics of vegetation subject to impact. The BOAM framework does not require benchmark values to be derived from site-specific plots, and allows for the use of published reference data, regional benchmarks, and expert judgement to define appropriate target or reference conditions. In this case, benchmark values were derived using the most appropriate and representative information available, rather than relying solely on on-site vegetation which is generally modified and variable in condition. The indigenous vegetation types present on the site are common and relatively simple in composition, and do not represent rare, threatened, or highly specialised	I agree that the BOAM does not require benchmark values to be derived from site-specific plots, although it would be useful for the ecologist to cite the references/sources from which benchmark values were obtained. No further comments.

	ecosystems that would necessitate the development of bespoke, site-specific benchmark plots. In this context, appropriate benchmark values can be reliably derived from existing reference data and professional judgement. While areas of higher-quality native vegetation are present within the wider site (e.g. covenant and SEA areas), these are either not subject to effects or are not necessarily representative of achievable or appropriate benchmark conditions for the vegetation types being impacted. As such, the use of site-derived benchmark plots was not considered necessary or appropriate. The approach adopted provides a robust and conservative basis for assessing vegetation loss and informing offsetting requirements, and does not affect the conclusions of the EcIA in respect of ecological effects or net biodiversity outcomes.	
Point 7: All 5 minute bird counts were conducted on a single day (15 December 2025) between 10am and 3pm which is a methodological weakness and does not align with DOC protocols.	The five-minute bird counts were undertaken in accordance with the DOC Inventory and Monitoring Toolbox guidance (Hartley & Greene, 2012). The DOC guidance does not require or explicitly recommend early morning-only surveys, but instead provides a broad acceptable survey window, within which the surveys were undertaken. The guidance states that counts should be conducted on fine, calm days between 1.5 hours after sunrise and 1.5 hours before sunset, with a typical mid-summer survey window of approximately 0730 to 1930 NZDT. The surveys undertaken between 10:00 am and 3:00 pm fall well within this prescribed timing window and are therefore consistent with DOC protocol.	My preference is to include counts closer to sunrise, but I do not consider this would have materially change the results of the surveys at the site. No further comments.

	Importantly, the five-minute bird counts were not relied upon in isolation and form one component of a broader avifauna assessment, which included targeted dawn surveys (including all bird species not just wetland species), multiple site visits and incidental observations across different times and conditions, desktop database review, and eDNA sampling. These multiple lines of evidence collectively provide a robust characterisation of avifauna present on the site. The survey effort is considered robust and proportionate to the scale and nature of ecological effects associated with the proposal.	
Point 8: Only 2 locations across all 36 identified natural wetland were undertaken for dawn bird surveys (26 November and 15 December). This is inadequate spatial distribution for cryptic wetland species, particularly bittern. It would have been appropriate to undertake a targeted acoustic survey for bittern during peak booming season (Octo-Nov) given numerous wetlands and bittern known to be around area (within 10km).	The selection of wetland survey locations was targeted and deliberate, focusing on those areas with the highest ecological suitability for supporting cryptic wetland bird species. The majority of wetlands identified within the site are highly modified and pasture-dominated systems, characterised by pasture grasses with wetland ratings (e.g. Mercer grass and creeping bent), a few sporadic rushes, no structural complexity, and little to no buffering vegetation. These wetlands are typically open and subject to grazing, and are therefore unlikely to provide suitable habitat for cryptic wetland species such as bittern or crake. In contrast, the two wetlands selected for targeted dawn surveys represent the highest quality wetland habitat on the site, with features including:	The explanation provided is acceptable. No further comments.

	• greater vegetation structure and complexity, • presence of emergent wetland vegetation, • areas of open water, and • some degree of buffering from surrounding land uses. These are the locations where cryptic wetland species would be most likely to occur if present, and therefore represent an appropriate and efficient focus for targeted survey effort. Notwithstanding this, the ecological assessment is based on multiple lines of evidence, including eDNA sampling, which collectively provide confidence in the characterisation of wetland bird use of the site. Targeted dawn wetland bird surveys were undertaken on 26 November 2025 and 15 December 2025, which align with the recognised booming season for Australasian bittern (Botaurus poiciloptilus) in New Zealand. Bittern vocal activity typically occurs during spring to early summer (approximately September to December), with peak activity commonly recorded during October and November, but extending into December, particularly in northern regions such as Auckland. The November survey therefore coincides with the peak booming period, and the December survey falls within the late phase of the active period.	

	While longer-duration acoustic monitoring can increase detection probability, the survey approach adopted is considered fit-for-purpose, particularly given: • the limited extent of suitable wetland habitat on the site, • the targeted focus on highest-quality habitats, and • the use of multiple complementary survey methods (including eDNA sampling). No evidence of bittern was detected, and given the nature and quality of available habitat, the likelihood of regular use of the site by bittern is considered low.	
Point 9: The final ACO and pitfall trap numbers (92 and 22 respectively) in the fauna survey memo differ from those states in the EcIA (120 ACOs and 24 pitfall traps) with no explanation.	The difference in ACO and pitfall trap numbers between the EcIA and the subsequent fauna survey memo reflects that the EcIA recorded anticipated (indicative) survey effort, as the lizard surveys were still being finalised at the time of report preparation. The fauna survey memo reports the actual survey effort undertaken. A total of 92 artificial cover objects (ACOs) and 22 pitfall traps were ultimately installed and monitored. The reduction in numbers from those indicated in the EcIA reflects a combination of site-specific constraints, including areas of unsuitable habitat for effective deployment, access limitations, and minor loss or disturbance of equipment during the survey period. Notwithstanding this variation, the survey effort remains consistent with accepted good practice for lizard surveys and was targeted to areas of suitable habitat, as shown in the survey mapping. The combination of ACOs, pitfall	This issue has been clarified. No further comments.

	traps, manual searching and nocturnal spotlighting provides a robust level of survey coverage. The variation in device numbers does not affect the interpretation of survey results or the conclusions of the EcIA in respect of lizard presence, habitat suitability, or ecological effects.	
Point 10: Regarding the nocturnal spotlight surveys on 5 November and 17 December, the fauna survey memo does not describe transect routes, duration, weather conditions, or the habitat types covered during each night survey. For arboreal gecko detection, which is the primary purpose of spotlighting, the spatial coverage relative to available gecko habitat (particularly the SEA and western consent notice area) cannot be assessed from the information provided. Spotlighting transects are not mapped. Two nights of spotlighting across a 109-ha site with heterogeneous habitat remains a minimal effort for this survey type.	The nocturnal spotlight surveys undertaken on 5 November and 17 December were targeted surveys focused on areas of suitable arboreal gecko habitat, rather than uniform coverage of the entire site. Survey effort was directed to native-dominant vegetation, including forest and scrub habitats, where arboreal geckos are most likely to occur. Areas such as open pasture, plantation forestry and highly modified habitats were not prioritised, as these are of low suitability for arboreal gecko species. The spatial extent of spotlighting effort is shown in Figure 1 (appended), which identifies the areas of best-quality habitat that were systematically searched. These areas include the SEA and western consent notice/covenant areas, where suitable habitat is present. A total of approximately 21 person-hours of nocturnal spotlighting was undertaken across the two survey nights under suitable nocturnal survey conditions. Weather conditions, personnel and survey effort are summarised in Table 1 of this response. The level of survey effort is considered appropriate and consistent with accepted practice, particularly given the targeted, habitat-based approach adopted.	The additional information is useful. No further comments.

	Importantly, spotlighting was undertaken in conjunction with multiple complementary survey methods, including ACOs, pitfall trapping, and manual searching. This combined approach provides a robust level of survey coverage across habitat types and detection methods. On this basis, the survey effort is not considered minimal, and is sufficient to characterise lizard presence and habitat suitability within the site. The absence of recorded lizards is therefore considered a reliable result, while a precautionary approach has been adopted in the assessment, assuming lizards may still be present at low densities and providing for appropriate management measures.	
Point 11: Question the utility of eDNA sampling for lizards.	eDNA sampling was not used as a primary survey method for lizards, and was not relied upon in the assessment of lizard presence or absence. As outlined in the fauna survey methodology, the primary purpose of eDNA sampling was to identify freshwater species and to complement the broader ecological assessment, rather than to function as a targeted lizard survey technique. The lizard survey methodology is clearly set out separately and comprises standard and widely accepted methods, including artificial cover objects (ACOs), pitfall trapping, manual searching and nocturnal spotlighting. These methods form the basis of the lizard assessment and are considered sufficient to characterise lizard presence and habitat suitability. The eDNA component was included as a supplementary line of evidence only, recognising that it may, in some	The additional information is useful. No further comments.

	cases, detect cryptic species that are not identified through standard survey methods. It is acknowledged that eDNA detection of terrestrial reptiles, including lizards, is currently limited and subject to methodological constraints, and therefore results were interpreted cautiously. No lizard species were detected through eDNA sampling. However, this result was not relied upon in the EcIA, and does not influence the conclusions of the assessment. A precautionary approach has been adopted, with lizards assumed to be potentially present at low densities and appropriate management measures proposed accordingly.	
Point 12: The spatial distribution of the ten ABMs is shown approximately in Figure 5, but the methods section does not describe the rationale for placement. Ten ABMs is a reasonable number for a site of this size, but adequacy is habitat-dependent and the placement logic should be explained in the report.	The rationale for ABM placement is described in the fauna survey memo, which states: "Monitoring locations were selected to include likely flyways, riparian margins, mature shelterbelts, vegetation edges, and open pasture areas, and were marked in the field with GPS and flagging tape." This reflects a targeted, habitat-based placement strategy, consistent with standard bat survey practice, whereby detectors are located in areas most likely to be used for commuting and foraging. In addition, ABM placement was informed by a review of existing bat information, including the DOC bat database, a recent bat survey undertaken in the area (2022–2023)	This issue has been clarified. No further comments.

	for the Notice of Requirement for road 6 of the Northern Project by AT and NZTA, and an earlier bat survey undertaken in 2017 along the site boundary and adjacent to the Nukumea Scenic Reserve. This information was used to ensure that monitoring locations were appropriately positioned within the broader landscape context. These habitat features and supporting information collectively represent the key movement corridors and edge environments utilised by long-tailed bats, and therefore provide an appropriate basis for maximising detection probability across the site. The spatial distribution shown in Figure 5 aligns with this approach, with detectors positioned to capture a representative range of habitat types and landscape interfaces. Accordingly, the placement of ABMs was deliberate, evidence-based, and consistent with accepted ecological practice, and the information provided in the survey documentation is sufficient to demonstrate the rationale for their deployment.	
Point 13: Question the utility of eDNA sampling for bats.	As outlined in response to Point 12, eDNA sampling was not used as a primary survey method for bats, and was not relied upon in the assessment of bat presence or absence. The primary bat survey methodology comprised acoustic monitoring using ABMs, which is the accepted and appropriate method for detecting bat activity. The eDNA component was included as a supplementary line of evidence only, recognising that it may, in some cases, assist in detecting cryptic species. It is	The additional information is useful. No further comments.

	acknowledged that eDNA detection of bats is currently limited and subject to methodological constraints, and results were interpreted cautiously. No bat species were detected through eDNA sampling. However, this does not influence the conclusions of the EcIA, which are based on acoustic monitoring and a precautionary assessment approach.	
Point 14: There has been no assessment of invertebrate values, even though this is not critical to the report's findings given the relatively small-scale impact on vegetation. At a minimum, it would be appropriate to include a desktop assessment.	No targeted terrestrial invertebrate surveys were undertaken on the Site given the relatively small-scale impacts proposed on vegetation and the absence of identified high-value or specialised invertebrate habitats. Terrestrial invertebrate communities are generally closely linked to vegetation type, habitat complexity and indigenous plant diversity. Based on vegetation mapping and field surveys undertaken for the EcIA, the Site is predominantly comprised of managed pasture, with additional areas of pine plantation, exotic-dominant vegetation, gorse scrub and native-dominant vegetation within SEA and consent notice areas. In the absence of specialised habitats (e.g., mature undisturbed forest), terrestrial invertebrate communities are expected to reflect those typical of modified rural environments in the Auckland region and are therefore likely to be dominated by common indigenous and introduced species. However, a review of available desktop information, including publicly accessible from iNaturalist and relevant DOC New Zealand Threat Classification System (NZTCS) assessments (including Gastropoda, Lepidoptera,	The additional information is acknowledged. No further comments.

	Hymenoptera, Onychophora and Orthoptera) was undertaken in preparing this response and did not indicate the presence of At Risk or Threatened terrestrial invertebrate species within or surrounding the Site. While records of kauri snails (*Paryphanta busbyi* – At Risk, Declining) are known within the wider northern Auckland/Northland region, these are typically associated with larger areas of intact native forest and dense leaf litter. The fragmented and edge-affected nature of native vegetation within the Site does not provide suitable habitat for this species, and their presence within the Site is considered highly unlikely. While many terrestrial invertebrate taxa in New Zealand are poorly described or classified as Data Deficient, the likelihood of Threatened or At Risk species being present is strongly constrained by habitat availability. The vegetation within the Site itself is generally fragmented, edge-affected and modified, and does not comprise intact or specialised habitats typically associated with Threatened or At Risk terrestrial invertebrate species. Potential effects on terrestrial invertebrates are primarily associated with vegetation clearance and ground disturbance. However, the majority of vegetation proposed for removal comprises low-value habitats (e.g. pasture, gorse scrub and exotic vegetation), with only a limited extent of native-dominant vegetation affected. Higher-value vegetation within SEA and consent notice/covenant areas is largely retained. Invertebrate populations are expected to be resilient to temporary disturbance due to their ability to recolonise from	

	surrounding habitats, which will remain available within and adjacent to the Site. Overall, potential effects on terrestrial invertebrates are considered to be low, increasing to positive in conjunction with the proposed revegetation, wetland creation and habitat enhancement that are expected to improve terrestrial habitat quality and connectivity over time.	
Comments / information request regarding managing operational effects		
Wastewater and disposal		
Point 15: No assessment of effects of overview of management measures for wastewater system failure.	This is addressed in a response memo prepared by Apex (refer **Appendix D** of the Wastewater Memo).	Appendix D uses flow charts to work through several scenarios should the system fail. This is not an assessment of effects. As such, the response provided is not sufficient.
Point 16: The covenant area in which the disposal field is proposed does not provide for any habitat loss or disturbance and its intended use is contrary to the reason the covenant was created.	The proposed disposal field has been specifically designed to avoid vegetation clearance and minimise disturbance, with driplines installed by hand beneath existing vegetation. This scale of disturbance is comparable to that associated with routine covenant management activities (see Point 17 below for further commentary on this point). As a result, there will be no measurable loss of indigenous vegetation and no substantive change to ecological function within the covenant area. While the covenant is intended to protect indigenous biodiversity values, the proposal does not compromise those values. The ecological characteristics of the site, including vegetation structure, habitat function and	Habitat loss is likely to be negligible based on the response to Point 17 below, although the response assumes there will be no major failure of the treatment system. It is noted, however, that any adverse effects of the wastewater field and discharge are not provided for under the wording of the existing covenant (i.e. not do anything that would prejudice the health or ecological value of the area to be protected, its long-term viability and/or sustainability). From a practical perspective, in the event of a system failure, the vegetation would need to be managed for

	connectivity, will be retained, and the scale of disturbance is comparable to that associated with routine covenant management activities. Importantly, the covenant will continue to be managed for its ecological values, and the presence of the disposal field does not preclude or fundamentally alter this purpose.	the purpose of maintaining/restoring the infrastructure rather than ecological values. We therefore still consider than an alternative (offset) covenant should be provided offsite as per the recommended condition provided at the front of this memo.
Point 17: If issues arise with the driplines in the future, it is highly likely that vegetation alteration will be required to remove and replace the lines as understorey and groundcover vegetation will have grown over and around them since their initial installation, encouraged by the increased availability of water and nutrients.	While the presence of the disposal field introduces an additional management consideration within the covenant area, it is not expected to fundamentally alter the primary management focus, which will remain the protection and enhancement of ecological values. This remains the primary management focus through the consent notice and the conditions of consent requiring active management of these areas. From an ecological management perspective, the type and scale of disturbance associated with any future dripline maintenance would be comparable to standard covenant management activities, such as weed control, pest plant removal, and occasional access for maintenance within vegetated areas. This level of low-intensity, intermittent understorey disturbance is already anticipated within covenant management and, when appropriately managed, does not compromise ecological values. To address this directly, dripline maintenance is proposed to be explicitly integrated within the ecological management framework. This includes:	See response to Point 16.

	• aligning maintenance activities with scheduled weed and pest management; and • requiring all works to be undertaken using low-impact methods consistent with ecological management practices. This will be provided for via the conditions of consent and/or associated management plans. Further work is being done on this and amended conditions will be provided. This is not yet incorporated into the conditions being circulated 17 April. This approach ensures that any disturbance is coordinated, minimised, and no greater than that associated with routine covenant management, with vegetation disturbance localised and temporary. Accordingly, the covenant will not be managed "for infrastructure"; rather, infrastructure maintenance will be subordinate to and embedded within the ecological management regime, ensuring the primary function of the covenant is retained. From an effects perspective, this results in: • minimal installation effects; • low operational effects under appropriate treatment and management; and • maintenance effects that are consistent with existing ecological management disturbance. In terms of system performance and potential failure, the proposal incorporates multiple safeguards consistent with	

	municipal-scale infrastructure as described by APEX and reproduced here for convenience, including: • Duty/standby redundancy for critical components • Balance tank storage to buffer inflows and prevent overloading • Real-time monitoring and controlled irrigation rates to match soil conditions • Backup power supply to maintain operation during outages • The treatment process itself produces very high-quality effluent, with nutrient concentrations significantly lower than typical environmental levels, and is designed to operate conservatively to avoid over-application. Collectively, these design features mean that the likelihood of system failure resulting in ecological effects is very low.	
Point 18: No assessment of alternatives has not been undertaken for the wastewater disposal field, and the applicant has not adequately demonstrated a functional need for the current location within an area of protected, SEA-quality vegetation.	*B&A planning response to comment:* The consent notice covenant area in which is proposed to be used for irrigating RO treated water is not identified and mapped as a SEA-T in the Auckland Unitary Plan ("AUP"). Rather, Viridis has identified this area as meeting the criteria for significant ecological value in Schedule 3 AUP based on the fourth criterion "stepping	The planning response provides useful information regarding functional need and assessment of alternative sites. No further comments.

	stones, migration pathways and buffers" as part of preparing its report. This means that the AUP RPS policy relating to effects on SEA-T's does not apply (B7.2.2(5)) and neither do the objectives and policies in Chapter D9 of the AUP because these relate the "Significant Ecological Areas Overlay". The AUP objectives and policies that apply to the consent notice covenant area are those in Chapter E15 of the AUP. None of these provisions require evidence demonstrating a functional need for an activity to occur within an area of native vegetation or an assessment of alternatives. Rather, they require (in summary) maintenance of ecological services and indigenous biodiversity values and protection of contiguous areas of indigenous vegetation cover, and in respect of the interface with development activities. Viridis' assessment demonstrates that these outcomes will be met with the irrigation field in place provided the recommended installation and management measures are adopted, which the applicant proposes to do. This also means that the consent notice covenant area is not an "SNA" or "significant natural area" for the purposes of the National Policy Statement 2023 Amended December 2025 ("NPSIB"). An area is only an SNA for NPSIB purposes if it was identified as such in a policy statement or plan on the NPSIB's commencement date (5 August 2023, being 28 days after the gazette date 7 July 2023) or if it was subsequently identified as an SNA	

on assessment against the criteria in the NPSIB (see definitions in clause 1.6).

Consequently, no functional need test or requirement for alternatives assessment applies to activities within the consent notice covenant area because clause 3.10 NPSIB does not apply. However, for completeness, it is noted that even if clause 3.10 NPSIB did apply, the functional need test would not apply because Viridis' assessment is that the irrigation field would not result in any of the effects in clause 3.10(2) NPSIB.

The NPSIB effects management provisions that applies to the consent notice covenant area is clause 3.16. Like the applicable AUP provisions, this clause does not require evidence demonstrating a functional need for an activity within a particular area of native vegetation. Rather, clause 3.16 states that for new subdivision, use and development outside SNAs:

- Significant adverse effects must be managed by applying the effects management hierarchy; and
- Other adverse effects that may adversely affect indigenous biodiversity must be managed to give effect to the objectives and policies of the NPSIB.

In this case Viridis' assessment is that the irrigation field will not have significant adverse effects on indigenous biodiversity within the consent notice covenant area, provided the drip lines are installed and managed in accordance with the proposed installation and

	management methods. As explained at Point 17, the type and scale of disturbance would be comparable to standard covenant management, and the applicant proposes to a management approach which sees maintenance of the irrigation field paired with vegetation management to ensure complementary management. More generally, Viridis' assessment demonstrates the revegetation and pest management proposed for this area as part of the project (now to be secured through a specific Ecology Management Plan in response to AC comments) will see its ecological and biodiversity values restored and enhanced which accords with policy direction in both the AUP and NPSIB. *Architect design team response to comment:* However, the applicant's design team took a careful and cross discipline approach to identifying locations for irrigation fields within the wider development design. First, areas within 15m of a stream or wetland were excluded. This was to ensure that discharged water had sufficient time and space to move through the soil before reaching the waterway. This narrowed appropriate areas quite a lot because of the nature of the network of freshwater bodies. Second, engineered slopes and naturally steep areas were excluded to avoid issues with installation and maintenance of the drip line infrastructure and so they	

	could accommodate the related planting. Much of the site is steep, and requires engineering to make easily useable, so again, this narrowed appropriate areas quite a bit. Third, the spaces proposed for neighbourhood parks were excluded although potentially viable because of the importance placed on this community infrastructure by Auckland Council.	
Point 19: To provide certainty that there will be no net loss of indigenous biodiversity protection within the covenanted site that is proposed for use as a disposal site, recommend an offsetting approach is adopted whereby another bush area of equivalent size and ecological value is legally protected in perpetuity (see proposed conditions), while protecting the operational needs of the irrigation field and as practicably possible the ecological values of the habitat (through weed and pest animal management).	Given that: • no measurable loss of indigenous vegetation or habitat is anticipated • ecological function within the covenant is maintained • effects are minor, localised, and temporary in nature • and system performance risks are robustly managed there is no residual adverse effect on indigenous biodiversity that would necessitate an offsetting response. Furthermore, the proposal delivers substantial ecological enhancement elsewhere on the site, including revegetation and habitat restoration, resulting in a net gain in indigenous vegetation extent and ecological value. These measures are more appropriately characterised as enhancement, rather than offsetting for adverse effects that are not expected to occur. On this basis, an offsetting approach is not considered necessary or proportionate.	While I agree that most effects on the covenanted site can be adequately managed, it is optimistic to assume that a significant failure of the treatment system could not occur. The proposed legal protection of an equivalent site provides an additional layer of confidence and is not particularly onerous on the applicant (i.e. offset planting will not be necessary). I have included a suggested condition of consent at the front of this memo.

Operational effects on fauna		
Point 20: The EcIA and subsequent response to memorandum explains that the planting of vegetated buffers will mitigate the effects of increased lighting, noise, and human disturbance. While I agree that planted buffers have positive benefits, the EcIA should not rely on this alone. Consideration should be given to the type and intensity of lighting recommended to make them as fauna-friendly as possible, e.g. selecting warm-white or amber LED sources and providing shielding to prevent lateral light spill. This is particularly important on lots adjoining riparian corridors and the SEA boundary, where even modest spill from garden or driveway lighting can penetrate native vegetation edges.	The EcIA concludes that potential effects associated with lighting, noise and human disturbance are low, based on the ecological context of the site and survey findings. Despite comprehensive fauna surveys undertaken across multiple seasons and using a range of methods, no sensitive, rare or threatened terrestrial species were detected. The habitats present are generally modified, and the site is not currently supporting fauna communities that are highly vulnerable to edge effects such as light spill. In addition, the proposal includes substantial revegetation, riparian planting and habitat enhancement, which will significantly increase the extent, quality and connectivity of indigenous habitat across the site. These measures will provide improved buffering and ecological resilience over time. In this context, the reliance on vegetated buffers is considered appropriate and proportionate to the level of ecological risk identified. Notwithstanding this, and to respond to the Council's concerns in a pragmatic manner, the applicant is willing to incorporate targeted lighting controls for dwellings in close proximity to sensitive ecological areas. Specifically, it is proposed that outdoor lighting for dwellings located within 20 m of riparian corridors and the SEA boundary be designed to: • use low-intensity, warm-colour lighting (e.g. warm-white or amber spectrum); and	I am supportive of the proposed changes to the lighting design, which will be included as a condition of consent. No further comments.

	• be directional and shielded to avoid light spill into adjacent vegetation. This is included as a condition of consent. This approach ensures that any perceived lighting effects are managed where they are most relevant, without imposing unnecessary restrictions across the wider development. On this basis, the combination of habitat enhancement and targeted lighting controls is considered sufficient to address perceived effects on fauna.	
Point 21: No restriction on domestic pets proposed. At a minimum, the EcIA should have: • Discussed cat predation as an urbanisation effect. • Referenced Auckland Council's guidance on cat management in urban-fringe developments. • Acknowledged that similar subdivisions adjacent to reserves have required cat-containment conditions in recent years (i.e. Ara Hills). • Recommended conditions of consent addressing cat management — for example, requirements for cat-proof fencing on reserve boundaries, cat-free covenants on all lots and riparian margins, or mandatory microchipping and registration. • Residents society to monitor, enforce and report on compliance	The potential effects of domestic cats as a component of urbanisation are acknowledged. Domestic cats can contribute to predation pressure on indigenous fauna, particularly birds, lizards and invertebrates, and this is recognised in ecological literature as a potential effect associated with residential development. However, the ecological context of the site is an important consideration. The EcIA identifies that, despite comprehensive survey effort, no sensitive, rare or threatened terrestrial fauna species were recorded, and the site is currently characterised by modified habitats and existing edge effects associated with surrounding development. As such, the baseline level of predation risk is already influenced by the existing urban environment. It is also noted that, while cat management is discussed in various strategic documents (including DOC guidance and Auckland Council biodiversity strategies), these are generally high-level and non-prescriptive, and do not establish specific requirements for domestic pet controls in relation to SEAs or comparable habitats under the RMA	The applicant's ecologist has appropriately acknowledged the potential adverse effects of domestic cats on indigenous fauna. I do not consider that the lack of threatened fauna at the site (as determined by the surveys) means that threatened fauna beyond the site (i.e. in Nukumea Scenic Reserve) would not be vulnerable to roaming cats. Overall, the proposed intention to ban cats from Stage 2 of the development is sensible and reasonable, given its proximity to large natural areas; however, the new condition of consent is not appropriate in its current form, noting that a prohibition without an enforcement and education mechanism is largely aspirational. I note there is a smaller SEA directly to the south of the Stage 1 area, and it is likely that the increased numbers of cats will put pressure on resident fauna.

The DOC urban wildlife guidance and Auckland Council's own biodiversity strategy both identify cat predation management as a standard expectation for developments of this type near SEAs. Of further relevance is the proposed Grand View Estate adjacent to Nukumea Scenic Reserve where commissioners decided that cats must be excluded. Other cat-free developments in the Ōrewa area include Sunny Heights, off West Hoe Heights in Orewa, also around 570 homes, which has placed a cat-free covenant on a portion of its site registered on the title of those properties, and the Weiti Bay development in Stillwater.	framework. Similarly, while some recent developments (e.g. Ara Hills, Weiti Bay) have incorporated cat management measures, these have been site-specific responses rather than reflecting a consistent or standardised requirement. Against that background, the applicant has also adopted a site-specific, targeted approach to managing potential effects of domestic cats. This includes the proposed use of covenants preventing cat ownership within Stage 2 of the development, which: • adjoins the Nukumea Scenic Reserve and areas of higher ecological value; and • contains the largest extent of established indigenous vegetation within the site. This approach recognises that spatial buffering is an effective method for managing potential effects of domestic pets, with Stage 2 acting as a functional buffer between the wider development (Stage 1) and more sensitive ecological areas. On this basis, the proposed approach appropriately balances ecological outcomes with practical implementation, and is considered sufficient to address potential effects associated with domestic cat predation without imposing unnecessary restrictions across the entire development. The Department of Conservation has provisionally advised this approach is considered acceptable.	

Comments / information request regarding management plans		
Fauna management plan		
Point 22: Fauna management plan bird section requires amendments to include more detail and align with standard conditions including: - The standard "bird breeding season" during which nesting bird surveys are required is 1 September to 31 March (not 1 September to 28 February as currently stated). - If nesting behaviour, or an active nest is located, an exclusion area with a diameter of 20 metres must be established around the nest (not 10 metres diameter as currently stated). - Section 1.4.1 states that "from July onwards, dotterels begin looking for breeding territory", but it does not state when they begin breeding. Northern New Zealand dotterel typically breed from August to February. This would mean that dotterels may begin nesting prior to the start of the nest survey period. Further information is required regarding how early dotterel nests will be located during August.	The Fauna Management Plan (FMP) provided with the application is a draft document, intended to demonstrate the proposed management framework. As set out in the consent conditions, a final FMP will be prepared and submitted to Council for certification prior to the commencement of works, and will be updated to reflect any refinements required at that time in accordance with standard preparation of final plan/certification processes. Notwithstanding this, the matters raised are largely technical clarifications and standard practice refinements and will be incorporated into the draft FMP. An updated draft FMP will be provided as part of the statutory comments phase. In particular the following will be included in the updated draft FMP: • the bird breeding season will be updated to 1 September to 31 March; • nest protection measures, including appropriate exclusion distances, will be aligned with Council expectations; and • species-specific considerations (including northern New Zealand dotterel breeding behaviour and timing) will be clarified, including appropriate pre-construction survey requirements where relevant. More broadly, the final FMP will ensure that fauna management measures are responsive to habitat	Response is appropriate and largely relates to minor matters of detail. Some updates have been made to the conditions, although a minimum setback from nesting forest birds does not appear to have been specified.

- Leaving grass to grow long may deter dotterels from nesting, but it should be noted that long grass can provide good habitat for indigenous skinks. Discouraging dotterels in this way will therefore result in increased management requirements for indigenous skinks.	conditions and species present, including consideration of any interactions between management approaches (e.g. vegetation management and potential skink habitat). On this basis, the matters raised do not affect the conclusions of the EcIA and are appropriately addressed either through the updating of the draft FMP or through the finalisation and certification of the FMP in accordance with consent conditions. Changes that were recommended to the FMP condition have been adopted and are shown in the conditions, except for the change relating to pests which is proposed to be included in the new condition providing for an EMP.	
Point 23: Fauna management plan lizard section requires amendments to include more detail and align with standard conditions including: - Wording regarding the timing of vegetation removal should be firmed up and be directive so that it is clear that any vegetation that provides potential skink habitat *must* be removed between 1 October and 30 April (not "*should"* as currently stated, as this is subjective and unenforceable). - Lizard management relies on destructive searches and inspections of felled vegetation. However, for a site of this size other salvage techniques should	As noted in response to Point 22, the FMP provided with the application is a draft document, and a final FMP will be prepared and submitted to Council for certification prior to the commencement of works in accordance with the consent conditions. The matters raised are primarily technical refinements, which will be incorporated at into the draft FMP and provided as part of the statutory comments phase. In particular the following will be included in the draft FMP: • the timing of vegetation clearance will be updated to provide clear and directive wording; • additional detail on survey and salvage methodologies (including the potential use of	I agree that the technical matters raised can be appropriately addressed through the updated draft FMP or through the finalisation and certification of the FMP. The conditions should specify that potential skink habitat must be removed between 1 October and 30 April.

also be included, such as pre-clearance trapping using pitfall traps, and spotlighting for geckos. - Details of the release site have not been provided and it is stated that this will be provided in the final plan, but I see no reason why this couldn't be determined at this stage. - There is no mention of pest animal control in the release site, or requirements for ongoing monitoring should a significant number of lizards be relocated. This is usually a requirement of projects of this scale.	supplementary techniques where appropriate) will be included; and Notwithstanding this, it is important to note that no lizards were recorded during comprehensive, multi-method surveys, including ACOs, pitfall trapping, manual searches and nocturnal spotlighting. On this basis, there is a high degree of confidence that lizard abundance on the site is low, and that only a small number of individuals, if any, would require relocation. A precautionary approach has nevertheless been adopted, with lizard management measures included within the draft FMP to ensure appropriate management should individuals be encountered. The scope and scale of any salvage or relocation effort will therefore be proportionate to actual findings during works, rather than assuming the presence of significant populations. In relation to release sites, these will be confirmed in the final FMP, noting that suitability may be influenced by the timing and staging of works, availability of appropriate habitat, and the implementation of revegetation and habitat enhancement measures within the site. On this basis, the matters raised do not affect the conclusions of the EcIA and are appropriately addressed through either the updated draft FMP or through the finalisation and certification of the FMP.	
Point 24: Fauna management plan bat section requires amendments to include more detail and align with standard conditions including:	As noted in response to Points 22 and 23, the FMP is a draft document, and a final FMP will be prepared and submitted to Council for certification prior to the commencement of works. The matters raised are largely	I agree that the technical matters raised can be appropriately addressed through the updated draft FMP. The applicant's precautionary approach is acknowledged.

- The sentence that states "If no bats were detected during the pre-vegetation clearance survey, felling can occur without implementation of the protocols" should be removed. As no other surveys are discussed, it is assumed that the survey being described here is the two consecutive nights of ABM monitoring required immediately prior to trees being felled. If this is the case, then no bat detections does not mean that the rest of the protocols do not need to be followed. Rather, it only means that further inspection by an arborist is not required before the trees are felled. All other aspects of the protocols still need to be followed, including inspecting the felled vegetation for evidence of bats having roosted in the tree in the past. This should be clarified. - No information is provided regarding where "additional planting is proposed to be provided and maintained for the purpose of the connectivity of long-tailed bat habitats". This should be provided as there is limited room available within the current plans to provide additional planting. If this "bat connectivity" planting will overlap with	technical refinements, which will be incorporated into the draft FMP and provided as part of the statutory comments phase. In particular the following will be included in the draft FMP: • the wording relating to pre-clearance bat surveys will be removed or their intention made clearer; and Notwithstanding this, it is noted that no bats were detected during acoustic monitoring, and the EcIA concludes that bat activity within the site is likely to be low or intermittent. A precautionary approach has nevertheless been adopted, with bat management measures incorporated within the FMP. In relation to the comment regarding "bat connectivity" planting, this requirement arises from the proposed consent conditions (carried over from the Notice of Requirement to achieve a consistent approach between the designation and the consent), rather than the EcIA or draft FMP. As set out in the EcIA, the proposal already includes substantial revegetation and habitat enhancement, including approximately 21 ha of planting beyond the 10.5 ha of planting required to offset vegetation loss, resulting in a significant net ecological gain. Accordingly, planting that contributes to habitat connectivity for bats is already inherently provided for within the broader revegetation framework, and is not relied upon as a separate or additional offsetting measure. Any overlap between "connectivity" planting	I recommend that the final FMP is externally reviewed once completed.

areas of revegetation already proposed, then this should be clarified and justified to ensure that revegetation work is not being "double counted".	and proposed revegetation does not represent double counting, but rather reflects the multi-functional ecological benefits of the planting programme. On this basis, the matters raised do not affect the conclusions of the EcIA and can be appropriately addressed through the updated draft FMP.	
Planting implementation plan		
Point 25: This plan is inappropriate and impractical for large-scale revegetation area, workable for high amenity landscape planting area. Separate Ecological Management Plan for ecological revegetation areas to be prepared by an ecologist in experience in large scale revegetation projects. Points recommended to include are eco sourced plants requirement not preferred where possible. The Ecological Management Plan should therefore include ongoing management of the SEA and bush covenant areas, including maps showing the locations and coverage of pest animal control devices, methods for the control of pest plants (including gorse), infill planting for gaps created by pest plant control, and a works programme to guide contractors.	The comments raised are acknowledged and largely relate to the level of detail and ecological specificity appropriate for large-scale revegetation and long-term ecological management. It is agreed that the landscape-based planting plans submitted with the application are not intended to function as a detailed ecological restoration specification, but rather to provide a conceptual framework for planting extent and typology. In response, it is proposed that a separate Ecological Management Plan (EMP) be prepared by a suitably qualified and experienced ecologist, and secured as a condition of consent, with the EMP to be submitted to Council for certification prior to implementation. The EMP will address the areas identified in the landscape plans as Native bush revegetation, upper riparian revegetation, lower riparian revegetation, and wetland planting mix, and will provide a detailed, ecologically-led framework for planting and ongoing management of these. The EMP will include, but not be limited to: • Eco-sourcing requirements for plant material;	The applicant acknowledges the issues raised and has proposed to prepare a separate EMP, which will specifically address ecological revegetation areas and associated ecological outcomes. I acknowledge that DOC has provide advice regarding plant species selection. I recommend that the final EMP is externally reviewed once completed. I also note that the consent conditions have not yet been updated to include reference to the EMP.

	• Refined planting palettes and species composition, including appropriate balance of pioneer and secondary species;
	• Planting densities and spacing, including consideration of canopy closure objectives and site conditions;
	• Infill planting requirements to address gaps arising from mortality or pest plant control;
	• A comprehensive pest plant and pest animal management strategy, including:
	  ○ methods, tools and control techniques;
	  ○ spatial layout (including mapping of control areas and devices);
	  ○ servicing and monitoring regimes; and
	  ○ adaptive management approaches;
	• Integration of pest management across revegetation areas, SEA and covenant areas; and
	• A staged works and maintenance programme to guide implementation and long-term management.
	
	The existing Planting Implementation and Maintenance Plan (IMP) will continue to apply to landscape and amenity planting areas (including streetscapes, open space planting, lot revegetation, stormwater pond edge planting and slope stabilisation areas), and will guide the practical implementation and maintenance of those areas. In contrast, the EMP will specifically address ecological	

	revegetation areas and associated ecological outcomes. The two documents are therefore complementary, with the IMP addressing landscape and engineering-related planting, and the EMP providing the ecological restoration framework. In relation to species selection and composition, it is noted that the current planting schedules reflect a preliminary, landscape-led design with some ecological input from Viridis and also from the DOC through engagement, and will be refined through the EMP process. The inclusion of a diverse range of species (including secondary and slower-growing species) reflects prior engagement with DOC and their objectives for longer-term ecological outcomes. These species will continue to be provided for alongside those needed to achieve effective early canopy establishment. It is also noted that the relative proportion of pioneer species (e.g. mānuka and kānuka) has similarly been influenced by DOC input, including consideration of fire risk, and this will continue to be taken into account during preparation of the EMP. Planting densities will likewise be reviewed and standardised through the EMP, taking into account site-specific conditions, establishment success, and relevant best practice guidance. Performance and establishment criteria (including canopy cover and survival targets developed in consultation with DOC) will apply to ecological revegetation areas addressed by the EMP. These criteria	

	will form part of the EMP and associated consent conditions, ensuring that ecological outcomes are clearly defined and measurable. Where relevant, these standards will also inform the broader planting approach, but their primary application will be to ecological restoration areas rather than landscape or amenity planting. Overall, these matters are appropriately addressed through the preparation and certification of a detailed, ecologically-led EMP, rather than further refinement of the current landscape plans. This approach ensures that revegetation and pest management are fit-for-purpose, technically robust, and responsive to site conditions, while maintaining appropriate flexibility at the implementation stage. The intent behind the planting and implementation plan was also to achieve successful planting and long term maintenance of these areas to return them to WF11 habitat in the long run. The EMP approach is a clearer and more direct method of achieving that outcome. Because of the need to take care to ensure that the EMP and the current IMP are complementary, each has the correct content requirements, and DOC's comments are properly carried over into the new conditions, the applicant team is still working on the proposed conditions relating to the EMP. These will be provided as soon as possible.	
Point 26: Pest control is highly specialised and needs own pest plant	Please refer to the response to Point 25 above. Pest control to be included as part of the EMP.	It is acknowledged that a detailed EMP will be prepared as a condition of consent.

and pest animal control plan prepared by expert. Key points to address include: - pest plant and animal controls to include SEA and consent notice areas not just revegetation areas. - infill planting for gaps created by pest control. - Practical control of rabbits in the event that they are damaging plantings. The plan currently states that "kill trapping" is the most appropriate tool to control rabbits, but I am not aware of any traps that have been certified for the control of rabbits. - The type of kill trap proposed for control of possums, and their recommended spacing across the site. - Appropriate pulsing of toxin use to prevent bait shyness and bioaccumulation. -The frequency of trap and bat station servicing. This is currently stated as 12 monthly intervals, which is not adequate to achieve meaningful control of pest animals. - A map of the recommended layout of pest animal control devices across the site.		

- Ongoing control of rats and mustelids during Phase 2, currently this is only proposed during Phase 1 (the first five years after planting occurs).		
Point 27: The implementation plans states that the Phase 1 establishment period includes "a minimum of five year defects liability period commencing on the date that the section 224(c) certificate is issued". However, the Issue of 224(c) would usually occur once the establishment period has been completed and the planting has been inspected to confirm that it has achieved 80% canopy closure and a minimum survival rate of 90% of the original density of plants. A condition is therefore recommended to allow the consent holder to enter into a bond if the early release of the 224(c) certificate is requested.	This condition is accepted in principle. But the applicant team is considering specific wording. This will be provided when ready.	No further comment.
Revegetation planting plans in landscape plan set		
Point 28: The revegetation planting schedules provided in sheets 2535/07 to 2535/09 of the landscape plans are overly diverse and include species that are not appropriate for a revegetation planting, such as small carex and grass species or very slow growing species	Please refer to the response to Point 25.	Matter already addressed.

such as nikau, that will not contribute to the initial establishment of a continuous canopy at the site. Species that are not appropriate for revegetation planting include, but are not limited to Astelia solandri, Carex banksiana, Carex dissita, and Microlaena avenacea.		
Point 29: Large numbers of secondary species are also proposed. These should be limited to only a few that are known to be able to establish in open, dry, and sunny conditions, and the number of pioneering species (such as kānuka and mānuka) should be increased.	Please refer to the response to Point 25.	Matter already addressed.
Point 30: The spacing of all terrestrial revegetation plantings should also be amended to no more than 1.4 metres. Currently there is a mix of 1.5 for the "native bush revegetation" areas and 1.0 for the "riparian" areas; the latter generally acceptable as per the AUP(OP).	Please refer to the response to Point 25.	Matter already addressed.
Point 31: It is not clear whether the "slope stabilisation" and "lot revegetation" areas are intended to be amenity plantings or to contribute to the extent of offsetting required under the BOAM. As these areas are not true ecological restoration areas (i.e. the planting mix has been tailored to	As noted in Footnote 5 of the EcIA, planting associated with slope stabilisation, stormwater ponds and wetlands is excluded from the total 31.85 ha of revegetation planting proposed across the site for ecological restoration purposes. Of this total, 10.5 ha is specifically identified and required to meet the offsetting requirements under the BOAM, and this does not include "lot revegetation" or other	The response is appropriate. No further comment.

accommodate landscape considerations) these areas should not be considered to contribute to the offset planting. It is therefore recommended that the landscape planting plan and Ecological Management Plan prepared as separate plans by the relevant experts in each field.	landscape-driven planting areas. Accordingly, there is no reliance on slope stabilisation or amenity planting to achieve offsetting outcomes, and no double counting occurs. While not included as part of the formal offset calculation, planting within lot revegetation and other non-offset areas will nevertheless provide additional ecological benefits, including increased habitat extent, connectivity, and buffering. These areas therefore contribute to the overall net ecological gain associated with the proposal in a practical sense, even if they have not been included in the pure ecological restoration revegetation figure. As set out in response to Points 25–30, it is proposed that a condition of consent being included requiring an EMP to be prepared and certified to address ecological revegetation areas, with landscape planting and ecological restoration appropriately distinguished. This approach ensures clarity of purpose and alignment with both ecological and landscape design objectives.	
Point 32: The "slope stabilisation" and "lot revegetation" areas should only include appropriately ecosourced plants and ecologically appropriate species. The slope stabilisation planting schedule currently includes landscape cultivars such as Phormium 'Emerald Green' and ecologically inappropriate species such as *Apodasmia similis.*	It is agreed in principle that ecological revegetation areas should utilise ecosourced and ecologically appropriate species, and this will be addressed through the preparation of the Ecological Management Plan (EMP) as outlined in response to Point 25. However, it is important to distinguish between ecological revegetation planting and slope stabilisation planting. As set out in the EcIA, slope stabilisation areas are not included within the revegetation planting	The clarification provided is acknowledged. No further comments.

	proposed for offsetting purposes, and serve a primarily engineering and erosion control function, rather than ecological restoration, and species that align with the needs of that purpose have been selected. The species identified by the reviewer (e.g. Phormium 'Emerald Green' and *Apodasmia similis*) are associated with slope stabilisation planting (not the "lot revegetation" planting), where plant selection reflects a combination of stability, establishment success, and landscape considerations, rather than strictly ecological criteria. These species are not considered weeds and do not pose a threat to the revegetation planting. In contrast, all areas of ecological revegetation (including those contributing to offsetting and wider habitat enhancement) will be addressed through the EMP and will utilise appropriate ecosourced indigenous species, consistent with ecological restoration best practice. On this basis, the distinction between planting types is clear, and the proposed approach appropriately aligns species selection with the intended function of each planting area.	
Point 33: The wetland planting mix includes several species that require open water, such as *Schoenoplectus tabernaemontani* and *Eleocharis sphacelata*. However, there is no indication of standing water being present in the wetlands described in the EcIA. These species are therefore	The comments raised are acknowledged and relate to the level of detail and refinement of species selection, which is appropriately addressed through the preparation of the EMP as outlined in response to Point 25. The current planting schedules are preliminary and landscape-led and will be refined through the EMP to ensure that species selection aligns with site-specific hydrological conditions, habitat characteristics, and	The clarification provided is acknowledged. No further comments.

unlikely to survive. *Eleocharis acuta* is also very small and as such is not an appropriate species to select when attempting to quickly establish a cover of indigenous species. Inappropriate species should be replaced with more of the robust, canopy-forming sedge species already recommended, e.g. *Carex geminata* and *Cyperus ustulatus*.	ecological objectives. This will include review of species suitability for establishment success and canopy development. Notwithstanding this, the wetland planting mix within the landscape plans will be updated to reflect these recommendations and provided as part of the statutory comments phase. It is noted that areas of open water are present within the site (e.g. Wetland U), and species requiring such conditions may be appropriate in those specific locations. The final allocation of wetland species will therefore be spatially targeted within the EMP, ensuring that species are matched to appropriate microhabitats. On this basis, the matters raised will either be addressed through the updated landscape schedules or through the EMP, which will provide a fit-for-purpose, ecologically robust planting specification, and do not affect the conclusions of the EcIA.	
Comments / information request regarding proposed offsetting		
Point 34: The EcIA should include an assessment against the principles of biodiversity offsetting listed in Appendix 8 of the AUP(OP) and/or Appendix 3 of the NPS-IB.	An assessment of the proposed biodiversity offsetting against the principles set out in AUP Appendix 8 and NPS-IB Appendix 3 is provided below. The principles are broadly consistent across both frameworks. • Avoidance, remediation, mitigation hierarchy: The proposal has applied the effects management hierarchy, with avoidance of (mapped) SEA areas, minimisation of vegetation clearance, and mitigation	The assessment provided is appropriate. No further comments.

	measures implemented prior to offsetting. Offsetting is applied only to residual adverse effects. • Limits to offsetting: The affected habitats are not identified as rare, vulnerable, or irreplaceable ecosystems, and do not support Threatened or At Risk species. As such, they are appropriate for offsetting. • Like-for-like / ecological equivalence: Offset planting is based on indigenous vegetation types consistent with those affected, and located within the same site and ecological context, maintaining ecological relevance. • Additionality: The proposal includes 10.5 ha of planting required to offset effects, with an additional ~21 ha of revegetation, ensuring outcomes are additional to the baseline and not otherwise required. • Timing and duration: While there is an inherent temporal lag in ecological restoration, this is addressed through early implementation of planting, ongoing management, and long-term protection, resulting in progressive ecological gains. • Landscape context and connectivity:	

	Revegetation enhances connectivity, buffering, and ecological function, including linkages to existing SEA, covenant areas, and Nukumea Scenic Reserve. • Security of outcomes: Planting areas will be legally protected and subject to long-term management, including pest control and maintenance through an EMP and consent conditions. • No net loss / net gain: The proposal achieves no net loss and a net gain in indigenous vegetation extent, quality, and ecological function, as demonstrated through the BOAM assessment. • Monitoring and adaptive management: Monitoring and maintenance requirements will be set out in the EMP, allowing for adaptive management to ensure successful establishment and long-term outcomes. On this basis, the proposed offsetting is considered to be consistent with the principles of biodiversity offsetting under both the AUP and NPS-IB frameworks.	
Point 35: The report states that: "A conservative benchmark was therefore adopted, using a very good condition example of broadleaved species scrub that supports high native species richness and includes future WF11	The benchmark adopted in the BOAM assessment represents a conservative, high-condition example of broadleaved indigenous scrub, consistent with the relevant ecosystem type (WF11) within the local ecological context. As stated, this benchmark reflects a very good condition state, including high native species	I agree that the benchmark values are likely to be appropriate, however, it would be useful to cite the sources. No further comments.

canopy species already present within the understorey." However, the location of the reference (benchmark) site was not provided, nor was the plot data.	richness and the presence of future canopy species within the understorey. The benchmark was derived using a combination of: • published reference information and regional ecological knowledge; • field observations of comparable vegetation within the wider area; and • professional ecological judgement, consistent with standard BOAM application where site-specific benchmark plots are not always required. The use of a high-condition benchmark is intentional and conservative, ensuring that offset requirements are not underestimated. On this basis, the benchmark approach adopted is considered appropriate, conservative, and consistent with accepted BOAM methodology, and does not affect the conclusions of the EcIA.	
Point 36: No monitoring or adaptive management details have been provided. Monitoring of offset plantings is critical to ensure that predicted biodiversity outcomes are realised. This should include, but is not limited to, the following: • The monitoring frequency and metrics to be tracked (species composition change, canopy cover, weed incursion rates)	Monitoring and adaptive management of revegetation plantings are recognised as important components of successful ecological outcomes. It was intended that these matters would be addressed during the establishment phase through the planting and implementation plan and associated consent conditions, and in the longer term through residential society management responsibilities. These matters will be further refined and clearly set out through the EMP and updated consent conditions.	The applicant intends to include a monitoring and adaptive management framework in the EMP, which is appropriate. No further comments.

• What constitutes "failure" of the offset and what remedial action is triggered. • How monitoring data will feed back into model assumptions (i.e. whether the trajectory curves will be updated as real data accumulates). Who has the authority to declare offset success, and at what point obligations are discharged.	The proposed offset comprises approximately 10.5 ha of standard indigenous revegetation planting, which is not considered complex or atypical, and for which there is a high level of confidence in successful establishment based on established practice in the Auckland region. Clear establishment and success criteria are already proposed through the consent framework, including: • achievement of minimum 80% canopy cover; and • a minimum 90% plant survival rate across the planting area; • over a minimum 5-year establishment period. These criteria provide measurable performance thresholds against which planting success can be assessed and will be detailed further within the EMP. The amendments to the conditions currently being worked on will include ensuring these apply to the EMP. The EMP will also set out: • monitoring frequency and methods; • establishment targets; and • remedial actions where establishment targets are not met (e.g. infill planting, weed control). Monitoring results will be used to inform adaptive management, ensuring that any issues are identified early and addressed to maintain the intended ecological trajectory. This was always the intent behind the proposed approach to ecological restoration planting and	

	a requirement inherent in have overarching planting objectives. The EMP approach will help to make required actions more explicit.	

Table 1. Summary of fauna and flora survey timing, personnel and conditions

Survey type	Date(s)	Personnel	Weather / conditions	Notes
General ecological walkovers / flora inventory	November–December 2025	Mark Delaney, Brittany Pearce / Viridis ecologists	General walkover conditions suitable for field observation; species identified during repeated walkovers in key vegetated areas	Flora inventory undertaken concurrently with plot sampling. Five 10 m × 10 m vegetation plots established across vegetation proposed for removal.
Vegetation plot sampling	November–December 2025	Brittany Pearce, Timothy Yang / Viridis ecologists	Standard plot-based vegetation assessment conditions	Five representative plots (V1–V5) established across approximately 2.25 ha of proposed vegetation loss to quantify vegetation structure, composition and condition.
Five-minute bird counts	15 December 2025	Brittany Pearce, Timothy Yang / Viridis ecologists	Fine weather; no rain or strong wind	Seven count stations (BC1–BC7), spaced at least 200 m apart; counts undertaken between 10.00 am and 3.00 pm.
Targeted dawn wetland bird surveys (including playback)	26 November 2025 and 15 December 2025	Brittany Pearce, Timothy Yang / Viridis ecologists	Dawn conditions appropriate for targeted listening and playback surveys	Two 45-minute dawn surveys commencing approximately 30 minutes before sunrise; included 15 minutes of playback for bittern,

Survey type	Date(s)	Personnel	Weather / conditions	Notes
				banded rail, fernbird and spotless crake, followed by passive listening.
Bat acoustic monitoring (ABMs)	Installed 12 November 2025; deployed for 32 nights	Viridis ecologists with technical support from Marc Choromanski / The Ecology Studio Ltd	Valid nights assessed using Weather Underground station IWAINU6 and DOC criteria: ≥8°C for first four hours after sunset, ≤20 km/h wind, and ≤2.5 mm rainfall; 24 valid nights achieved	Ten Song Meter Mini Bat 2 detectors deployed across likely flyways, riparian margins, mature shelterbelts, vegetation edges and pasture interfaces.
eDNA sampling	15 December 2025	Viridis ecologists / samples processed by Wilderlab NZ Ltd	N/A	Six-replicate eDNA sample collected from a representative location within the central catchment to complement freshwater and terrestrial fauna surveys.
Lizard survey – ACO and pitfall installation; manual searching	4–5 November 2025	Suitably qualified ecologists from RMA Ecology Ltd under the supervision of Senior Herpetologist Dr Graham Ussher	Fine	92 ACOs and 22 pitfall traps installed; approximately 3 person-hours manual searching; gecko slough recorded during installation.
Lizard survey – nocturnal spotlighting	5 November 2025	RMA Ecology Ltd	Fine, calm; full moon; 20–14°C	Approximately 10.5-17.5 person-hours spotlighting within native forest and kānuka-dominant scrub.
Lizard survey – ACO check 1 / manual search	2 December 2025	RMA Ecology Ltd	Partly cloudy; rain later; ~22°C	Partial ACO check; approximately 0.5 person-hours manual searching; 24 ACOs inaccessible due to livestock-related H&S constraints.

Survey type	Date(s)	Personnel	Weather / conditions	Notes
Lizard survey – ACO check 2 / manual search	4 December 2025	RMA Ecology Ltd	Variable weather; ~17°C	Full ACO check; approximately 1.16 person-hours manual searching.
Lizard survey – ACO check 3 / pitfall set / manual search	10 December 2025	RMA Ecology Ltd	Fine, calm; ~25°C	ACO check, pitfall activation and approximately 1 person-hour manual searching.
Lizard survey – ACO check 4 / pitfall check / manual search	11 December 2025	RMA Ecology Ltd	Fine to partly cloudy; ~24°C	ACO check, pitfall check and approximately 1.25 person-hours manual searching.
Lizard survey – nocturnal spotlighting / remaining ACO checks	16 December 2025	RMA Ecology Ltd	Drizzle until late evening; ~18°C	Approximately 3.5 person-hours spotlighting; remaining previously inaccessible ACOs checked.
Lizard survey – pitfall checks / final ACO checks / device removal	17 December 2025	RMA Ecology Ltd	Warm with intermittent showers; 16–22°C	Full site coverage; all ACOs and pitfall traps removed.

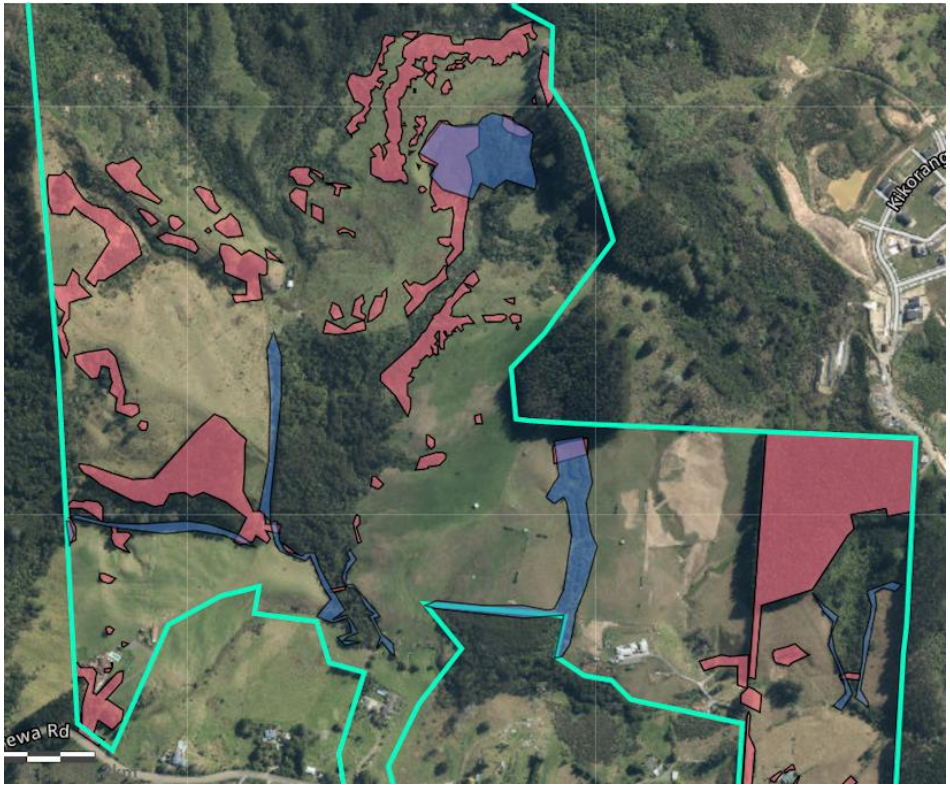


Figure 1. Manual spotlight night search areas (blue polygons) where best quality habitat for arboreal geckos was searched. The proposed vegetation clearance areas are shown in shaded red, most of which do not constitute viable native lizard habitat.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 25:

Freshwater Ecology

Delmore Fast Track Application

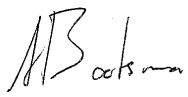
To: Auckland Council – Freshwater Ecology

From: Mark Delaney – Viridis; and Lachlan Van der Meij – McKenzie & Co

Date: 17 April 2026

Re: Freshwater Ecology Response Memorandum

1.0 Technical Specialist Memo – Freshwater Ecology

From:	Antoinette Bootsma, Senior Freshwater Ecologist - Earth Streams and Trees team, Specialist Unit, Planning & Resource Consents Department
Qualifications & Relevant Experience:	I hold the qualification of: Master of Science in Ecology and have 18 years of experience in freshwater ecological assessment. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications and have appeared as an expert witness before consent authorities and the Environment Court on one occasion.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23/04/2026

2.0 Original Specialist Review Memo

There was a discrepancy between the effects assessments relevant to culverts provided in the Viridis ecological assessment and WWLA hydrology assessment and plans provided in Appendix 33. Plans should be updated to clearly show culvert dimensions in relation to embeddedness, slope and modifications required to achieve fish passage, total length and erosion and scour protection. Culvert plans, effects assessments and consent triggers should be accurately integrated.

While an assessment of stream and wetland erosion response to culverts has been provided, Morphum's fluvial geomorphological assessment does not include consideration of an altered hydrograph resulting from an impermeable catchment. I note that erosion matters require an interdisciplinary approach. The effects of

erosion and stream migration and the consequent sediment release into the aquatic environment are directly related to potential loss of stream value. However, I note that assessment and mitigation offered for this potential effect require understanding of geotechnical, fluvial geomorphological stormwater and engineering matters that fall outside the scope of my expertise.

3.0 Updated Response to Applicant's Memo

Updated plans for culverts demonstrate which culverts require consent and how fish passage will be achieved. While small discrepancies between culvert plans and application documents still exist, I consider these to be minor. I note that further amendments to culvert design to resolve matters around their classification as dams are not considered in my memo.

The applicant's ecologist has provided comments on fish passage at culverts 7 and 8 with steep gradients. I accept that similarly steep gradients in the proposed new culverts will provide equal fish passage and allow species which inhabit those sections of stream to migrate upstream.

I note that culvert plans provide pre and post development flow at the inlet and outlet of each culvert and that only culverts 2 and 5 have a notably higher post development flow (0.6 and 0.5m/s flow increase respectively).

Stream erosion matters cross over stormwater, engineering and fluvial geomorphology considerations, which fall outside the scope of review of freshwater ecological effects. While I defer to these specialists for their review of overall stream erosion, I consider that, as it pertains to freshwater ecology, stream erosion has been satisfactorily addressed.

Based on the above, I consider all matter resolved, including conditions. However I specifically note that my assessment is based on culvert plans reviewed as part of this assessment and does not consider potential future culvert changes requiring further stormwater design consideration.

4.0 Conclusion

I consider that the application satisfactorily addresses the potential loss of stream and wetland value and extent that may result from the proposed development and I agree that conditions of consent are adequate to ensure that the envisaged outcome will be achieved.

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (freshwater ecology) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on lodged material	Applicant Response	Council Specialist Response
The Viridis ecological assessment as well as WWLA hydrology assessment discuss culverts and their relation to potential stream and wetland erosion. These documents refer to culvert being embedded 25%, spanning 1.3 x the stream width and not exceeding 30m in length. Plans in Appendix 33 do not correspond in all instances	• Viridis: Whilst culverts 7 and 8 appear to have steep gradients, they match the natural stream gradient and therefore reflect current fish passage conditions, see figures 1 and 2 below. Fish found in the surveys were generally considered good climbers, especially for the species expected to be located in the upper catchments (eg. eels). These culverts are located relatively high up in the catchments. • McKenzie & Co: Culvert elevations / long-sections have been updated to be more accurate. Embedment is also shown in the plan views. A table outlining each culvert embedment is depicted in Attachment 1. • McKenzie & Co: In regard to Culvert 10, the plans have been updated to shown permanent wetland loss.	• I consider outstanding culvert matters satisfactorily addressed. I note that all temporary and permanent wetland loss have been adequately addressed in the wetland offset package. • I note that my assessment is based on culvert plans provided in this application.

with descriptions in the ecology and hydrology memos. This is further relevant to consent triggers for culverts that do not meet Permitted Activity triggers. I recommend that culvert plans should consider the following:

- It is not clear that all culverts will be able to provide fish passage since slopes are not clearly shown to be in line with requirements in the New Zealand Fish Passage Guidelines (2024), particularly culverts 7 and 8 appear to have steep gradients.
- Embeddedness of culverts is not clearly shown on drawings, some culverts, (including 5, 8, 9 and 11 appear to be under the ground elevation.
- Plans for culvert 10 (drawing #3725-1-4810) indicate that temporary wetland loss and subsequent reinstatement will be

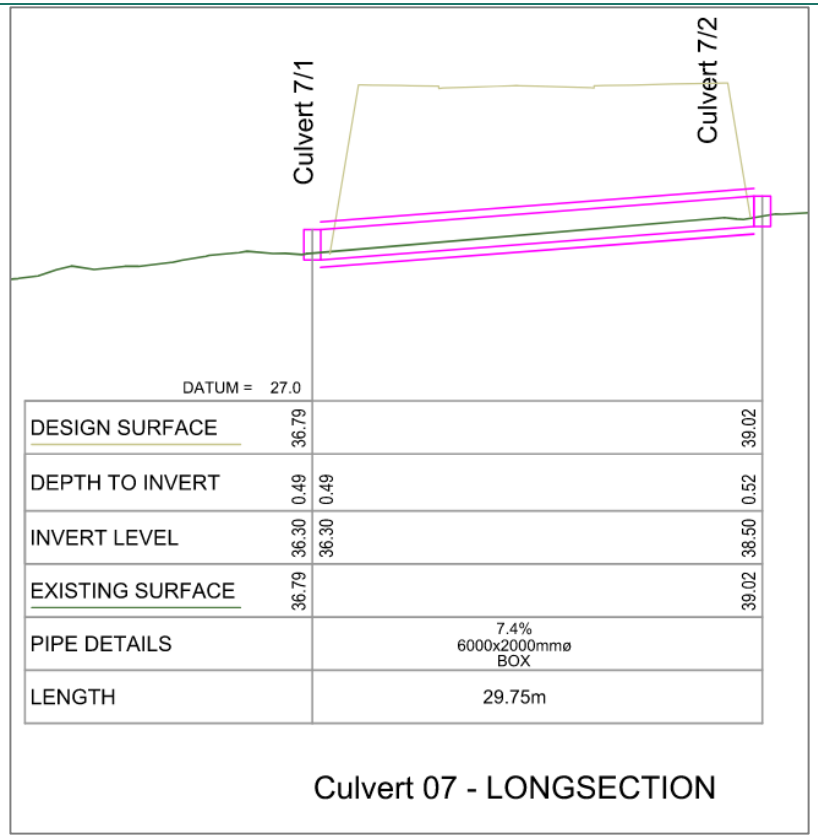
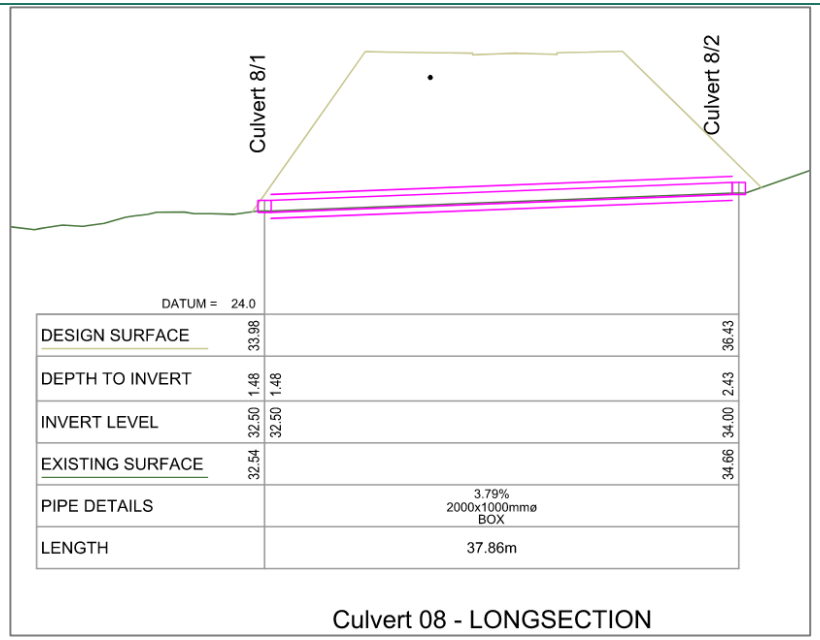


Figure 1: Culvert 7 long section

undertaken. However, since water will be directed into the culvert, I do not consider that wetland habitat adjacent to the culvert will be able to be reinstated.	 **Figure 2: Culvert 8 long section**	
My concern that culverts will enable erosion of the wetlands is addressed in the lodged Geomorphic Risk Assessment prepared by Morphum which states that, "overall, the proposed culvert layouts are consistent with the geomorphic risk framework previously provided and do not introduce additional	A response to this query will be provided to Council as part of the geomorphology memorandum.	I note that culvert plans provided indicate pre and post development flow at the inlet and outlet of each culvert and that only culverts 2 and 5 have a notably higher post development flow (0.6 and 0.5m/s flow increase respectively). I accept the applicant's ecologist's response to fish passage concerns. I note that stream erosion matters cross over stormwater, engineering and fluvial geomorphology considerations, which fall outside the scope of review of freshwater ecological effects. While I defer to these specialists for their review of overall stream erosion, I

geomorphic risks beyond those identified in the Geomorphic Risk Assessment". While I acknowledge that my concern regarding stream erosion resulting from culverts has been addressed, the statement above does not include consideration of changes to the post development hydrograph in terms of duration and frequency of erosive flows resulting from an impervious catchment.		consider that, as it pertains to freshwater ecology, stream erosion has been satisfactorily addressed.

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on lodged documents (Appendix 44)	Applicant Response	Council Specialist Response
1. Prior to the commencement of earthworks on-site, the consent holder must prepare and submit to Council for certification, a final Wetland Offset Plan. The Wetland Offset Plan must be prepared with input from a suitably qualified ecologist, hydrologist and stormwater engineer. The Wetland Offset Plan must be in general	It is understood that this condition has been resolved and Council is agreeable to a 5 year duration.	I am in agreement with a 5 year monitoring timeframe.

accordance with the following documents approved under Condition 1: (a) The Landscape Plans prepared by Greenwood Associates, dated December 2025; and (b) The report prepared by WWLA, titled "Wetland and Culvert Assessment", dated December 2025; and (c) The report prepared by Virdis, titled "Delmore Fast Track Application – Ecological Impact Assessment", dated December 2025. The Wetland Offset Plan must include the following minimum details: (d) Calculated accountancy for unavoidable wetland reclamation in accordance with the AUP(OP) Appendix 8; (e) The location of the area(s) proposed for wetland creation; (f) Works to ensure a wetland hydrology is created and maintained; (g) Planting schedule, including species, density and grade; (h) Legal protection (e.g., consent notice); (i) A ~~five~~ ten-year maintenance and monitoring plan to ensure the wetland(s) and associated planting is successfully established; and (j) Measures to be undertaken if the wetland(s) or planting(s) is not successful.		

Advice note: The Wetland Offset Plan may be submitted in stages or sub-stages to align with the development staging. Commentary: A five year monitoring plan is sufficient to ensure establishment of plants in new wetlands. However, to ensure that new wetland hydrology functions to account for the permanent loss of wetlands resulting from this application, a ten year monitoring period is required to ensure that newly created wetlands will persist.		

Attachment 1: Culvert Embedment

Proposed Culvert	Culvert Parameters		
	Span (mm)	Rise (mm)	Embedment (mm)
Culvert 1	4000	2000	350
Culvert 2 (circular)	1950		650
Culvert 3	5000	4000	350
Culvert 4	5000	4000	350
Culvert 5	4000	1000	350
Culvert 6	4000	2000	350
Culvert 7	6000	2000	350
Culvert 8	2000	1000	600
Culvert 9 (circular)	900		150
Culvert 10 (circular)	2100		700
Culvert 11	4000	1700	350
Culvert 12 (circular)	1500	900	400

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 26:

Arboriculture

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Delmore Fast-Track
Fast-Track application number:	FTAA-2512-1164

2.0 Technical Specialist Memo – Arboriculture

To:	Dylan Pope – Lead Planner & Carly Hinde - PPL
From:	Rhys Caldwell, Specialist (Arborist), Specialist Unit, Planning and Resource Consents – Auckland Council
Qualifications & Relevant Experience:	I have a Trade Certificate in Amenity Horticulture (1993) and an Advanced Certificate in Arboricultural (2014) and have 36 years of experience within the horticultural and arboriculture industries with the last 9 years as a regulatory arborist at Auckland Council. I am a member of the New Zealand Arboricultural Association. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications, and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (**Code**), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23 March 2026

3.0 Executive Summary / Principal Issues

The application seeks to develop a total of 1213 new lots within the subject site. The proposal will impact areas or protected vegetation, primarily for the creation of new roads to service the development. From an arboricultural perspective the proposed vegetation removal is not significant and includes the removal of both native and exotic tree species. The main areas of implicated protected vegetation are in close proximity to streams and are also subject to a consent notice. These areas have been referenced as Areas 1, Area 2, Area 3, and Area 4 within the ecological assessment.

The vegetation clearance within these areas have been quantified as Area 1 – 200m², Area 2 – 1300m², Area 3 – 280m² and Area 4 – 110m². There are other individual trees or small groups of trees proposed for removal and are identified within the arboricultural assessment. The majority of these are exotic trees species such as Poplar, Willow, Gum, Cypress, Pine or know pest plants.

4.0 Documents Reviewed

The following documents have been reviewed in preparing this memorandum:

- Assessment Environmental Effects – titled Delmore – Fast Track Approval Application – Assessment of Environmental Effects and Statutory Analysis, prepared by B & A Urban & Environmental, dated 23 December 2025.
- Arboricultural Assessment – prepared by Peers Brown Miller Ltd, dated 19.12.25.
- Ecological Impact Assessment - prepared by Viridis, dated 18 December 2025.
- Landscape Drawings – prepared by Greenwood Associates, date 19/12/2025.
- Delmore: Proposed Consent Conditions

5.0 Additional Reasons for Consent Not included in AEE / Incorrect Reasons for Consent

From an arboricultural perspective the reasons for consent have been identified.

6.0 Specialist Assessment

The majority of the site is not subject to any overlays that would protect the bulk of the tree population. The non-protected trees are predominately exotic species that are commonly found in a rural farming environment. While the loss of tree cover is not desirable the proposed replanting of the site includes a large number of trees that will be planted with the newly formed roads that will become protected under Chapter E17 Tree in roads. The landscape plans show a significant number of replacement trees to be planted within the proposed roads as well as the proposed open space areas. The number of proposed replacement trees exceeds the number of trees being removed. The grades of these trees have been detailed as being 45-litre, which are approximately 2m in height at the time of planting. There is a good mixture of species, which would be suitable for this location.

It is also proposed to undertake revegetation planting within the riparian areas, that also includes several tree species. The trees are a smaller grade than what is proposed for the street trees and would be

appropriate considering they are part of a re-vegetation program. In time these tree species will attain height and will establish themselves as the dominate canopy cover. Due to the ecological nature of these areas, I would defer to council's ecologist with regard to the suitability of the chosen species.

The intention is to retain the majority of established healthy trees within the riparian areas while removing the undesirable weed species. From an arboricultural perspective the loss of tree cover within these areas is not significant and it is proposed to undertake a significant level of both tree and re-vegetation planting to mitigate the loss of these trees.

The arboricultural assessment has included a recommended Tree Management Plan (TMP) to manage the tree works to be undertaken within or adjacent to the protected areas. With projects of this nature the key to success, from an arboricultural perspective, is having an appropriate level of tree protection to ensure any trees being retained are adequately protected and ensuring onsite arboricultural supervision when works may impact upon a protected tree or trees.

Provided that the works are undertaken as recommended within the arboricultural assessment and in accordance with the recommended TPM and conditions, any impacts upon the retained trees can be managed to an acceptable level.

Overall, I can support the proposal. I would consider the loss of trees, from an arboricultural perspective, to be less than minor provided that replacement planting is undertaken as detailed in the landscape plans prepared by Greenwood Associates and that the trees to be retained would be adequately protected provided that the tree protection conditions are followed and adhered to.

7.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

8.0 Recommendation

Based upon the information provided, I can support the proposal.

9.0 Proposed Conditions

The application has included a list of the proposed conditions of consent, listed as Appendix 44. I have reviewed the relevant conditions, in particular, conditions 2.1.11 – Tree Management Plan (27), 2.1.24 – Landscape Plans (74 to 77), and 2.1.25 Implementation of Maintenance Plan (78 & 79), regarding arboriculture and replacement planting. I am satisfied that these would be appropriate regarding the protection of the trees being retained and the re-establishment of tree cover, with the exception of #27 which needs amended as shown below to delete the deemed certification text.

27: At least 20 working days prior to the commencement of any vegetation clearance works for any stage or sub-stage of the development, the consent holder must prepare and submit to Council a final Tree Management Plan (TMP) for certification. ~~Council must respond to the request within 20 working days, or the TMP is deemed to be certified.~~ The purpose of the TMP is to manage arboricultural effects on vegetation identified within the Arboricultural Report.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 27:

Landscape

Delmore Fast Track Application

To: Auckland Council – Landscape Architecture

From: Chris Campbell – Senior Associate (Landscape Architect) – Greenwood Associates; Charlotte MacDonald – Barker & Associate

Date: 16 April 2026

Re: Landscape Architecture Response Memorandum

1.0 Technical Specialist Memo – Landscape Architect

From:	Helen Mellsop
Qualifications & Relevant Experience:	I hold the qualifications of Bachelor of Landscape Architecture and Diploma of Horticulture, and have 24 years of experience in landscape planning, landscape assessment and landscape design. I am a registered landscape architect and a full member of Tuia Pito Ora, the New Zealand Institute of Landscape Architects. I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications and have appeared as an expert witness before consent authorities and the Environment Court on multiple occasions. I am accredited to sit on Resource Management Act hearing panels under the Ministry for the Environment's 'Making Good Decisions' programme and was appointed to Auckland Council's independent commissioner panel for the 2021-2023 and 2024-2026 terms.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	21 April 2026

2.0 Original Specialist Review Memo

- The proposal would result in a complete change of landscape character from rural to urban. The urban character would be consistent with that of adjacent and nearby urban development at Ara Hills, West Hoe Heights and Strathmill.

- The visual and rural amenities of adjoining properties directly south of the proposal would be significantly compromised by the proposal, particularly during the construction period.
- The proposal would result in moderate-high adverse effects on landscape character and values during construction and moderate adverse effects on completion, reducing to low-moderate over time as street tree and revegetation planting matures.
- The development has relatively poor connectivity (vehicular and pedestrian/cyclist) both within the site and with surrounding rural and urban areas. While pedestrian connectivity has been improved in the new application, additional pedestrian/cycle connections are recommended.
- The steep topography of the site means that substantial earthworks would significantly modify the natural landform. However retention and protection/revegetation of intermittent and permanent water courses and wetlands means that the natural patterns of the landscape would be retained to some extent. The naturalness of wetlands and streams within the site would be enhanced and some public access would be provided to and along stream courses. Public connections through the SEA to Nukumea Reserve are not included in the application.
- Roads and development have in the main been located to follow land contours and to minimise the extent of earthworks required. The decision to provide level building platforms on each proposed residential lot has increased the extent of earthworks and associated retaining walls and resulted in steep batters above stream gullies. These even steep batters, managed as mechanically stabilised earth (MSE) retaining walls would detract from the naturalness of the gullies.
- Proposed street tree and amenity planting is generally appropriate in location, size and species mix. The revegetation planting mix requires amendments.
- Detailed soft and hard landscape design plans would be required for communally owned bush and riparian areas, the Significant Ecological Area, walkways and any other community facilities.
- The draft specifications for landscape implementation and maintenance do not currently cover all required aspects.
- The proposed conditions of consent do not currently provide sufficient certainty that the existing SEA and proposed walkways and any other community facilities on communally owned land would be consistently maintained and protected in perpetuity.

3.0 Updated Response to Applicant's Memo

Initial updated landscape plans (dated 10 April) have been provided, together with a response memo from Greenwood Associates and Barker & Associates (dated 16 April).

Apart from the pedestrian connectivity issues, which have not been addressed, the changes to plans and conditions proposed in the landscape response memo would resolve my concerns if implemented. However I have not at this stage been able to review final updated landscape plans, an updated planting and maintenance plan, or an updated set of conditions that responds to the recommendations in my previous memo.

4.0 Conclusion

At the time of writing no evidence has been provided that the landscape issues identified in my 25 March 2026 memo have been resolved. Responses from Greenwoods Associates and Barker & Co. on the 16 April indicate that there is potential for them to be largely resolved (with the exception of pedestrian connectivity recommendations), but I have been unable to confirm that due to lack of updated plans and conditions.

Delmore Fast Track Application

1.1 Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Landscape Architecture) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
Pedestrian connectivity within and beyond the development remains relatively poor and does not support a walkable and connected neighbourhood. While the proposed pedestrian connections across gullies and through proposed revegetation areas within the site are positive, additional connections from Road 03 to Road 04, from Road 16 to Road 17, and from Road 24/JOAL 38 to Road 22 are recommended. These connections would provide significantly more direct pedestrian access to neighbourhood parks and/or the commercial area from Stage 1B and 2C, as well as improving connectivity across the development.	As discussed with Council, comments regarding connectivity will be addressed through the urban design response memorandum.	No additional connections are shown in the initial updated landscape plans (10 April). The urban design response memo dated 16 April does not specifically comment on this issue.

Road connectivity from Stages 2A-1 and 2A-2 to Te Ara Hills has not been provided, despite such a connection being shown as anticipated on the Ara Hills 2024 Structure Plan and Ara Hills Illustrative Masterplan (Figures 2 and 3 in Appendix 14 Concept Structure Plan. Pedestrian connections to the unformed legal road from Stages 2A-1 and 2A-2 are shown on the plans – I recommend that these be constructed as shared pedestrian/cyclist paths to at least allow cycling connectivity through to Ara Hills.	As discussed with Council, comments regarding connectivity will be addressed through the urban design response memorandum.	No additional detail provided on pedestrian connections to the unformed legal road shown in initial updated landscape plans (10 April). The urban design response memo dated 16 April does not specifically comment on this issue.
The Greenwood Associates landscape response states that fences on private lots between amenity gardens/lawns and the covenanted 'Lot Revegetation Mix' PM planting areas would be 1.2m high and visually permeable. However, the landscape plans still show 1.8m visually permeable fences in these locations. I recommend that the plans be updated to accord with the statement in the landscape response memo.	Greenwood Associates will revise landscape plans to be consistent with the landscape response memo. The updated set of plans will be available 20 April.	Updated plans provided on 10 April do not include the sheets which show fencing, and no additional plans have been provided. If the fencing change has been made in plans provided to the Panel, this issue would be resolved.
Neither the Greenwoods Landscape Plans nor the Greenwoods Planting and Implementation Plan propose any weed control or infill planting within the SEA in proposed Lot 1920. There are relatively large areas of gorse-dominant vegetation on the lower edges of the SEA (refer Figure 11 in the Viridis Ecological Impact Report). The B&A Objectives and Policies Assessment states that removal of weeds (eg gorse) would occur in the	Greenwood Associates acknowledges the risk of these areas acting as a seed source for further spread of gorse across the wider landscape and will update the planting and implementation plan (specification) to provide measures for removal of gorse and revegetation of these areas. Amendments to the planting and implementation plan are also being undertaken to address comments from the Department of Conservation.	Issue would be resolved if the planting and implementation plan was updated as proposed. No amended planting and implementation plan was available for review.

SEA, but the landscape plans and specifications do not currently include this scope of work. Weeds within the SEA would provide a seed source for spread into the planned revegetation areas. It is possible that the exclusion of the SEA may be the result of ongoing discussions between the applicant and the Department of Conservation/Auckland Council regarding ownership, management and development of this area adjacent to Nukumea Reserve. However given the current ownership I recommend that weed control and infill planting within the SEA be included in the landscape plans, and that ongoing plant and animal pest control within the SEA be included in the maintenance requirements both during Phase 1 (consent holder) and Phase 2 (Residents Society).	The applicant will provide this plan as soon as practicable.	
The AEE states that walking tracks and lookout points within proximity to the neighbouring Nukumea Reserve form part of the open space network for the development (AEE p53) but these elements are not shown on the landscape plans and there are no requirements within the conditions to ensure that this recreational infrastructure is implemented. A condition addressing this discrepancy is recommended below.	Greenwood Associates will update the full set plans to show these tracks and look out points. The updated set of plans will be available 20 April, preliminary landscape plans updated have been included.	Preliminary updated landscape plans dated 10 April do not show the tracks and lookout points. No additional plans were available on 21 April. This issue would be resolved if final updated plans showed these elements.
I am unsure whether there are any conditions that would require implementation of planting in the	Response to recommended / amended conditions are provided below in section 1.3.	

communal revegetation areas prior to s224(c) certification for each stage. A condition is recommended below.		
I am unsure whether there are any conditions that would require implementation of planting in the communal revegetation areas prior to s224(c) certification for each stage. A condition is recommended below.	Response to recommended / amended conditions are provided below in section 1.3.	

1.3 Response to Recommended / Amended Conditions

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)	Applicant Response	Council Specialist Response
78. It is unclear whether this document is a draft of the Implementation and Management Plan required by Condition 78. It appears to cover most of what would be required in this plan but there are some missing elements: - Timing of when revegetation planting will be undertaken in relation to the stages of development. I recommend that a table be included that sets out which areas of planting will be implemented prior to s224(c) certification for each stage of the development; - Weed control and any required infill planting within the SEA in Lot 1920;	The applicant accepts in principle a new ecological management plan, which would sit alongside the planting and implementation plan. This requires a co-ordinated approach between landscape and ecology and therefore we cannot provide a final set of conditions at this time. The applicant intends to provide this by 20 April. With regard to the walkways within the commonly-owned bush lots, the intention is that these will be constructed by the consent holder at the relevant stage of development works, and maintained by the Residential Society thereafter. Conditions will be proposed to clarify this.	Amended/new conditions addressing this issue have not yet been provided.

- Specifications for construction and long term maintenance of walkways, steps, signage and any furniture or other infrastructure within the commonly-owned bush lots; - Pest animal control during Phase 2 (Residential Society responsibility) is limited to monitoring for pest animals that might impact the revegetation planting. In order to realise the ecological benefits of the revegetation planting, I recommend that pest animal control during this phase also include the control of pests such as possums, rats and mustelids that impact native fauna in the bush areas (refer also to recommendations regarding pest animal control in the ecological review from Nick Goldwater of Wildland Consultants). I also recommend an amendment to Condition 78 to ensure that implementation and maintenance specifications for walkways, steps, signage and any furniture or other infrastructure within the commonly-owned bush lots are also included in the Implementation and Maintenance Plan and that responsibility for long term maintenance of these recreational facilities is transferred to the Residents Society.		
78. Prior to the issue of section 224(c) for the relevant stage, the consent holder must provide to the Monitoring Team Leader for certification a finalised set of detailed soft and hard landscape design drawings and supporting written	As per comment above.	Amended/new conditions addressing this issue have not yet been provided.

documentation prepared by a landscape architect or SQEP for landscaping works. The submitted information must be in general accordance with the Landscape Plans referred to in Condition 1. The landscape design drawings, specifications and maintenance requirements must, at a minimum, include the following matters: a. Planting for the purpose of protecting or enhancing landscape and amenity values, including: i. The location of all landscape/amenity planting areas. ii. A plant schedule based on the submitted planting plan(s) which details specific plant species, plant sourcing, the number of plants, and height and/or grade (litre) / Pb size at time of planting; iii. Specifications for site preparation, including methods for weed control and protection of retained indigenous vegetation, soil preparation, planting implementation, mulching, and irrigation; iv. Specifications and a programme for active maintenance of planting areas over a period of at least 5 years, including plant replacements, weed control and pest animal control; b. Plans denoting the design of retaining walls, fences, steps, walkways, wayfinding signage and lookouts (including those located in revegetation		

and/or ecological enhancement areas covered by Condition 79) and c. The final location, height, materiality and treatment of retaining walls, both within private lots and communally-owned areas. d. Methods for ensuring maintenance of hard and soft landscaping in perpetuity; e. Delegation of responsibilities between the consent holder and the Residential Society.		
79 . The consent holder must prepare and submit to Council for certification, an Ecological Management Plan prepared by a suitably qualified ecologist for all revegetation planting and ecological enhancement areas (including all SEA areas, existing protected consent notice areas, and proposed areas for offset planting). The Plan must include as a minimum: (a) The location of all ecological revegetation planting (b) Planting schedules for ecological revegetation planting (to include species, number of plants, spacings, etc); (c) Infill planting schedules for gaps created in existing bush covenant and SEA areas following pest plant control activities. (d) The details and timing of revegetation planting (e) Confirmation that plants will be ecosourced from the Tamaki or Rodney Ecological Districts;	As per comment above.	Amended/new conditions addressing this issue have not yet been provided.

(f) Confirmation that the required extent of revegetation required under the BOAM has been achieved (excluding landscape and amenity planting areas covered under Condition 78); (g) A programme and specification for ongoing control of pest plants and pest animals in perpetuity; (h) Maps of pest animal control devices across the site; (i) Methods for ensuring maintenance of revegetation areas in perpetuity; and (j) Delegation of responsibilities between the consent holder and the Residential Society, as follows: (k) The consent holder is responsible for the establishment and maintenance of all new revegetation planting until 80% canopy closure has occurred and a minimum survival rate of the plants being 90% of the original density through the entire planting area(s) has been achieved over a minimum 5-year defects liability period commencing on the completion of planting work. (l) Once all new planting is established, the Residential Society is responsible for the ongoing maintenance and ongoing eradication of pest plants and animals. Advice note: Pest plant control means that there are no mature, fruiting and / or flowering individuals of weed species present within the		

covenant area and any weed species present are dead. In addition, there must be no areas where weed species are smothering and / or out competing native vegetation including suppressing the natural regeneration processes. Pest animal control means meeting Council's minimum requirements and national standard best practice methods for control of these species to an acceptable level.		
Subdivision Condition 113 The reference in the tables for Stages 1 and 2 Ownership and Management Responsibilities for bush areas and private lot bush covenant areas refers to the Implementation and Maintenance Plan approved under Condition 1. This should instead refer to Condition 78, as the draft Plan submitted as Appendix 47.3 to the AEE does not currently cover all necessary aspects (eg. timing of implementation for each stage, weed and animal pest control in the SEA, long term animal pest control).	These conditions will be amended to refer to the relevant management plan.	
Condition re timing of implementation of hard and soft landscape works within bush lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922. Currently there does not appear to be a condition requiring implementation of revegetation and hard landscape works (walkways etc) prior to s224(c) certification for each stage. Condition 80 gives the timing for landscape implementation on	Auckland Council Parks has requested conditions relating to the implementation of landscaping works within drainage reserves and parks. For the avoidance of duplication and because differing conditions have been proposed by Council, we defer to the Parks response.	

private lots but there does not appear to be similar conditions for other proposed planting. Condition 130 of the final conditions for the previous application covered the timing of landscape works in the neighbourhood parks and drainage reserves, but this does not appear to be included in the current condition set. I am unsure of the best position or wording for these conditions but tentatively recommend the following: Prior to the issue of section 224(c) certification for any stage or sub-stage, all hard and soft landscape works within the neighbourhood parks in Stage 1 (recreation reserve Lot 1800) and Stage 2 (recreation reserve Lot 5020) and the drainage reserves (Lots 1601-1609, 1616, 1621-1627) must be implemented in accordance with the certified landscape plans. Prior to the issue of section 224(c) certification for any stage or sub-stage, all hard and soft landscape works within the relevant balance lots for the stage (Lots 1901, 1904, 1905, 1908, 1910, 1920 and 1922) must be implemented in accordance with the certified landscape plans.	With regard to the planting for the balance lots, this is accepted and will be incorporated into the updated condition set.	

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 28:

Urban Design

Delmore Fast Track Application

To: Auckland Council – Urban Design

From: Cam Wallace – Barker & Associates

Date: 16 April 2026

Re: Urban Design Response Memorandum

1.0 Technical Specialist Memo – Urban Design

From:	Mustafa Demiralp
Qualifications & Relevant Experience:	I hold a Bachelor of Urban Design and Landscape Architecture and a Master of Urban Design. I have over 17 years of experience in urban design across both the private and public sectors in New Zealand. I have prepared urban design assessments and technical advice for resource consent applications, plan changes, and fast-track applications, and have been involved in a wide range of projects, including structure planning, master planning, and medium to high-density residential developments. I am currently a Principal Urban Designer at Auckland Council, where I provide urban design advice on resource consent and private plan change applications, and contribute to hearings and assessment processes for large-scale residential, mixed-use, and subdivision developments.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23.04.2026

2.0 Original Specialist Review Memo

The original specialist review identified several urban design concerns arising from the lodged proposal. In summary, these are related to:

- a fragmented overall structure influenced by topography and natural features;
- the extent to which JOALs function as primary access streets serving large numbers of dwellings;

- retaining and street interface effects, including battered frontage conditions and indirect access;
- some vehicle-dominated street environments; and
- a small number of constrained unit typologies.
- The original review also identified JOAL design and functionality as a key matter requiring further refinement, including pedestrian priority, waste management integration, amenity, and alignment with the intent of PC79 transport provisions.

3.0 Updated Response to Applicant's Memo

Following review of the applicant's response material and updated drawings, a number of matters have been satisfactorily clarified or reduced in significance. In particular:

- Retaining outcomes along street interfaces have improved relative to the earlier scheme, and the earlier request relating to worst-case retaining scenarios has been withdrawn. However, some battered landscape frontage conditions still present sub-optimal outcomes.
- Additional interface material has been provided, and no further significant concerns arise from this at a high level.
- The applicant's explanation regarding block lengths and permeability is generally accepted, and this is no longer considered a significant standalone concern.
- The applicant's explanation regarding paired and unpaired vehicle crossings, including the influence of topography and retaining constraints, is generally accepted at a high level. However, some streets remain vehicle-dominated in character.
- While some refinements have been made, concerns remain regarding pedestrian priority, amenity, waste accommodation, consistency of landscape treatment, and the extent to which JOAL design aligns with the intent of PC79. The recommended amendment to the JOAL/access condition is therefore still supported.

4.0 Outstanding Issues

4.1. The principal outstanding issue is the design and functionality of JOAL environments, particularly where they operate as primary access routes, effectively functioning as streets, serving a large number of dwellings. Examples include:

- JOAL 03, serving 25 units, extending over approximately 250m
- JOAL 1, serving approximately 20 units
- JOAL 4A, serving approximately 23 units
- JOAL 40, serving approximately 25 units

- JOAL 9, serving approximately 27 units
- JOAL 56, serving approximately 19 units.

Key matters include:

- Inconsistent provision of grade-separated pedestrian paths. Examples include JOAL 1, which serves approximately 20 units, and JOAL 4A, which serves approximately 23 units.
- Limited amenity within some JOAL environments. While some landscape amenities have been introduced in certain JOAL profiles, this is not consistent across all JOALs. For example, JOAL 40A, which serves approximately 25 units, does not appear to provide any additional landscape amenity space.
- Accommodation of waste and service functions without compromising pedestrian movement. Landscape plans indicate that waste bins are located within pedestrian paths during collection, which may compromise usability and safety.
- Appendix 11 Landscape Plans do not fully reflect the outcomes of JOAL spaces. The quality of the resulting outcome remains unclear.
- Lack of clear demonstration of alignment with the intent of PC79 transport provisions.

4.2 The battered landscaped frontage conditions, where some dwellings are not directly accessible from the street and street engagement is reduced. Some examples include Lots 616–634, 715–730.

4.3 High concentrations of vehicle crossings in certain locations, such as Lots 1142-1227 and Lots 746-838. Limited on-street parking provision may also place pressure on the streetscape amenity.

4.4 The need for clear implementation and maintenance responsibilities to secure approved design outcomes.
Given the scale of the proposal and the likely staged delivery across multiple builders or development packages, there is a need to ensure that approved architectural and landscape outcomes are consistently implemented. Without clearly defined responsibilities and robust implementation mechanisms, there is a risk that consented design outcomes are not fully realised at the construction stage, resulting in reduced overall quality.

Response to Further Information Requests / Technical Comments

- Retaining walls and street interface
- Elevations – street and internal interfaces
- JOAL Design
- Block structure and connectivity
- Street interface and vehicle dominance

These matters are addressed in Table 1.2 below.

Response to Recommended / Amended Conditions

- Condition 109-110 JOAL/access condition

The recommended amendment remains supported. While further design work has been undertaken, the JOAL environment remains the principal outstanding urban design issue. It is therefore appropriate that the relevant JOAL/access condition be expanded to include design details relating to pedestrian movement, path widths, separation from vehicle movement, and confirmation that pedestrian paths are not obstructed by waste or other service functions. The condition should also ensure that JOALs are designed to a quality commensurate with the number of lots they serve, particularly where they function as the primary means of access in place of a public road.

If this cannot be appropriately incorporated within the existing condition, a separate condition addressing JOAL and internal access design should be included.

5 Conclusion

Overall, the proposal has responded positively to a constrained site context, and a number of matters identified in the earlier review are now more positively resolved. The proposal demonstrates a generally positive residential character, with reasonably well-resolved street interfaces in most locations and a coherent architectural response. Overall, while the proposal demonstrates a number of positive attributes, a number of urban design concerns remain, principally in relation to JOAL design and functionality that would benefit from further refinement.

Delmore Fast Track Application

1.1

Introduction

This memorandum responds to the Technical Specialist Memo prepared by Auckland Council (Urban Design) in relation to the above fast-track application (as lodged). This response addresses:

- Further information requests / technical queries; and
- Recommended amendments to consent conditions.

1.2 Response to Further Information Requests / Technical Comments

Information Request from Council	Applicant Response	Council Specialist Response
Retaining walls and street interface While some retaining wall details are provided on Appendix 11 – PG. 2535/18 Typical Retaining Sections, including examples exceeding 1.5m, these do not fully demonstrate typical or worst-case conditions where retaining heights are approximately 3m or greater.	It is understood that the concerns regarding retaining walls have now been resolved (as per email from Auckland Council on 2 April).	This matter is largely resolved. It is acknowledged that retaining outcomes along street interfaces have improved relative to the previous scheme, and that higher retaining walls along street frontages are now less common. The earlier request for additional information relating to worst-case retaining wall scenarios has been withdrawn. Some concerns remain regarding battered frontage conditions and their implementation and maintenance, but retaining wall design is no longer considered a key outstanding issue in itself.
Elevations – street and internal interfaces The application primarily provides street elevations. Elevations demonstrating the	Additional drawings have been provided highlighting the treatment of the proposed development along external site boundaries in the	Additional interface material has been provided, and no further significant concerns arise from this

relationship between development and adjacent lots, as well as elevations within JOAL environments, are not provided.	document titled *'260402 – DELMORE – UD SECTION RFI.'* All JOAL's have been updated in the civil road drawings to show accurate footpath locations and widths.	material at a high level. This matter is no longer considered an outstanding issue.
JOAL Design • Review JOAL design to ensure these environments function appropriately as primary access where they serve a large number of dwellings. • Provide improved pedestrian priority, grade separation between pedestrian and vehicle movement. • Allocate adequate space and provide lighting design to support safety and CPTED outcomes • Incorporate landscaping, including tree planting, within JOAL environments. • Clearly resolve waste management, including bin storage and collection locations, ensuring pedestrian paths are not compromised.	• JOAL designs include provision for a grade separate footpath on at least on side. Larger JOALs have incorporated grade separated footpaths on either side of the JOAL. A condition has also been proposed requiring implementation of speed calming measures for longer JOALs to further support a reduction in vehicle speeds on support pedestrian priority. • It is proposed to undertake detailed lighting designs at EPA stage and a condition is proposed to address this. • In terms of landscaping, all JOALs proposed benefit from in-lot landscaping (including low-level ground cover, hedges and specimen trees) which directly adjoins theses spaces as set out in the landscape plans. Whilst not within the defined JOAL boundary, experientially these areas of landscaping will form part of the JOALscape for any visitors arriving by foot. Additionally, some JOALs will also benefit	• This remains the principal outstanding urban design issue. • While it is acknowledged that the updated roading drawings (Appendix 26a) now incorporate grade-separated pedestrian paths in some JOAL profiles, this approach is not applied consistently across the development. There remain several JOALs that function as primary access streets serving a significant number of dwellings, where grade separation and pedestrian priority are not clearly demonstrated. Examples include JOAL 1 (serving approximately 20 units) and JOAL 4A (serving approximately 23 units). • Similarly, while some JOAL profiles introduce landscape strips of approximately 0.5m to 1m in width, this is not consistent across all JOALs. For example, JOAL 40 (serving approximately 25 units) does not appear to provide additional landscape amenity space. In

	from the proposed slope revegetation area which, in time will form a dense area of landscaping adjoining them. Given the narrow extent of most JOALs, additional landscaping within the JOALS themselves is not considered necessary. • As above, the Mckenzie road drawings have been updated to include newly proposed loading bays, footpaths and rubbish truck turning heads.	addition, these landscape elements are not clearly coordinated with Appendix 11 Landscape Plans, and the quality and implementation of these spaces remain unclear. • The applicant has also indicated that JOAL environments will benefit from adjoining lot landscaping. However, in many instances, front yard spaces are fenced directly along the boundary, which limits the extent to which private planting contributes positively to the JOAL environment. This reduces the potential for these spaces to function as high-quality pedestrian environments. Some examples of this condition are JOAL 40 and JOAL 03. • Furthermore, landscape plans indicate that waste bins are to be located within pedestrian paths on collection days, which has the potential to obstruct pedestrian movement and reduce safety, particularly in JOALs that operate as primary access routes. • While the proposed speed calming measures and the approach to address lighting design at a later stage are supported, the response does not clearly demonstrate how the JOAL design as a

		whole aligns with the intent of PC79 transport provisions, particularly in relation to pedestrian priority and the quality of the shared environment. • Given the number of dwellings reliant on these JOALs, a higher level of amenity, spatial definition, and pedestrian prioritisation is expected. On this basis, the concerns previously raised regarding the design and functionality of JOAL environments remain relevant.
Block structure and connectivity Explore opportunities to introduce additional mid-block connections within longer blocks to improve permeability.	While mid-block pedestrian connections are often promoted to enhance permeability and walkability, their value must be considered in relation to the site's physical context. Broadly speaking the proposal has adopted small blocks with frequent connections across flatter areas of the site. Most of the development features blocks lengths of less than 180m which is considered low when compared with central Auckland suburbs such as Herne Bay, Ponsonby and Grey Lynn which regularly feature block lengths that typically extend between 200-400m. The longest block within the development is in the northern section of Stage 2 and extends approximately 260m and any additional mid-block connection in this location would not respond to any obvious future pedestrian desire line and wouldn't meaningfully improve permeability.	The applicant's explanation is generally accepted. While some longer blocks remain, this matter is not considered a significant standalone concern at a high level.

Street interface and vehicle dominance • Review areas with high concentrations of vehicle crossings. • Reduce the concentration of vehicle crossings where practicable.	The current design, as lodged, has been reviewed for vehicle crossings, and all feasible crossings have been paired. Crossings that remain unpaired are constrained by factors such as road gradients and retaining walls. In areas with steeper roading, pairing vehicle crossings across 9m-10m individual lot frontages would result in significantly increased retaining wall heights. For example, on a 1:8 road gradient, side yard retaining walls would increase from approximately 1.2m (unpaired crossings) to around 2.4m if crossings were paired. This would also result in steeper and less practical parking pads. All proposed vehicle crossings comply with Auckland Transport's minimum separation distance requirements. In locations where crossings are not paired, sufficient space has been maintained to accommodate street trees, lighting, and bin storage, as per Greenwoods landscaping plans.	The applicant's explanation regarding paired and unpaired vehicle crossings, including the influence of topography and retaining constraints, is generally accepted at a high level. However, the resulting streetscape outcomes in some locations remain vehicle-dominated, such as Lots 1142–1227 and 746–838. Limited on-street parking provision may also place pressure on the front yard landscaping and outdoor living areas to be converted to additional car parking over time, which can adversely affect the streetscape amenity. Similar outcomes observed in other recent developments of similar intensity, such as Cardinal West in Redhills, suggest that such effects can arise in practice.

1.3 Response to Recommended / Amended Conditions

Condition Request from Council	Applicant Response	Council Specialist Response
It is recommended that the relevant JOAL/access conditions (Condition 100–101) be expanded to include design details relating to pedestrian movement, including path widths, separation from vehicle movement, and confirmation that pedestrian paths are not obstructed by service functions such as waste storage.If this cannot be appropriately incorporated within the existing condition, a separate condition addressing JOAL and internal access design should be included.	Further design work has been undertaken to address the concerns regarding the JOALs, and this condition change is no longer necessary.	Request remains – wording below is for new requested condition if conditions are not changed.
		****New** - Pedestrian Access and JOAL Design** The design and construction of all Jointly Owned Access Lots (JOALs) and internal accessways shall ensure safe and efficient pedestrian movement, and shall be in general accordance with the approved plans, except as modified by the following: a) Pedestrian paths shall be clearly defined and provided along all accessways, with a minimum unobstructed width of [insert width, e.g. 1.5m], unless otherwise demonstrated as appropriate through detailed design. b) Pedestrian paths shall be designed to be physically separated from vehicle manoeuvring areas where practicable, or otherwise clearly delineated through changes

		in surface treatment, level, or markings to ensure pedestrian safety. c) All pedestrian paths shall remain unobstructed at all times. Service and operational functions, including but not limited to waste and recycling storage, utility infrastructure, and loading areas, shall not encroach upon or impede pedestrian movement. d) Details of pedestrian path design, including width, surface treatment, separation measures, and interface with vehicle crossings, shall be provided as part of the engineering plan approval and shall be implemented prior to the issue of a Code Compliance Certificate. e) Details shall also be provided demonstrating responsibility for the implementation and ongoing management and maintenance of all common landscaped areas within the JOAL and internal accessways. This shall include identification of the legal mechanism (such as a residents' society, body corporate, or similar arrangement) responsible for ensuring these areas are established, maintained, and kept in good condition for the life of the development. Evidence of these arrangements shall be provided to Council prior to the issue of a Code Compliance Certificate.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 29:

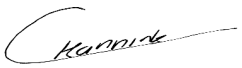
Parks

Specialist Response Template – Fast-track Approvals Act 2024
Substantive Application – Parks Planning Response to applicant updates

1.0 Technical Specialist Memo – Parks Planning

Application Description

Application and property details

From:	Cas Hannink – Senior Parks Planner
Qualifications & Relevant Experience:	I hold the qualification(s) of a Bachelor of Urban Planning with First Class Honours with experience across Parks Planning, Resource Consents and the private sector in Auckland, New Zealand. I am a member of the New Zealand Planning Institute**.** I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications.
Preparation in Accordance with the Code of Conduct:	I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.
Signature:	
Date:	23/04/2026
Reviewed:	For release by Parks Lead Agency Hester Gerber: Manager Parks Planning  23/04/2026

2.0 Original Specialist Review Memo

2.1 Landscaping, encumbered street tree locations and species selection

2.1.1 Identified concerns regarding the adequacy of soil volumes for street trees and alignment with The Auckland Code of Practice for Land Development and Subdivision Chapter 7: Landscape (COP 7) expectations. Noted uncertainty around species suitability and ability to achieve long-term canopy maturity in constrained environments.

2.1.2 Highlighted potential conflicts between tree placement and adjacent vehicle crossings, services, and infrastructure constraints.

2.2 Interfaces, boundary treatments and gradients for reserves

2.2.1 Identified unclear gradients for drainage and open space areas to ensure ongoing maintenance and usability. Concerns were raised that the plans do not clearly demonstrate compliance with maximum gradients (1:3 for planted areas and 1:3 for grassed areas), creating a risk that Council may not accept vesting of the drainage assets.

2.2.2 Noted unclear interface treatments between parks, commercial areas, and retaining structures from residential units. Maximum heights and passive surveillance for fencing heights and permeability raised as being unclear.

2.3 Neighbourhood parks and metrics and future acquisition

2.3.1 Identified uncertainty around functional adequacy and configuration of the proposed neighbourhood park and the eastern boundary gradients of Lot 1800.

2.3.2 Steep batters (up to 1:1) along stream corridors and within eastern boundary of Lot 1800 which presents maintenance constraints and does not meet associated metrics.

2.3.3 Lots 1800 and 5020 are outside the 1% AEP floodplain and are primarily subject to localised overland flows within a very low hazard area. Concerns were raised regarding flood risk and site resilience. A key risk scenario is blockage of the upstream motorway culvert, which could result in inundation depths exceeding 1m across the southern portion of Lot 1800 and adjacent roads.

2.3.4 The applicant has applied residential society conditions to Lot 5020, but not to Lot 1800. As a result, if Council acquisition does not proceed, the open space outcome is only secured for Lot 5020 and not for Lot 1800.

2.4 Open space network and route legibility

2.4.1 Raised concerns regarding safety and maintenance responsibility for routes through ecological corridors. Noting the previous panel's recommendations, Council is not amenable to take ownership of maintenance responsibility for any of these walkways.

2.5 Other outstanding deficiencies/Considerations

2.5.1 Noted inconsistencies between scheme plans and landscape plans regarding reserve boundaries and extents.

2.5.2 Identified missed opportunities for canopy tree provision and long-term amenity outcomes.

2.5.3 Raised general information gaps affecting clarity of overall design intent and implementation certainty.

2.6 Conditions review

2.6.1 Raised that open space acquisition for recreation purposes should not override the need to deliver functional open space outcomes (recreational park lots), with the inconsistent application of the residential society approach between Lot 1800 and Lot 5020 as noted in paragraph 2.3.4 above.

2.6.2 Standard Parks Planning conditions were provided to the applicant.

3.0 Updated Response to Applicant's Memo/Plans

3.1 Landscaping, encumbered street tree locations and species selection

3.1.1 While the response has advised that more detailed information on soil volumes and potential use of structural soil solutions can be developed at the EPA stage, this does not address the previous concerns raised.

3.1.2 The applicant's response relies in part on soil volume assessments undertaken for a previous Fast Track application (Delmore Version 1), noting that the majority of trees were provided with approximately 10 m^3 of soil, and that structural soil solutions may be applied to constrained areas. Those assessments relate to an earlier iteration and cannot be relied upon.

3.2 Interfaces, boundary treatments and gradients for reserves

3.2.1 The applicant has not addressed previous concerns regarding gradients within drainage and open space recreational areas (parks). For gradients and future operational management, the following has not been demonstrated or provided in the updated information:

- 1:5 maximum gradient for grassing.
- 1:3 maximum gradient for planting.

3.2.2 No clear controls demonstrate that batters can be achieved within acceptable parameters for maintenance and usability as per above.

3.2.3 The plans do not clearly confirm that retaining structures adjacent to reserve areas are located outside of reserve boundaries or consistently adhere to the agreed maximum

height parameters. While conditions are proposed to manage detailed design and approval, the current drawings do not provide enough certainty to show that concerns have been fully addressed.

3.2.4 The updated plans do not adequately demonstrate how fencing along reserve boundaries will achieve appropriate CPTED outcomes, permeability, and interface treatment. Specific details regarding fencing type, height, and location remain unclear or unresolved for specific interface locations (Lots 1623 & 1605). Although conditions are intended to address these matters at the detailed design stage, the plans do not yet provide sufficient clarity.

3.3 Neighbourhood parks and metrics and future acquisition

3.3.1 While the majority of associated metrics for the neighbourhood park locations are met, the applicant's conditions and the provision of a residential society to protect the open space outcome for Lot 5020 has not been extended for Lot 1800. Only Lot 5020 maintains an open space outcome if not acquired by Council.

3.3.2 Updated plans to depict any changes to the steep batters (up to 1:1) along stream corridors and within eastern boundary of Lot 1800 have not been provided, presenting maintenance constraints and does not meet associated metrics.

3.3.3 A key risk which remains is the blockage scenario of the upstream motorway culvert, which could result in inundation depths exceeding 1m across the southern portion of Lot 1800 and adjacent roads.

3.4 Open space network and route legibility

3.4.1 The applicant's response outlined that no provided walkways are proposed to vest with Auckland Transport or Parks and Community Facilities. As per the submitted plans, these connections are indicated within private land. Council is not amenable to taking responsibility for these walkways/accessway routes.

3.5 Other outstanding deficiencies/Considerations

3.5.1 The landscaping plans (appendix 11) do not match the scheme plan boundaries for Lot 5020. These appear to include the commercial lot into the park for Lot 5020.

3.6 Conditions review

3.6.1 The acquisition of open space for the purpose of recreation land (ownership) should not override the outcome to be provided in the need for open space. While the applicant has considered the residential society outcome for Lot 1800, this has not been considered for Lot 5020.

4.0 Outstanding Issues

The below outstanding issues have been noted relating to technical commentary and the applicants proposed conditions.

4.1 Response to Further Information Requests/ Technical Comments

4.1.1 The long-term protection of open space outcomes remains unresolved. While a residential society mechanism is proposed for one lot (Lot 5020), this has not been consistently applied, creating uncertainty that 1800 will be protected and function as intended open space if not acquired by Council. The applicants updated plans already depict Lot 1800 as a subdivided residential lot (Drawing number 3725-370 of Appendix 10A Stage 1 Scheme Plan).

4.1.2 Gradient compliance across all drainage reserve lots have not been demonstrated. There is no confirmation that batters meet the required maximum gradients of 1:5 for grass and 1:3 for planting, resulting in uncertainty around safety, maintenance, and vesting compliance.

4.1.3 Maintenance access remains a concern, as the absence of confirmed gradients creates uncertainty regarding safe and functional Council access along pathways to drainage reserves in relation to point 4.1.2 above.

4.1.4 The previous concerns for the eastern slope of the neighbourhood park location with the adjacent stream corridor for Lot 1800 remains as it locates a 1:1 slope within the neighbourhood park (lot 1800). This does not meet maintenance requirements in accordance with paragraphs 4.1.2 and 4.1.3 above.

4.1.5 Flood risk and overland flow considerations are not fully resolved. While both lots are generally outside the 1% AEP floodplain, the potential effects of culvert blockage on Lot 1800 remain unclear due to limited supporting information.

4.1.6 The current documentation does not clearly demonstrate that adequate soil volumes and appropriate design measures have been incorporated to support the proposed species at maturity, particularly in constrained locations adjacent to vehicle crossings and servicing depths. While the use of structural soils or similar systems is acknowledged as a potential solution, this has not been sufficiently detailed or confirmed in the updated information.

4.1.7 The updated landscape plans do not adequately demonstrate fencing outcomes along reserve boundaries, with CPTED, permeability, and specific details (including at Lots 1623 and 1605) remaining unclear.

4.2 Response to Recommended / Amended Conditions

4.2.1 The applicant has not considered the residential society outcome for Lot 1800 to match the conditions provided for Lot 5020. Only one Park is protected for an open space outcome if not acquired by Council.

4.2.2 The applicant has not accepted the relevant implementation conditions relating to reserves. Therefore, planted slopes which are to be a maximum 1:3 grade and grassed slopes to be a maximum 1:5 grade are not demonstrated within the updated plan set, or the conditions.

4.2.3 No 3-year maintenance period adopted for the streetscape in alignment with the minimum standards for tree establishment in accordance with the Auckland Code of Practice for Land Development and Subdivision – Chapter 7: Landscape (COP 7). Newly planted street trees experience the highest stress and mortality risk during their first three years, particularly in constrained urban environments where soil volume, water availability, and physical damage are common challenges.

5.0 Conclusion

Based on the updated information provided, Parks Planning still do not support the proposal given key information gaps and concerns that remain unresolved including plan updates which do not correspond with the applicant's response comments. While the applicant has adopted various standard Parks Planning conditions, the removal of specific recommended conditions would result in an undesirable parks and open space outcome for the community. It is recommended that these gaps be addressed before the Panel is minded to approve the Fast Track proposal, to ensure appropriate open space outcomes and to resolve future maintenance considerations for all assets proposed to vest.

6.0 Response to Further Information Requests / Technical Comments

Information Request from Council on the lodged material	Applicant Response	Council Specialist Response
1. Open Space outcome for Lot 1800 is not protected The residential society mechanism applied to Lot 5020 has not been extended to Lot 5020. Unclear long-term ownership, management, and public access arrangements.	The applicant is willing to provide a neighbourhood park within Stage 1 where Council confirms its intention to acquire and vest the land, noting the proposed park meets the relevant size, accessibility, and design requirements. It is also our understanding that reserve acquisition is funded through development contributions, and therefore there is an appropriate mechanism available to enable Council to secure this land. However, if Council does not wish to acquire the land, it is appropriate that the area be developed for residential purposes. This is justified on the basis that the adjoining Ara Hills development is required to deliver a neighbourhood park which would adequately service future residents of the Delmore site. In contrast, the retention of a neighbourhood park within Stage 2 is supported, as this location is more removed from adjoining neighbourhood parks and is necessary to ensure an appropriate distribution of parks across the wider catchment.	Outstanding – The applicant has considered the residential society outcome for 5020 but not considered this for Lot 1800. Park provision is therefore not protected. It is positive that the applicant intends to retain a degree of open space provision regardless of whether acquisition proceeds. The proposal to maintain the Stage 2 park in perpetuity through a residents' society acknowledges existing gaps within the open space network in this greenfield context. Figure 1 presents a gap analysis which indicates that the level of service for both Stage 1 and Stage 2 parks is largely contained within the scope of the fast-track development. The Stage 1 catchment, modelled under a medium to high-density scenario, does not extend sufficiently to service other parts of the Ara Hills development (Figure 2). On this basis, the rationale used to secure the Stage 2 park through a residents' society due to a perceived network gap could equally be applied to the Stage 1 park, supporting its retention in perpetuity.

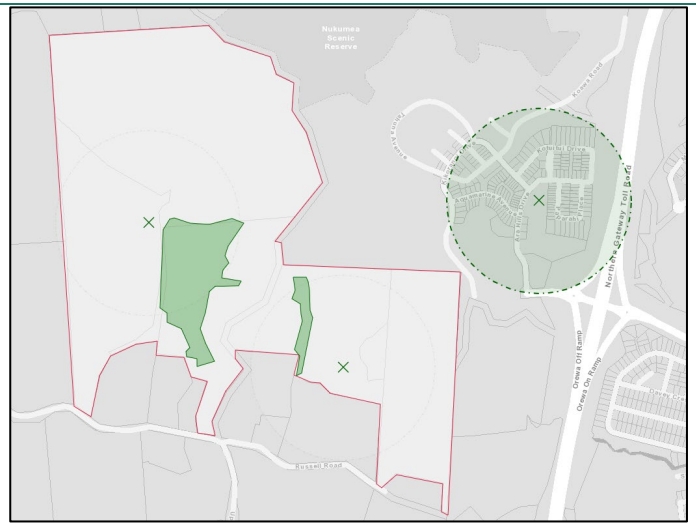


Figure 1: Existing provision within wider catchment.



Figure 2: Updated catchment of Delmore park locations.

		Please note previous incorrect references to Lot 1800 and 5020. Lot reference within column 1 have been edited accordingly.
2. Access pathways into park space (Lot 5020) Drawing 2535/36 (Stage 2 Lot Design Part 10) depicts walkway connections from the private lots into the adjacent park lot (5020). This is not supported from a Parks Planning lens.	These paths will be removed from the landscape plans. A full set of updated landscape plans will be provided on 20 April, however some preliminary updates are attached.	Resolved - Considered to be addressed in depictions from high level landscape plans provided on 20/04/2026. Detailed plans of staging of landscape plans have not been provided.
3. Maintenance period requirements for native species No confirmation of extended (3-year) maintenance period for slow-establishing natives. A 3-year maintenance period is now considered the standard Parks Planning practice for street trees as per the COP Chapter 7 Landscape.	As per the response to conditions below, a two-year maintenance period for street trees is considered appropriate and consistent with experience across previous projects.	Outstanding - Minimum standards for tree establishment for The Auckland Code of Practice for Land Development and Subdivision – Chapter 7: Landscape requires three (3) years. Newly planted street trees experience the highest stress and mortality risk during their first three years, particularly in constrained urban environments where soil volume, water availability, and physical damage are common challenges.
4. No gradient confirmations in drainage reserves including a 1:1 slope in Lot 1800 (park) No confirmation that gradients meet safe use and maintenance requirements. - 1:5 maximum gradient for grass - 1:3 maximum gradient for planting	The drainage reserve plans are being updated to show the gradients and will be provided on 20 April. The 1:1 slope has been shifted and is no longer within the boundary of Lot 1800. This will be indicated on the updated plans to be provided on 20 April.	Outstanding – Outlined as confirmed in applicants' comments but updated plans have not been provided. Remains outstanding. Uncertain compliance with vesting and safety standards. Slips, erosion, unsafe public access and maintenance risks. Healthy Waters may reject the proposed assets.

A small eastern portion of Lot 1800 adjacent to the covenanted vegetation maintains a 1:1 slope.		
5. Access to drainage reserves for maintenance Lack of clarity on whether maintenance access meets required standards given access through private lots for the below lots: - Lot 1624 provides a right of way for maintenance access over private lots.	The design has been updated in all necessary locations to ensure maintenance access is provided from a public access point directly to the reserve. Easements over private land are no longer proposed. Updated scheme plans will be provided on 20 April.	Outstanding - Outlined as confirmed in applicants' comments but updated plans have not been provided. Remains outstanding. Uncertain compliance with vesting and safety standards. Slips, erosion, unsafe public access and maintenance risks. Healthy Waters may reject the proposed drainage assets.
6. Flooding of Lot 1800 during culvert blockages Insufficient hydraulic modelling and supporting technical information.	Updated flooding drawings have been provided showing no impact on Lot 1800 during the SWCoP culvert blockage assessment. These plans will be provided by 20 April.	Outstanding – Concerns remain as per review from Healthy Waters specialists. Uncertain compliance with vesting and safety standards. Potential for unmitigated flood risk to public land and users under blockage conditions.
7. Canopy coverage optimization and calculation. No clear strategy to maximise canopy in berms with available space or canopy coverage calculations.	Greenwood Associates have incorporated street trees in all suitable locations. While specific canopy coverage calculations have not been provided, the proposed streetscape and berm layout demonstrate that the design maximises canopy coverage while maintaining a predominance of native tree species.	Outstanding – Uncertain delivery of long-term canopy coverage outcomes including: - Urban Ngahere Strategy 30 percent canopy coverage. - 12-15% tree canopy closure (AT requirements). Can be determined at detailed design but limits the ability to assess whether the design will support mature canopy tree growth as intended.
8. Confirmation of available soil volumes and rooting space Documentation does not clearly demonstrate how recommended soil	At the EPA stage, specific information on soil volumes within berms can be provided if required.	Outstanding – Uncertain delivery of long-term canopy coverage outcomes including: - Urban Ngahere Strategy 30 percent canopy coverage. - 12-15% tree canopy closure (AT requirements).

volumes will be achieved within the constrained corridor between planting areas and vehicle crossings. Root barriers as noted in Appendix 11 (overview Memo) are acceptable where intersecting with SW infrastructure.	However, it should be noted that during the submission process of the previous proposal that 2/3 of the street trees had sufficient space for a minimum of 10cu.m of planting soil. For the remaining 1/3 trees, the majority were generally afforded space to allow between 8-9.95 cu.m, for these areas a detail was proposed that allowed for the provision of structural soil below the adjacent proposed footpath with would allow for root spread and increase the soil area. After investigation of allowable soil volumes at the EPA stage, Greenwood Associates will consider if such a detail is appropriate and, if it is determined to be so, will be included within the EPA landscape drawing package.	The applicant's response partly relies on soil volume assessments prepared for a previous Fast Track application, which indicated that most trees would receive approximately 10 m³ of soil and that structural soil solutions may be used in constrained areas. However, these assessments relate to an earlier iteration of the proposal and cannot be relied upon for the current application. Can be determined at detailed design but limits the ability to assess whether the design will support mature canopy tree growth as intended.
9. Species selection not supported B. tarairi proposed despite known high failure rates after ~10 years. Raupō and Carex secta proposed despite long-term maintenance and performance issues (Stormwater pond edge species selection). Reduces confidence in species resilience and suitability.	These three species will be removed from the proposal and substituted with more suitable species as described below: • Where B.taraire forms a part of the wider planting mix 'BM' it will be removed and its 2% coverage within this planting group dispersed amongst other native trees within this planting mix, specifically A.excelsus, D.spectabile, K.excelsa and P.totara.	Outstanding – Not resolved with no plans provided to confirm changes. Can be addressed at EPA for detailed design changes. Parks Planning cannot support S.chatamica (Kōwhai), S.microphylla (Kōwhai), M.excelsa (Pōhutukawa), or P.costata (Tawapou) as street trees. M.excelsa 'Maori Princess' (Pōhutukawa 'Maori princess') as a replacement street tree species can be supported.

	• Where B. taraire is a street tree our recommendations for substitution are S.chatamica (Kōwhai), S.microphylla (Kōwhai), M.excelsa (Pōhutukawa), M.excelsa 'Maori Princess' (Pōhutukawa 'Maori princess') and P.costata (Tawapou). • In terms of carex (C.secta) and raupo (T.orientalis) within SM-Stormwater pond edge planting mix, our recommended substitutions for carex are A.fulvida (toetoe) and V.Stricta (koromiko) and recommended substitutions are P.tenax (harakeke) and S.tabernaemontanii (kuawa).	
10. Fencing adjacent to drainage reserves The landscape plans indicate 1.8m solid fencing adjacent to specific drainage reserve locations (Lots 1623 & 1605). Other locations appear to provide 1.8m open security fencing (50% permeable).	The landscape plans will be revised to ensure a consistency in fencing treatments adjacent to drainage reserves. Updated landscape plans will be provided on 20 April.	Outstanding – Plan depictions do not match applicants' commentary.
11. Consideration of modified soil profiles in species selection It is unclear whether the planting palette has been assessed against the likely modified or compacted soil conditions resulting from development.	This has been considered and specific details will be provided for these slopes and soil conditions as part of the updated landscape plan set on 20 April.	Resolved - Can be determined at detailed design.

12. Root management or engineering solutions near vehicle crossings No clear information is provided on whether design responses (e.g. structural soils, soil cells, or connected trench systems) will be used to expand rooting space beneath hard surfaces.	These details are typically addressed at the EPA stage, where site-specific design responses such as structural soils, soil cells, or trench systems can be appropriately resolved. The provision of this information at that stage is standard practice and would not materially affect or alter the overall design outcomes proposed at the consent stage.	Outstanding - Uncertain delivery of long-term canopy coverage outcomes including: - Urban Ngahere Strategy 30 percent canopy coverage. - 12-15% tree canopy closure (AT requirements). Can be determined at detailed design but limits the ability to assess whether the design will support mature canopy tree growth as intended.
13. Stormwater line location measurement depth not demonstrated. The depth appears to exceed 1m at a minimum of 1.7m in depth at a high-level measurement. (Drawing Number 3725-1-3610 on Appendix 26 Stage 1 and SW line depth measurements under front berm for collector road and N/O.R 6).	As per above, details outlining the street tree relationship can be provided during the EPA submission stage.	Outstanding – Original lodgement documentation depicted a measured 1.7m separation distance. Street tree locations and updated plans do not confirm a measured vertical distance.
14. Admin update to reference for Lot 5020 The scheme plan does not clearly identify Lot 5020 as open space or land in lieu of reserve.	The Scheme Plans are being updated and will be provided to Council on 20 April.	Resolved – Applicant has updated and provided a clear plan reference for Lot 5020.
15. Appendix 9.1 Retaining walls do not include an assessment on retaining walls adjacent to lots to vest for reserve areas	The applicant is currently working through details on retaining walls adjacent to drainage reserves and will provide an update as soon as practicable.	Outstanding - Plan depictions do not match applicants' commentary. No further detailed retaining wall indications or plans have been provided for the landscape plans

Appendix 9.1 does not include assessment of retaining walls adjoining reserve boundaries.		
16. Drainage Reserve planting suitability in high-velocity zones Carex secta proposed without confirmation of water velocity conditions.	As per response to point 9, Carex secta within SM-Stormwater pond edge planting mix, is recommended to be substituted for A.fulvida (toetoe) and V.Stricta (koromiko).	Resolved – Replacement species considered to be suitable.
17. Interface with new commercial lot requires clarification for Lot 5020. No detail is provided on how level changes between park and commercial lot will be managed. One retaining wall under 1m is depicted.	This a low-level wall, if a specific treatment is required then planting can be used to soften any perceived effects. Conditions have been included as per request for fencing and retaining wall heights adjacent to Lot 5020.	Outstanding - Plan depictions do not match applicants' commentary. No further detailed retaining wall indications or plans have been provided for the landscape plans
18. Walkway vesting arrangements appear to be privately owned. Walkways shown on landscape plans do not specify whether they will vest or remain privately owned. Parks Planning and Parks and Community Facilities (PCF) will not assume ownership or maintenance responsibilities.	All walkways on private land will remain in private ownership to be managed by the residential society.	Resolved – walkways will remain in private ownership. Councill is not amenable to take ownership of any associated walkways.
19. Delineation of park boundary with residential lots is unclear for Lot 5020. Private/public boundaries are not accurately demonstrated with fencing or post locations in relation to Lot 5020.	This will be a 1.2m fence, plans will be revised to clearly show this and will be provided on 20 April.	Outstanding – Plan depictions do not match applicants' commentary.

7.0 Response to Recommended / Amended Conditions

Parks Planning acknowledge the conditions proposed by the applicant, but it is preferred to use the tested and standard conditions to ensure consistency in its execution whilst also clarifying its application to the various stages for the development. To note is that the vesting of roads is not possible under land use and conditions relevant to Parks infrastructure will only be required under a subsequent subdivision.

The recommended conditions outlined in sections below must be considered for inclusion by the applicant. Where a specific condition number has not been identified, a 'X#' has been used to indicate its inclusion accordingly.

Standard Parks Planning conditions have been included accordingly.

The applicant's proposed conditions will be depicted with strikethrough lines in the green text (~~**deletions**~~) and insertions in blue text (**insertions)**

Conditions adopted by the applicant

7.1 General conditions

7.2 Land Use Conditions

As part of the future formalised assessment, Parks Planning will review the land use conditions for consistency with additional conditions for insertion noted below.

Condition Request from Council on the lodged condition document (Appendix 44 to the AEE)		**Applicants Response**	**Council Specialist response**
	Advice note:	This advice note is already included as part of the land use conditions, however, has been expanded as per	Resolved and included accordingly under condition 42 of 2.1.15.

	Landscaping associated with public roads, open spaces and reserves will be considered for engineering plan approval when the lots are created, and land is to be vested at the time of subdivision. It is advisable that any landscaping as part of the land use be designed in accordance with Auckland Council standards and in particular "The Auckland Code of Practice for Land Development and Subdivision Chapter 7: Landscape	the request. Refer Section 2.1.15 of the conditions.	
X83.	**Fencing to adjacent Neighbourhood Parks** Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of neighbourhood park(s) (Lots 1800 and 5020) must be low height (1.2m) and at least 50% visually permeable. The council is exempt from sharing costs. A consent notice will be required to be registered on Lots 358 and 1113-1127. The consent notices will be prepared by the Council's solicitor at the consent holder's cost.	This condition is already included as part of the land use conditions (refer section 2.1.24 of the conditions).	Partially Resolved - Ensures interface transparency and passive surveillance while managing height and privacy. Protects open space amenity. Specific lot references are preferred to maintain consistency including second paragraph. No information has been provided regarding gradients or the treatment of retaining walls adjacent to the drainage reserves. This condition may need to be updated if more detailed plans, beyond the current high-level depictions, are submitted.
X84.	**Fencing to adjacent Drainage Reserves** Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of any drainage reserves (Lots 1800, 5020, 1600–1602, 1604–1609, 1616, 1620–1624, 1627–1629) must be either low height (1.2m) or at least 50% visually	This condition is already included as part of the land use conditions (refer section 2.1.24 of the conditions).	Partially Resolved - Ensures interface transparency and passive surveillance while managing height and privacy. Protects open space amenity.

	permeable (max height 1.8m). If located above a retaining wall, a maximum 1.2m fence with 50% visual permeability must be provided. Landscape planting may be implemented on the private lot and must be maintained to ensure 50% visual permeability. The council is exempt from sharing costs. A consent notice will be required to be registered on all adjacent residential lots. The consent notices will be prepared by the Council's solicitor at the consent holder's cost.		Specific lot references are preferred to maintain consistency including second paragraph. No information has been provided regarding gradients or the treatment of retaining walls adjacent to the drainage reserves. This condition may need to be updated if more detailed plans, beyond the current high-level depictions, are submitted.
X85.	**Retaining Walls** Any retaining wall(s) and ancillary and supporting structures must be entirely located within the residential lots (Lots 358 and 1113-1127) and must be clear of the boundary of the reserve(s) (Lots 1800 and 5020). The retaining wall must be no higher than; - 1m above existing ground level adjacent to Lot 5020. - 1.5m above existing ground level adjacent to Lot 1800. A certificate from a licensed cadastral surveyor must be provided certifying the compliance with this requirement at the lodgement of the survey plan for approval.	This condition is accepted and has been included as part of the updated condition set (refer section 2.1.24 of the conditions).	Partially resolved - Ensures all retaining structures are private and do not encroach on public land. Protects usability and safety of reserves. Specific lot references are preferred to maintain consistency. No information has been provided regarding gradients or the treatment of retaining walls adjacent to the drainage reserves. This condition may need to be updated if more detailed plans, beyond the current high-level depictions, are submitted.
7.3 Subdivision Conditions		**Applicants commentary**	**Council Response**

X137.	**Streetscape landscaping** Prior to the issue of the section 223 application under the RMA (at Engineering Plan Approval stage), the consent holder must submit a detailed streetscape landscaping plan(s) for rain gardens/ street trees/ street gardens for approval by the Manager Parks Planning. In particular, the plans must: a) Be prepared by a suitably qualified landscape architect. ~~b) Be in general accordance with the plans prepared by Greenwood Associates and referenced under Condition 1.~~ Be in general accordance with the plans prepared by Greenwood Associates, dated 19/12/2025, Revision A and 10/04/2026, Revision A and referenced under Condition 1. c) Show all planting including details of intended species, location, plant sizes at time of planting and likely heights on maturity, tree pit specifications, the overall material palette, location of streetlights and other service access points. d) Ensure that selected species can maintain appropriate separation distances from paths, roads, street lights and vehicle crossings in accordance with the Auckland Transport Code of Practice. e) The provision of root barrier solutions for any encumbered street tree locations. f) Include planting methodology.	This condition is accepted and has been included as part of the updated condition set (refer section 3.1.14 of the conditions).	Resolved - Standard Parks Planning conditions for appropriate species selection, spacing, and maintenance needs. Aligns with AT CoP and Chapter 7 of the Auckland CoP. Concerns remain over provided landscaping plans. Only high level plans dated 10/04/2026 were provided within the response review, labelled as 'initial updates'.

	g) Comply with the Auckland Code of Practice for Land Development and Subdivision: Chapter 7: Landscape. ***Advice note:*** *Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval.*		
X138.	**Parks condition only where drainage reserves are acceptable to Healthy Waters:** **Drainage reserves/ Stormwater ponds** Prior to the issue of the section 223 application under the RMA At (at Engineering Plan Approval stage), the consent holder must submit a detailed landscaping plan(s) for stormwater ponds and drainage reserves for approval by the Manager Parks Planning. The plans must: a) Be prepared by a suitably qualified landscape architect. b) Be in general accordance with the xxx prepared by xxx dated xxx. c) Show all planting including details of intended species, location, plant sizes at time of planting and likely heights on maturity, tree pit specifications, and the overall material palette. d) Include planting methodology.	This condition is accepted and has been included as part of the updated condition set (refer section 3.1.14 of the conditions).	Resolved - Standard Parks Planning condition for appropriate species selection, spacing, and maintenance needs. Aligns with AT CoP and Chapter 7 of the Auckland CoP. The applicant has not included the green highlighted header.

	e) Demonstrate a topographic overlay to illustrate proposed gradient levels within the reserve. f) demonstrate a flood overlay identifying flood-prone areas within the reserve. g) Demonstrate all outfalls and retaining walls, including visual assessments within the reserve. h) An annotated pavement plan and related specifications, detailing proposed site levels and the materiality and colour of all proposed hard surfacing. i) Provide a Safety in Design Register for the 3m wide shared pathway within the drainage reserves. j) Comply with the Auckland Code of Practice for Land Development and Subdivision: Chapter 7: Landscape. ***Advice note:*** *Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval.*		
X139.	**Implementation of streetscape works**	This condition is accepted and has been included as part of the updated condition set (refer section 3.1.14 of the conditions).	Resolved - Provides assurance for asset condition before Council handover. Ensures streetscape assets are fit-for-purpose.

	Prior to issue of section 224(c) certification, all street landscaping must be implemented on Lots 2000–2006, 2008, and 2100–2106 in accordance with the approved streetscape plans and to the satisfaction of the Manager Parks Planning and landscaped in accordance with the Auckland Code of Practice for Land Development and Subdivision Chapter 7: Landscape, and in particular the following: a) The street must be cleared of any construction material, rubbish and surplus soil, and must be maintained in a neat and tidy condition. b) Should site factors preclude compliance with any of these conditions, the Manager Parks Planning must be advised in writing as soon as practicable and, in any case, prior to planting, and an alternative soil improvement methodology proposed by the consent holder to the satisfaction of Manager Parks Planning. Grassing must only be undertaken when the weather is suitable i.e. mild, dull and moist, and when the ground is moist and workable. Where delays occur in the agreed programme which prevents areas being planted, the consent holder must inform the Manager Parks Planning immediately.		
X140.	**As-built plans**	This condition is accepted with a minor amendment that clarifies this is for areas to be vested. Therefore, this would not apply if the neighbourhood park in Stage 2 is to be retained in	Standard parks Planning conditions which provides records of assets for registration and future maintenance. Critical for Council asset handover.

	Prior to the issue of the 224(c) certificate, the consent holder will provide to the Development Engineer and Manager Parks Planning as-built plans for landscape works (hard and soft) within all proposed parks, reserves and streets to be vested in the following format: a) For vested assets from a new development, as-built plans must be provided in digital format (DWG, DXF or GIS shape files on CD or via e-mail) as well as a pdf copy of the signed as-built plan(s). b) The following requirements apply to digital formats: i. All dimensions are to be in millimetres, and all levels and lengths in metres. ii. All locational data must be plotted in New Zealand Transverse Mercator 2000 (NZTM 2000) coordinates in terms of New Zealand Geodetic Datum 2000 (NZGD 2000) datum as approved by Land Information New Zealand (LINZ). c) All graphical data to be located/plotted to the following accuracy: i. X & Y coordinates +/-100mm ii. Z coordinates +/-50mm (e.g. lid level) in terms of the NZTM 2000 coordinates iii. Invert levels +/- 20mm. iv. Digital plans must show all required information, including specific asset information shown in the Legend of the as-built files. If external reference files, overlay or non-standard font shape files are required for this, then these should also be provided.	private ownership. Refer section 3.1.14 in the updated condition set.	The additional reference to 'within all proposed parks, reserves and streets to be vested' is considered acceptable.

	d) The as-built plan (generated from the digital format) and structural drawings must include a signed certification statement by a Licenced Cadastral Surveyor or a Registered Surveyor responsible for the as-built. e) The as-built plans must be submitted on standard ISO metric plan sheets, drawn at scales 1:100, 200, 250, 500 or 1:1000 as appropriate or as specified by the Council. The information should fit on one sheet where possible. If this is not possible at A3 size, multiple plan sheets must be submitted with an index sheet. On agreement with Auckland Council, hard copy plans may be saved and submitted in portable document format (pdf) for ease of transmission. f) Existing assets must be validated by providing asset information demonstrating appropriate dimensions of the existing known assets via sketch, aerial photo, and location of the assets g) Existing assets and assets to be removed or abandoned must be shown on as-built plans. h) Copies of the following documents are required, where these assets will be maintained by Auckland Council. i. All assets | Operation and maintenance manuals or asset owner manuals, and any other documentation provided by a supplier for use by an asset owner, e.g. warranty, guarantee. Additional documentation will be required for project records. These will be specified in project contract documents or Auckland Council project management manuals.		

	Post Development		
X141.	**Maintenance – Streetscape** Prior to the issue of the section 224(c) certificate [Replace green text for KO applications with: the start of the maintenance period], the consent holder must provide for the approval of the Manager Parks Planning a Maintenance Plan, for all planting and landscaping to be established in the streetscape (Lots 2000–2006, 2008, and 2100–2106). The Maintenance Plan must include: a) Vegetation maintenance policies for the proposed planting, in particular details of maintenance methodology and dates / frequencies. b) Details of watering, weeding, trimming, cultivation, pest and disease control, checking of stakes and ties, pruning and other accepted horticultural operations to ensure normal and healthy plant establishment and growth. c) Vandalism eradication policies.	This condition is accepted and has been included as part of the updated condition set (refer section 3.1.14 of the conditions). (d) has not been included as it is unclear what this relates to.	Subject to further review and detailed commentary during future lodgement. Ensures plant establishment and survival while aligning with maintenance standards and provides accountability for plant losses. Removal of point 'd' is suitable.
X142. To Split a.	The consent holder must undertake maintenance, in accordance with the approved Maintenance Plan for a ~~two~~ three-year period commencing on the date that the section 224(c) certificate is issued. Any maintenance issues deemed unsuitable by the Manager Parks Planning during this period must be remedied by the consent holder at their expense. ~~If any damage/theft to the planting occurs during the maintenance period, the consent holder must replace damaged/stolen plants with the same species and height.~~	This condition has been partially accepted, with an amendment that requires the maintenance period to be two years (refer section 3.1.14 of the conditions	Ensures that all streetscape planting successfully establishes to an acceptable standard following construction and prior to full public vesting or handover

			Separate condition preferred for damage and theft noting this applies to all reserves and streetscapes.
X142. To Split b.	If any damage/theft to the planting occurs during the maintenance period, the consent holder must replace damaged/stolen plants with the same species and height, and must be maintained for a period of three years following the replacement planting, to the satisfaction of the Manager Parks Planning.	This condition is only partially accepted and has been combined with the condition above (refer section 3.1.14 of the conditions). While the replacement of any damaged or stolen planting during the maintenance period is supported, the requirement to reset and apply a new three-year maintenance period for each individual replacement plant is not practical for a development of this scale. This approach would create an ongoing and potentially indefinite maintenance obligation that is difficult to monitor, administer, and enforce, particularly where damage or theft may occur at different times across the site. A more appropriate approach is for all replacement planting to be maintained for the remainder of the original maintenance period, rather than triggering a new maintenance period for each instance. This ensures that planting is successfully established while providing a clear, consistent, and manageable	As per above, ensures consistency with the certified landscape design not only for the streetscape but for all reserves.

		timeframe for both the consent holder and Council.	
X143.	Monitoring Report – Streetscape (3-year maintenance period) Following the issue of the completion certificate under s224(c), the consent holder must submit a Monitoring Report to the Manager Parks Planning, for approval every 3 months for the duration of the 3-years maintenance period. The Monitoring Report must include but is not to be limited to the following information in respect of ~~respect of all planting and landscaping established in the road reserve:~~ Lots 2000–2006, 2008, and 2100–2106: a) Success rates, including growth rates and number of plants lost (including an analysis of the distribution of losses); b) State of protection barriers where required; c) Canopy maturity, beginnings of natural ecological process–s - natural regeneration in understorey, use by native birds, etc; d) A running record of fertilisation, animal and weed pest control and replacement of dead plants; e) Details on the condition of, and recommendations for maintenance of, the fencing and f) Recommendations for replacement of dead plants and implementation of these recommendations (remediation work).	This condition has been partially accepted, with an amendment that requires the maintenance period to be two years (refer section 3.1.14 of the conditions).	Subject to further review and detailed commentary during future lodgement. Provided detail on establishment, canopy development, erosion, pest control, and replanting needs over time. Supports Standard Parks Planning Lot reference preferred.

	Any recommended remediation work must include a start date for replanting. The first measure of the survival rate of plants must not be measured any sooner than 12 months following planting. ***Advice Note:*** *This condition requires monitoring reports to be submitted for a minimum of 3 years following planting. This condition will be deemed satisfied upon a satisfactory final inspection after the maintenance period and subsequent bond release.*		
Stage 1B			
X163.	Lot 1800 shall be transferred to Auckland Council as land in lieu of reserve (for the purpose of recreation) if by the time of application for the survey plan for Stage 1B to be approved under section 223 the consent holder has entered into an agreement with Auckland Council for the sale and purchase of Lot 1800.	The applicant did not provide commentary.	Resolved and included within applicants conditions set.
X164.	If no agreement is in place in accordance with Condition 141 by the time of application for the survey plan for Stage 1B-2 to be approved under section 223, then Lot 1800 will remain as a balance Lot for the purposes of a neighbourhood park to meet the need for open space to the community it is located within and have registered a consent notice for that purpose. *Advice Note* *If a sale and purchase agreement is not entered into, the*	This condition is not accepted as currently framed, due to reasons outlined in Section 1.2 above.	Edited accordingly for original and standard Parks Planning wording. Ensures that if no agreement is in place, the intended outcomes for park and green space is still enabled even if not acquired by Council. See further comments an analysis in Section 6 Paragraph 1 above.

	intended outcome for park and open green space, will still be achieved by the consent holder through the provision of a privately owned and managed open space made available for public use via a common entity. ~~shall be developed into residential lots in accordance with the following plans:~~ • ~~Scheme plan titled "Alternative Plan for Lots 359 – 370, 1512 Being Subdivision of Lot 1800 DP XXXXXX Stage 1B 1", dated 18 December 2025.~~ • ~~Architectural plans prepared by Terra Studio titled "A-S1-1-87, A-S1-1-88, A-S1-1-89, A-S1-1-90"~~		
X165 / X166.	**Balance lots for Neighbourhood Park purposes (Stage 1 Park Lot 1800)** Prior to the issue of a s224(c) certificate, the Consent Holder must establish an Incorporated Society (or equivalent legal body) to own, manage and maintain any communal lots, and all associated communal infrastructure, (if any) not accepted by Auckland Council for vesting under condition 175 above. The following requirements must be met in order to satisfy the condition: a) The common assets are required to remain in the ownership of the Incorporated Society (or equivalent legal body), except with the prior approval of Auckland Council. b) The structure, functions and rules of the Incorporated Society must include provision for the following:	The applicant did not provide commentary.	Ensures that if no agreement is in place, this conditions ensures that the future residents' society will be responsible for the ongoing management and maintenance of the publicly accessible open space.

	c) The common assets are required to remain in the ownership of the Incorporated Society (or equivalent legal body), except with the prior approval of Auckland Council. d) The structure, functions and rules of the Incorporated Society must include provision for the following: i. All lot owners to automatically be and remain a member of the Incorporated Society for so long as they are a registered proprietor of a Lot; ii. All lot owners fulfil the obligations of a member, as set out in the Rules of the Incorporated Society; iii. The Incorporated Society will be responsible for the maintenance of landscaping, infrastructure, asset management plans, and similar matters as they pertain to the common assets. iv. Ongoing compliance with the relevant resource consent, bylaw, or other requirements of Auckland Council, and v. An acceptable method of management of the Incorporated Society's (or equivalent legal body) future affairs, and for the raising of funds from members from time to time to adequately finance any future maintenance and renewal obligations. The Rules must identify a process for		

	setting, collecting and enforcing the payment of levies. e) All costs associated with the establishment and maintenance of the Incorporated Society (or equivalent legal body) must be borne by the Consent Holder. f) A copy of the document(s) describing the functions, powers, duties and liabilities of the Incorporated Society (or equivalent legal body) must be provided to Auckland Council for certification that the infrastructure and assets will be properly maintained over time. The document(s) must evidence each of the requirements above and that the ongoing operation, maintenance and repair obligations of this condition will be adequately provided for.		
X165.	Lot 1800 must be free of easements and encumbrances and with no utility devices or structures on the land or on any of its road frontages or berms, unless agreed in writing with Auckland Council.	The applicant did not provide commentary.	Resolved - Retained
X167.	~~If additional lots are included as a result of Condition 142, the consent holder must register the below consent notices on the record of title, where relevant.~~	The applicant did not provide commentary.	Incorrect reference for Condition 142 which relates to maintenance periods. Parks Planning does not support condition 142 or the applicants updated condition 164. This condition is suggested for deletion from a Parks Planning lens.

	Stage 2		
X180.	If no agreement is in place in accordance with Condition 170 by the time of application for the survey plan for Stage 2B-3 to be approved under section 223, then Lot 5020 ~~will transfer to the Residential Society and the management and maintenance of the reserve shall be included as part of the Residential Society obligations as outlined in 113.~~ will remain as a balance Lot for the purposes of a neighbourhood park to meet the need for open space to the community it is located within and have registered a consent notice for that purpose. *Advice Note* *If a sale and purchase agreement is not entered into, the intended outcome for park and open green space, will still be achieved by the consent holder through the provision of a privately owned and managed open space made available for public use via a common entity.*	The amendments to this condition are accepted and have been updated as part of the condition set.	Resolved - Ensures that if no agreement is in place, the intended outcomes for park and green space is still enabled even if not acquired by Council.
X181.	Lots 2100, 2102-2106 on the scheme plans approved under Condition 1 must be vested to Auckland Council as a public road. The consent holder must meet all costs associated with the vesting of the road.	The applicant did not provide commentary.	Resolved – Vesting of public roads
X188.	~~**Residential Society**~~ ~~The owners of all residential lots shall belong to the Residential Society and shall abide by its constitution (or similar incorporation documentation) and shall pay all monies levied by the Residential Society for the Common Infrastructure.~~	This condition is not accepted for the reasons outlined above (relating to Stage 1 park).	Ensures that if no agreement is in place, this conditions ensures that the future residents' society will be responsible for the ongoing management and maintenance of the publicly accessible open space.

	Balance lots for Neighbourhood Park purposes (Stage 2 Park Lot 5020) Prior to the issue of a s224(c) certificate, the Consent Holder must establish an Incorporated Society (or equivalent legal body) to own, manage and maintain any communal lots, and all associated communal infrastructure, (if any) not accepted by Auckland Council for vesting under condition 175 above. The following requirements must be met in order to satisfy the condition: g) The common assets are required to remain in the ownership of the Incorporated Society (or equivalent legal body), except with the prior approval of Auckland Council. h) The structure, functions and rules of the Incorporated Society must include provision for the following: i) The common assets are required to remain in the ownership of the Incorporated Society (or equivalent legal body), except with the prior approval of Auckland Council. j) The structure, functions and rules of the Incorporated Society must include provision for the following: vi. All lot owners to automatically be and remain a member of the Incorporated Society for so long as they are a registered proprietor of a Lot;		

	vii. All lot owners fulfil the obligations of a member, as set out in the Rules of the Incorporated Society; viii. The Incorporated Society will be responsible for the maintenance of landscaping, infrastructure, asset management plans, and similar matters as they pertain to the common assets. ix. Ongoing compliance with the relevant resource consent, bylaw, or other requirements of Auckland Council, and x. An acceptable method of management of the Incorporated Society's (or equivalent legal body) future affairs, and for the raising of funds from members from time to time to adequately finance any future maintenance and renewal obligations. The Rules must identify a process for setting, collecting and enforcing the payment of levies. k) All costs associated with the establishment and maintenance of the Incorporated Society (or equivalent legal body) must be borne by the Consent Holder. A copy of the document(s) describing the functions, powers, duties and liabilities of the Incorporated Society (or equivalent legal body) must be provided to Auckland Council for certification that the infrastructure and assets will be properly maintained over time. The document(s) must		

	evidence each of the requirements above and that the ongoing operation, maintenance and repair obligations of this condition will be adequately provided for.		
Standard Parks Planning conditions not adopted by the applicant but required			
X1.	**Park and Reserve Development** Prior to the implementation of the works and as part of the Engineering Plan approval, the consent holder must submit for the approval of the Manager Parks Planning detailed engineering and landscaping plans for all hard assets / park furniture / fixtures /planting/grassing to enable reserve development to be undertaken within Lots 1800, 5020, 1600–1602, 1604–1609, 1616, 1620–1624, 1627–1629. The plan(s) and supporting planting methodology, to be submitted for approval, must; a) Be in general accordance with the plans prepared by Greenwood Associates, dated 19/12/2025, Revision A and 10/04/2026, Revision A and referenced under Condition 1. b) Be prepared by suitably qualified person/s c) Design and details of any retaining walls in the park(s)/reserve(s) or adjacent to the park(s)/reserve(s), and any other structures in the reserves. d) Include a weed management plan detailing weed eradication and control methods for the park, prior to and after planting.	This condition is not accepted. A new condition is proposed below which clarifies that the consent only requires basic reserve formation, consistent with the landscape drawings which show a grassed outcome. The applicant is willing to consider amendments if Council has standard wording. *"Prior to section 224(c) for the relevant stage, the consent holder must form the recreation reserves (Lot 1800 and Lot 5020) to a mowable grassed surface, including final shaping, topsoiling, grassing, and removal of weeds and rubbish.* *Advice Note: No planting, park furniture, fixtures, structures, shared paths, or other hard or soft landscape*	Standard Parks Planning conditions for appropriate species selection, spacing, and maintenance needs. Aligns with AT CoP and Chapter 7 of the Auckland CoP. Landscape drawings do not only depict a grassed outcome. One neighbourhood park also maintains planting and gradients which required detailed design, species selection, gradient confirmations and CPTED outcomes. The applicants proposed conditions is not accepted.

	e) Identify all new planting to be undertaken on the site including details of the intended species, spacing, quantities, location, plant sizes at the time of planting, their likely heights on maturity and how planting will be staged and established. f) Include specifications for plant condition and a written specification detailing the planting methodologies to be used. g) Identify the existing species to be retained. h) Comply with the Auckland Code of Practice for Land Development and Subdivision: Chapter 7: Landscape. i) Demonstrate a topographic overlay to illustrate proposed gradient levels within the reserve. j) demonstrate a flood overlay identifying flood-prone areas within the reserve. k) Demonstrate all outfalls and retaining walls, including visual assessments within the reserve. l) Include the location and specifications for a shared pathway (pedestrian and cycle) at a minimum of 3 metres in width. m) An annotated pavement plan and related specifications, detailing proposed site levels and the materiality and colour of all proposed hard surfacing. n) Provide a Safety in Design Register for the 3m wide shared pathway within the drainage reserves. o) [Parks planner to insert] Any other relevant agreed assets to mitigate for the development including accessways to vest, walkways, boardwalks, park edge road developments for	*works are required as part of this consent."*	

	new roads adjacent to existing park land, bridges, ***Advice note:*** *Plans approved under Resource Consent do not constitute an Engineering Plan Approval and should not be used for the purposes of constructing public works in the absence of that approval.*		
X2.	In accordance with section 221 of the Resource Management Act 1991, a consent notice shall be registered on the Record(s) of Title to be issued for each lot requiring that for so long as they are a registered proprietor of the Lot, the owners of the Lot must be members of the established Incorporated Society (or equivalent legal body) that jointly owns and is responsible and liable for the ongoing management and maintenance of the common assets	Conditions are already included for each stage which require a consent notice to be registered on the record of title for the residential society. No further amendments to the conditions are considered necessary.	This condition secures the long-term maintenance of shared open spaces and infrastructure by requiring future lot owners to be members of an Incorporated Society. It ensures these areas are managed and funded by residents if not vested in Council. The neighbourhood Park Lots (Lots 1800 and 5020) are not covered by the applicants updated condition 126.
X3.	The consent holder must ensure that the following matters have been complied with for the survey plan where parks and reserves are proposed to be vested: a) Stage 1 Park Lot 1800 and Stage 2 Park Lot 5020 must be shown as land in lieu of reserve (for the purpose of recreation). b) That a right of way easement, in favour of Auckland Council, is established over any lots required for the purposes of public access	The parks conditions already require that they are to be transferred as "land in lieu of reserve (for the purpose of recreation)". Furthermore, no right of ways easement is needed for the parks as they are all accessed via road frontage. No further amendments to the conditions are considered necessary.	Partially resolved - Required for appropriate vesting classification and maintenance access. Maintenance access is not just for the neighbourhood park locations but all associated drainage reserves. Point 'b' is not required where access is provided via the associated vested road network. However, where access is not secured by easement, point 'b'

	and/or reserve maintenance to allow access to Council staff and contractors		should apply. Lots 1601 and 1603 will require a right-of-way mechanism to ensure access, including during interim stages of works given the staging. .
X4.	Where vesting of reserves is to occur, all reserves must vest in accordance with s239 of the RMA and free of easements, encumbrances and with no utility devices, pipes, transformers, structures or the like on the land or on any of its road frontages or berms.	The parks conditions already require that they are to be free of easement, encumbrances and structures. No further amendments to the conditions are considered necessary.	The applcaints condition X165 only extends to Lot 1800. This is required to ensure reserve land is free of infrastructure and suitable for future public use. Supports safe and functional park development
DURING DEVELOPMENT			
X5.	**Implementation of park landscape works** Prior to the issue of section 224(c) certification, all hard and soft landscape works within the park/s (lots 1800 and 5020) must be implemented in accordance with the approved landscape plans to the satisfaction of the Manager Parks Planning and landscaped in accordance with the Auckland Code of Practice for Land Development and Subdivision Chapter 7: Landscape, and in particular: a) All areas of the reserve that have been grassed must have a 90 percent strike rate, in a mowable condition, and be weed b) and rubbish free.	This condition is not accepted for the reasons outlined above. A new condition is proposed as identified above.	Not resolved - Provides assurance for asset condition before Council handover. Ensures proposed open space assets are fit-for-purpose during implementation.

	c) Planted slopes to be a maximum 1:3 grade and grassed slopes to be a maximum 1:5 grade. d) Grassing and planting must be carried out by a suitably qualified landscape contractor in the planting season (April to September) and when the weather is suitable (mild, dull and moist) and when the ground is moist and workable. Where delays occur in the agreed programme which prevents areas being planted, the consent holder must inform the [council staff title] immediately. e) At practical completion auditing, a chartered professional engineer engaged by the applicant must provide certificates of compliance and producer statements as relevant and certify that the parks construction works have been carried out in accordance with the approved plans and comply with the requirements in condition (s) – above). Written manufacturers guarantee must be supplied for any products where warrantees are available or applicable. f) Any defects identified at the practical completion audit are to be remedied by the applicant. The practical completion of the works will be determined by the Manager Parks Planning to their satisfaction, and this indicates the commencement of the maintenance period.		
X6.	**Weed control**	The applicant is currently reviewing this condition in the context of the email received from Auckland Council Parks on 15 April and will provide an update by 20 April.	Not resolved - The applicant has not included this as a condition. Standard Parks Planning weed control condition to ensure re-vegetation efforts and prevents reinfestation.

	The consent holder must submit a Weed Control Programme to the satisfaction of the Manager Parks Planning prior to the start of earthworks. The Weed Control Programme must be implemented to the satisfaction of the Manager Parks Planning and prior to the issue of the certificate under s224(c). The programme needs to include: a) An inventory of the weed species to be removed; b) Removal techniques to be utilised; weed disposal methods c) Time frames for work and whether the weed removal needs to be staged (particularly relevant for sensitive areas such as coastal edges or riparian margins) d) Any re-vegetation programme required to prevent re infestation of weeds e) As assessment of any ecological issues around the removal of vegetation f) Methods for addressing stability and erosion and sediment control methods		Also critical for handover and acquisition. This is also in line with the COP Chapter 7.
POST DEVELOPMENT			
X7.	**Monitoring Report – Reserves (5-year maintenance period)** Following the issue of the completion certificate under s224(c), the consent holder must submit a Monitoring Report to the Manager Parks Planning, for approval every 3 months for the first 18 months, then 6 monthly thereafter for a minimum period of five years. The Monitoring Report must include but is not to be limited to the following information	The applicant is currently reviewing this condition in the context of the email received from Auckland Council Parks on 15 April and will provide an update by 20 April.	Not resolved or provided in updated conditions set. Provided detail on establishment, canopy development, erosion, pest control, and replanting needs over time. Supports operational readiness and final hand-over to acceptable standard of assets.

	in respect of Lots 1800, 5020, 1600–1602, 1604–1609, 1616, 1620–1624, 1627–1629: a) Success rates, including growth rates and number of plants lost (including an analysis of the distribution of losses); b) State of protection barriers where required; c) Canopy closure, beginnings of natural ecological process–s - natural regeneration in understorey, use by native birds, etc; d) A running record of fertilisation, animal and weed pest control and replacement of dead plants; e) Details on the condition of, and recommendations for maintenance of, the fencing and f) Recommendations for replacement of dead plants and implementation of these recommendations (remediation work). Any recommended remediation work must include a start date for replanting. The first measure of the survival rate of plants must not be measured any sooner than 12 months following planting. ***Advice Note:*** *This condition requires monitoring reports to be submitted for a minimum of 5 years following planting. This condition will be deemed satisfied upon a*		

	satisfactory final inspection after the maintenance period and subsequent bond release.		
X8.	**CONSENT NOTICES** The consent holder must register with the Registrar-General of Land a consent notice under Section 221 of the RMA, against the computer registers (certificates of title) for lots Lots 358 and 1113-1127. The consent notice/s must record that condition/s 83, 84 and 85 are to be complied with on a continuing basis. a. Any retaining wall(s) and ancillary and supporting structures must be entirely located within the residential lots and JOALs and must be clear of the boundary of the reserve(s) (Lots 358 and 1113-1127). The retaining walls must be no higher than; b) 1m above existing ground level adjacent to Lot 5020. c) 1.5m above existing ground level adjacent to Lot 1800. b. Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of neighbourhood park(s) (Lots 1800 and 5020) must be low height (1.2m) and at least 50% visually permeable.	This condition has been partially accepted and included within the updated condition set (section 3.3.2 and 3.4.2).	Provides ongoing legal mechanism to secure interface and boundary treatment obligations into future. The applicants consent notices do not go into specific height or treatment details. Specific lot references are preferred to maintain consistency. No information has been provided regarding gradients or the treatment of retaining walls adjacent to the drainage reserves. This condition may need to be updated if more detailed plans, beyond the current high-level depictions, are submitted.

	c. Any fencing, hedging or planting along boundaries or within 2 metres of boundaries of any drainage reserves (Lots 1600–1602, 1604–1609, 1616, 1620–1624, 1627–1629) must be either low height (1.2m) or at least 50% visually permeable (max height 1.8m). If located above a retaining wall, a maximum 1.2m fence with 50% visual permeability must be provided. Landscape planting may be implemented on the private lot and must be maintained to ensure 50% visual permeability.		
	Advice Notes		
	LANDOWNER APPROVALS *All works in Reserves will require Landowner Approval prior to any works being undertaken. Approval requests can be sent to landadvisors@aucklandcouncil.govt.nz*		Standard Parks Planning advice note for works on assets that have already vested to Council or on Council owned land.
	TREE ASSET OWNER APPROVALS *Any tree removals or works affecting vegetation on Reserve land or existing street trees will require Tree Asset Owner Approval from the Community Facilities Urban Forest Specialist Team. Approval requests can be sent to treemanager@aucklandcouncil.govt.nz.*		Standard Parks Planning advice note for works on assets that have already vested to Council.

Delmore Fast-Track

04/05/2026 – Auckland Council Response

Annexure 30:

Rodney Local Board

Local Board Feedback Template – Fast-track Approvals Act 2024

Project Name:
Delmore Fast Track Development

Location:
88,

130 and 132 Upper Orewa Road and 53A, 53B and 55 Russell Road, Ōrewa
Date:
8 April 2026

Prepared by:
Guy Wishart and Ivan Wagstaff

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1. Context – About Fast-track Applications

The Fast-track Approvals Act 2024 (FTAA) provides a streamlined consenting process for projects deemed to have significant regional or national benefit. Decisions are made by an appointed **Expert Panel**, with no public notification and limited avenues for appeal.

It is important to note:

- The Local Board does **not have a formal decision-making role**, but can provide **local insights** on community impacts, transport, open space, mana whenua engagement, and infrastructure alignment.
- There is **no requirement for applicants to respond to Local Board feedback**, but it can be considered by the Expert Panel.

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2. Local Board Feedback

Rodney Local Board and Auckland Council Perspective

Delmore Fast-Track Development

The Rodney Local Board acknowledges the need to increase housing supply across Auckland; however, the proposed Delmore fast-track development raises significant concerns regarding sequencing, infrastructure capacity, environmental risk, and long-term financial liability for Auckland Council and ratepayers.

The proposal seeks approval for a large-scale greenfield development of approximately **109 hectares, delivering up to 1,213 dwellings, commercial areas, transport infrastructure, and on-site wastewater and water systems**. While the scale of development may contribute to housing supply, it is inconsistent with planned growth sequencing under the Auckland Future Development Strategy, which identifies this area for development significantly later. Advancing development ahead of planned infrastructure risks placing pressure on already constrained transport, water, and community services.

Transport capacity remains a primary concern. The Hibiscus Coast corridor and State Highway 1 between Orewa and Albany already experience significant congestion, and existing park-and-ride facilities are at or near capacity. Although the proposal includes delivery of part of the NoR6 arterial route, there is no committed funding for wider network completion, and public transport infrastructure, including rapid transit extension to Milldale, remains unfunded. Without these strategic investments, development may worsen congestion and reduce accessibility for existing communities.

Infrastructure servicing also presents risks. The proposal relies on **on-site water supply and wastewater treatment due to limited network capacity**, with future connection contingent on upgrades. The Rodney Local Board considers that reliance on interim servicing solutions creates environmental uncertainty and may transfer future upgrade costs or risks to council. Development should instead align with confirmed Watercare and infrastructure investment timelines.

The Local Board remains particularly concerned about natural hazard exposure. The site contains **flood plains, overland flow paths, wetlands, and areas of land instability**, which increase the potential for adverse effects during extreme weather events. Recent Auckland storm events have demonstrated the long-term financial and social consequences when development proceeds in high-risk areas. Council must avoid creating future liabilities associated with property buyouts, infrastructure damage, or emergency response costs.

Environmental impacts also require careful consideration. The site includes networks of streams, wetlands, and areas of native vegetation, and large-scale earthworks and hydrological changes may affect downstream receiving environments, including the Orewa River catchment. While mitigation is proposed, the Rodney Local Board supports a precautionary approach, robust monitoring, and strong consent conditions to protect ecological and freshwater values.

If the development proceeds, the Rodney Local Board requests that:

- Full development contributions and targeted levies are applied to fund transport, community facilities, and infrastructure upgrades;
- Land for neighbourhood parks and open space is transferred to council at no cost;
- Interim public transport solutions are funded by the developer;
- Council bears no liability for future natural hazard impacts;
- Robust environmental monitoring and mitigation measures are implemented; and

- Development staging aligns with infrastructure delivery.

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3. Conclusion

In summary, the Rodney Local Board supports well-planned growth but considers that the Delmore fast-track proposal is premature. Advancing development ahead of infrastructure and outside strategic planning frameworks risks adverse transport, environmental, and financial outcomes. A coordinated, infrastructure-led approach remains essential to ensure sustainable growth for Rodney and the wider Auckland region.

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4. Contact for Further Information

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ivan.wagstaff@aucklandcouncil.govt.nz