1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Auckland Surf Park – Stage 2
Fast-Track application number:	EPA reference: FTAA-2606-1246 Council reference: BUN60467823

2.0 TECHNICAL SPECIALIST MEMO – HEALTHY WATERS & FLOOD RESILIENCE

To:	Brooke Dales – Lead Planner Warwick Pascoe – Principal Project Lead
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 more than 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:	07 October 2026

3.0 DOCUMENTS REVIEWED

The following documents have been reviewed in preparing this memorandum:

- *Auckland Surf Park Community - Stage 2, Assessment of Environmental Effects and Statutory Analysis*, dated 8 June 2026, and prepared by Barker & Associates
- Appendix 8.1: *Rules Assessment*, prepared by Barker & Associates
- Appendix 8.2: *Rules Assessment – PC120*, prepared by Barker & Associates
- Appendix 9: *Auckland Surf Park Community Masterplan, Substantive Fast Track Application Design Report* (Part A – Part B), dated 5 June 2026, and prepared by Studio Pacific Architecture
- Appendix 9: *Auckland Surf Park Community Masterplan, Substantive Fast Track Application Pack, Masterplan Drawing Set* (Part A), dated 5 June 2026, and prepared by Studio Pacific Architecture
- Appendix 26: *Auckland Surf Park, Engineering Drawings, Resource Consent* (Part 1 and Part 2), dated April 2026, and prepared by McKenzie & Co
- Appendix 27: *Stage Scheme Plans* (Revision D), dated February 2026, and prepared by McKenzie & Co
- Appendix 28: *Unit Title Plans*, prepared by McKenzie & Co
- Appendix 29: *Engineering Infrastructure Report, Auckland Surf Park Community, Stage 2 Development* (Revision F), dated 8 June 2026, and prepared by McKenzie & Co
- Appendix 31: *Stomrwater Management Plan, Auckland Surf Park Community* (Revision H), dated 9 June 2026, and prepared by McKenzie & Co
- Appendix 32: *Technical Memo, Subject: Secondary Flows Assessment for Auckland Surf Park Community*, dated 9 June 2026, and prepared by McKenzie & Co
- Appendix 33: *Auckland Surf Park Community Stage 2 – Flood assessment*, dated 4 June 2026, and prepared by Woods
- Appendix 44: *Auckland Surf Park Community – Stage 2 Development, Ecological Impact Assessment* (Version 2), dated 2 June 2026, and prepared by Viridis Environmental Consultants
- Appendix 59: Auckland Surf Park Community, Revised Recommended Resource Consent Conditions, dated 25 June 2024, and prepared by Barker & Associates
- Appendix 60: *Auckland Surf Park Community, Stage 1 - s.127 Amended Resource Consent Conditions*, dated 5 June 2026, and prepared by Barker & Associates
- Appendix 61: *Auckland Surf Park Community, Stage 2 - Draft Resource Consent Conditions*, dated 5 June 2026, and prepared by Barker & Associates
- Appendix 62: *Auckland Surf Park Community, Subdivision Draft Resource Consent Conditions*, dated 5 June 2026, and prepared by Barker & Associates
- Appendix 63: *Auckland Surf Park Community, Unit Title Subdivision Draft Resource Consent Conditions*, dated 24 February 2026, and prepared by Barker & Associates

4.0 REASONS FOR CONSENT

The Applicant's Agent has identified the following reasons for consent under Chapter E8 of the AUP:

- E8.4.1(A10) - The proposal involves the discharge of stormwater runoff from impervious areas within the project area not otherwise provided for by Table E8.4.1. This is a discretionary activity.

Healthy Waters & Flood Resilience (HWFR) holds a Regionwide Network Discharge consent (RWNDC) which authorises the diversion into and discharge from public stormwater networks within the Auckland Region. The RWNDC is only applicable to urban zoned land and as the underlying zoning of the development site is Future Urban the proposed development cannot be authorised by the RWNDC.

A Stormwater Management Plan (SMP) for the development has been prepared and submitted as part of the Fast-Track application. This has been reviewed in the context of explaining the proposed stormwater management for the development, but has not been reviewed in the context of adoption under Schedule

4 of the RWNDC.

Private diversion and discharge consents are sought and have been applied for as listed above.

5.0 SPECIALIST ASSESSMENT

The Applicant has applied for consents to enable Stage 2 of the Auckland Surf Park Community development, comprising a hyperscale artificial intelligence data centre campus, an integrated residential development of approximately 486 dwellings, visitor accommodation, a village centre, live-work activities, wastewater and water servicing infrastructure, staged and unit title subdivision, and associated stormwater management, landscaping, roading and infrastructure works.

Existing Environment

The existing site is rural and within the Dairy Flat stormwater catchment. It is not currently serviced by any stormwater management or public stormwater networks. The site contains several tributaries of the Rangitoopuni Stream, associated drainage channels, floodplains, overland flow paths and flood-prone areas that form key components of the site's hydrological network. Flood hazards are a significant feature of the existing site and surrounding area (Figure 1).

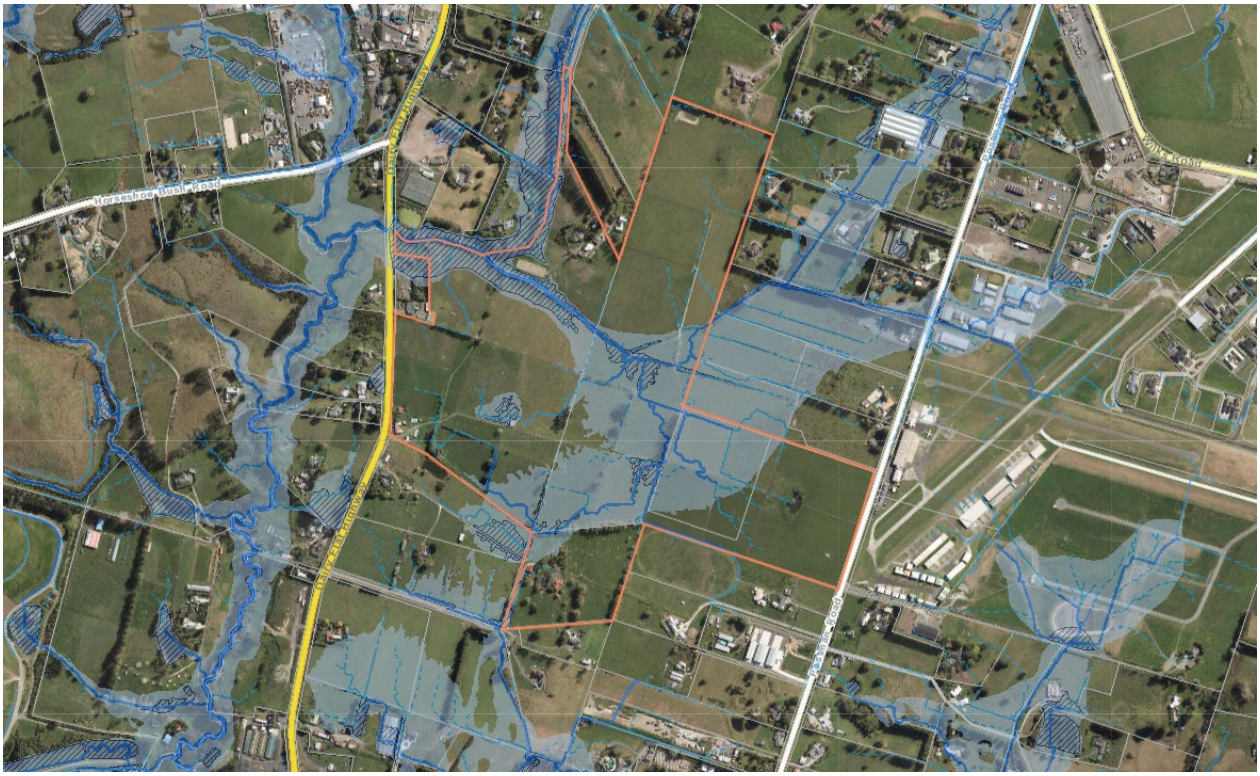


Figure 1. Existing Flood Hazards at 1350 Dairy Flat Highway (Auckland Council GeoMaps, extracted September 2026)

Engagement with the Applicant

HWFR has reviewed the Applicant's stormwater modelling and identified matters requiring further clarification and justification, which have been passed on to the Applicant's Engineers for consideration. These matters are discussed in more detail in the following sections and relate to key modelling assumptions, the representation of proposed private stormwater infrastructure within the model, and the extent to which the modelled attenuation performance of the private stormwater infrastructure can be relied on.

HWFR have not met with the Applicant's agents to discuss the preliminary feedback on the model that has been provided.

A site visit has not been undertaken by any representatives from HWFR. HWFR specialists, in particular the Catchment Manager, are familiar with the wider area.

Proposed Mitigation and Assessment of Effects

As the stormwater management proposed to service the development is largely intended to remain private (except for where it services the proposed public Collector Road) and it is not proposed that the development is authorised by HWFR RWNDC, from a technical stormwater perspective HWFR scope is limited to catchment wide impacts and assessment of proposed public stormwater assets servicing the Collector Road.

Flood Risk

The site is subject to existing floodplains, flood prone areas, and overland flow paths that convey runoff through the development site toward Dairy Flat Highway. The proposed development includes floodplain recontouring, increased flood storage, formalised overland flow paths, new conveyance channels, and culverts and bridge infrastructure intended to maintain flood conveyance and manage secondary flow paths. The Applicant's Engineer concludes that the proposed works will not increase flood levels or flood risk beyond the site and that flood storage and conveyance capacity will be maintained or improved.

Further clarification in respect of the flood modelling undertaken by the Applicant's Engineer has been sought by HWFR to demonstrate that the proposed flood attenuation and storage mitigation measures are adequate to ensure the flood risk will not increase beyond the site. Until these matters are addressed, HWFR cannot in a technical capacity confirm that the Project can deliver the stormwater outcomes relied on in the assessment of effects.

Collector Road

The proposed development includes a number of stormwater management assets associated with the Collector Road (Road 1), including a raingarden (RG3), a wetland (Wetland 4), swales, culverts, and associated drainage infrastructure proposed to be vested in Council as public assets. These assets are intended to manage runoff, maintain existing drainage functions, and provide stormwater treatment and attenuation. The Applicant's Agents conclude that the proposed infrastructure will adequately manage stormwater and flooding effects associated with the development. However, further clarification has been sought by HWFR regarding the purpose, operation, and performance of the proposed assets, including the role of the Collector Road culverts, the interaction between public and private infrastructure, and the arrangements for long-term ownership, operation, and maintenance. Until these matters are addressed, HWFR cannot in a technical capacity confirm that the proposed public stormwater infrastructure meets Council standards and will achieve the stormwater outcomes relied upon in the assessment of effects.

Minute 2

HWFR have been directed to provide advice to support Council's response to Minute 2 from the Panel. In particular the response to Item 17(c):

> ***17(c) – Does Auckland Council consider this private infrastructure adequate to support the Project?***

In response to 17(c), we direct the Panel to consider previous commentary from the '*Responding to*

unanticipated development report' to the to the Policy, Planning and Development Committee on the 8th September 2026.

Long-term Infrastructure Performance Position

Private Stormwater Network

Auckland Council acknowledges that the Fast-track approvals process enables consideration of development proposals that may not align with the timing, scale or location anticipated through Auckland's existing growth and infrastructure planning frameworks.

Council notes that privately owned infrastructure can facilitate development without immediate reliance on public investment. However, privately operated infrastructure may also create long-term risks relating to asset performance, environmental outcomes, service continuity, governance arrangements and future funding responsibilities. Council's concern is that if such arrangements fail over time, pressure may ultimately fall on public authorities and ratepayers to intervene.

Accordingly, if the Panel is minded to approve the proposal, Council submits that conditions should ensure:

- *The stormwater network remains privately owned, operated, maintained and renewed by the developer, body corporate, infrastructure company, residents' association or other legally constituted entity in perpetuity.*
- *Legally enforceable mechanisms are established to secure funding for ongoing operation, maintenance, monitoring, renewal and replacement of the stormwater assets.*
- *Responsibility for compliance with all stormwater discharge, water quality and flood management requirements remains with the private network operator.*
- *Appropriate asset management plans, governance arrangements and performance monitoring requirements are established and maintained.*
- *No expectation is created that Auckland Council will assume ownership, maintenance, operational responsibility or financial liability for the private stormwater infrastructure in the future.*
- *Any future vesting or transfer of assets to Council can only occur at Council's discretion and subject to compliance with all relevant standards and Council requirements current at that time.*

Council considers these safeguards necessary to ensure that the long-term risks, costs and obligations associated with servicing the development remain with the beneficiary of the development and do not transfer to Auckland ratepayers over time. This is particularly important where development is proceeding outside the infrastructure assumptions on which Council's existing planning and investment programmes have been based.

Council does not oppose the use of a private stormwater network in principle. However, Council submits that any approval should be contingent upon robust, legally enforceable arrangements that permanently allocate ownership, operational responsibilities, renewal obligations and associated financial risks to the private network operator, with no obligation on Auckland Council to assume those responsibilities in the future.

HWFR acknowledges that the proposed conditions of consent appear to provide a framework for securing the private ownership and operation of the stormwater network. However, further amendments or additional conditions may be required to fully address the long-term ownership, operation, maintenance, renewal, replacement, compliance, and performance liability matters identified in Council's response to

Minute 2.

6.0 SECTION 67 INFORMATION GAP

At the time of writing this Memo we have identified the following information gaps:

S67 Matters

Flooding

HWFR have reviewed the provided flood modelling and have the following comments, noting that clarifications on these matters, including any changes to the model, will require the Applicant to review the provided flood effects assessment and update the document content and conclusions as necessary. We understand that these comments have been provided to the Applicant's agent:

1. The reported increase in peak runoff of approximately 2.65m³/s appears very low relative to scale and nature of the proposed development, including the extent of proposed new impervious areas. The Applicant must provide supporting information that demonstrates this increase in peak runoff is an accurate representation of the proposed development and update the modelling parameters as necessary.
2. The model assumes a Hydrologic Soil Group (HSG) C soils (CN=74) for pervious areas, whereas the available soil mapping and Council's regional modelling indicate HSG B soils may be more representative. Assuming that underlying soils are HSG C may overestimate pre-development runoff and underestimate the relative increase in stormwater runoff following development. HWFR recommends that sensitivity testing is carried out using HSG B soils (CN=61). This will provide a better understanding of the scale of effects from the proposed development and how the assumed soil conditions influence the modelled peak flows and runoff volumes.
3. The wave pool appears to provide significant flood storage within the post-development model through progressive filling during storm events. The Applicant needs to provide justification for this approach as this appears to be reducing the simulated post-development peak flows and runoff volumes. HWFR recommends the modelling of the wave pool is reconsidered including pre-filling of the permanent water level, or otherwise representing the wave pool and any associated permanent water levels within the terrain model.
4. The post-development model indicates ponding depths of up to approximately 0.9 m within parts of the proposed solar panel area. The applicant must confirm whether the overall post-development attenuation performance relies on this storage and provide further discussion on:
    a. The compatibility of these flood depths with the proposed solar infrastructure; and
    b. The mechanisms that will ensure the proposed attenuation performance will be retained and maintained over the long term.

Until these matters are addressed, HWFR cannot in a technical capacity confirm that the proposed private stormwater infrastructure can deliver the stormwater outcomes relied on in the assessment of effects.

Proposed Public Assets

The Applicant should confirm what land and assets are proposed to be vested in Auckland Council. There are currently inconsistencies across the provided documents. For example, the Infrastructure Report

proposes that in addition to Road 1 (Collector Road), Road 2 (Spine Road) will also be vested as a public asset, however the proposed scheme plans do not show Road 2 as a 'road to vest'. This information is important to clarify to ensure there is no ambiguity on the vesting of public land and assets in Council.

In preparing this memo, HWFR have considered the stormwater assets located within and servicing the Collector Road to be the only assets proposed to be vested in Council.

Collector Road Stormwater Management

The Application documents indicate that the stormwater assets serving the Collector Road are intended to be vested in Council as public assets. However, the following remains unclear:

- How Wetland 4 and RG 3 were determined as Best Practicable Options (BPOs), in particular why 2 devices are required and how a wetland was considered fit for purpose given the catchment area does not meet the minimum GD01 requirements, both of which carry a risk of elevated operation and maintenance costs to Council;
- How the stormwater system performs under blocked conditions for the three culverts and whether this will result in elevated flood hazard risk to public road users or neighbouring properties;
- Whether sufficient land has been set aside to enable access for Operation and Maintenance (O&M) to the public stormwater assets and accommodate the necessary O&M activities without incurring unreasonable traffic management and establishment costs; and
- How the wetland, swales, culverts, and supplementary storage operate together to achieve the necessary stormwater management outcomes.

Clarification on the matters outlined above is needed to determine whether the assets proposed to be vested in Council can achieve the necessary stormwater management performance outcomes and can accommodate the ongoing O&M activities without incurring unreasonable costs to Council.

7.0 RECOMMENDATION

Overall, HWFR does not currently have sufficient information to verify the flood modelling assumptions, confirm the performance of the proposed flood mitigation measures, or assess the appropriateness and long-term operation and maintenance requirements of the proposed public stormwater assets.

HWFR is currently unable to conclude whether the proposed flood management and proposed public stormwater infrastructure will achieve the stormwater management performance outcomes outlined in the application. Further information is required to address the matters identified under section 67 before further assessment can be made.

8.0 PROPOSED CONDITIONS

HWFR have reviewed the proposed conditions of consent and only provide comments on conditions relevant to its area of expertise.

At the time of writing conditions associated with a private diversion and discharge consent do not appear to have been put forward by the Applicant's Agent. HWFR seek the opportunity to review any further conditions that are put forward by the Applicant's Agent or recommended by other specialists that relate to the proposed public stormwater management devices.

Conditions relating to the management of private stormwater assets only have not been commented on in detail and we understand will be addressed as part of the Regulatory Stormwater Specialists assessment.

HWFR may provide further recommendations on the proposed conditions of consent following resolution of the matters identified under section 67.

Existing Stage 1 Consent

Appendix 59 includes existing conditions of consent pertaining to Stage 1 of the wider development (BUN60429155). Appendix 60 includes proposed changes to these conditions. From a HWFR perspective, in relation to stormwater the proposed changes are largely administrative in nature, including updates to report and plan references, and do not materially alter the approved stormwater management framework or stormwater-related conditions. As the existing Stage 1 authorisations for the diversion and discharge of stormwater remain in place, HWFR provides no further comments on the proposed Stage 1 condition amendments.

Stage 0, Stage 5, and Stage 5A

Stages involving roads that are intended to be vested in Council include Stages 0, 5, and 5A. The proposed conditions for these stages include engineering approval, streetscape, maintenance, and bond requirements. HWFR recommended the following conditions and advices notes relating to the maintenance of public stormwater devices are added to these stages.

Maintenance of public stormwater devices

X1. Prior to Engineering Plan Approval, the consent holder must provide to the Council for certification, an Operation and Maintenance Plan (OMP) for all public stormwater management devices, including but not limited to raingardens, wetlands, swales, culverts, and outlet structures. The OMP must identify the inspection, maintenance, monitoring, and asset management requirements necessary to ensure the ongoing performance and functionality of the devices.

Advice Note:

- *The certification required by this condition shall be undertaken by the relevant Council asset owner.*

X2. The consent holder must maintain the public stormwater devices until either 80% of the lots within the subdivision discharging to the device have been developed, or for a period of five (5) years from the date of issue of the final certificate pursuant to section 224(c) of the RMA, whichever occurs first. The consent holder must maintain the devices in accordance with the Operation and Maintenance Plan certified by the Council under [Condition X.1].

X3. Any deficiencies identified by the Council during the maintenance period, including the asset damage, sediment accumulation, litter or debris accumulation, and deficient planting, that prevent device from operating in accordance with its approved design and function must be remedied by the consent holder at its expense.

Advice Notes:

- *A bond will be required at the time of the application for certificate pursuant to section 224(c) of the RMA to secure compliance with this condition. The bond amount shall be certified by the relevant Council asset owner.*

- *All proposed stormwater wetlands and raingardens shall be fitted with a gross pollutant trap. Maintenance access to all stormwater wetlands, raingardens, and associated structures shall be designed and constructed in accordance with SWCoP and GD01, to the satisfaction of the relevant Council asset owner.*

Stage 2 – Stage 7

As the majority of stormwater management that services the development is proposed to be owned and operated privately in perpetuity HWFR has limited comments on the proposed conditions of consent relating to Stage 2 to Stage 7.

General Subdivision Conditions

Utility Company

6. Evidence that a Utility Company has been legally established must be provided to Council for certification. The Utility Company will be responsible for the provision, operation and maintenance of private wastewater, stormwater and water supply infrastructure serving the Auckland Surf Park Community development.

   The Utility Company must retain ownership and responsibility for the private infrastructure assets serving the development and must not be wound up or dissolved unless alternative arrangements for the ongoing provision, operation and maintenance of wastewater, stormwater and water supply services are secured to the satisfaction of Auckland Council.

   The evidence provided must include a copy of the Utility Company's constitution, which must include the following requirements:

. . .

(b) Stormwater - The constitution must state that the Utility Company must:

(i) Make stormwater management and disposal available to all relevant lots within the Auckland Surf Park Community development on an equitable and non-discriminatory basis;

(ii) Manage and implement the staged development of the stormwater management devices, including the stormwater wetlands (private drainage lots);

(iii) Operate and maintain the stormwater wetlands to comply with the discharge requirements of the relevant resource consents [insert LUC/DIS Ref. Nos.]; and

(iv) Ensure that any necessary future consents, renewals, or alternative lawful stormwater management arrangements are in place prior to the expiry of the relevant resource consents.

Condition 6: Supported.

Land Covenants

7. The consent holder must provide a draft land covenant documents to the Council's Legal Team for review. The draft covenant documents must include provision for that:

(a) Specifies ownership, operation, and maintenance of any private water, stormwater and wastewater systems;

(b) Specify responsibility for, and methods for the management of, those private systems; and

(c) Require the operation and maintenance of any private water, stormwater and wastewater systems to be generally in accordance with the relevant Operation and Maintenance Manuals to be provided to Council and any other relevant resource consents.

Condition 7: Supported

Other Subdivision Conditions

As noted, the proposed subdivision is to be implemented in a number of stages, with each stage subject to a suite of similar conditions relating to engineering requirements, easements, legal mechanisms, shared asset ownership and maintenance, certification, and the provision of infrastructure, which apart from matters previously discussed within this memo above are generally supported.

As outlined within the response to Minute 2 further amendments or additional conditions may be required to fully address the long-term ownership, operation, maintenance, renewal, replacement, compliance, and performance liability matters associated with private stormwater management devices. HWFR has not proposed specific conditions to address these matters, as they relate primarily to the long-term ownership, governance, and funding arrangements for private infrastructure. However, should the Panel consider such mechanisms necessary, HWFR could provide further input on potential condition wording.