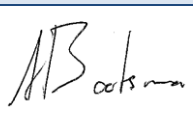
1.0 APPLICATION DESCRIPTION

Application and property details

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

2.0 Technical Specialist Memo – Earthworks & Erosion and Sediment Control

To:	Brooke Dales, Consultant Planner Warwick Pascoe – Principal Project Lead
From:	Antoinette Bootsma (Senior Freshwater Specialist, Earth, Streams & Trees Team, Auckland Council)
Qualifications & Relevant Experience:	I hold the qualification of: Master of Science in Environmental Science and have 19 years of experience in freshwater ecological assessments. 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.
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:	30/09/2026

3.0 Executive Summary

AW Holdings 2021 Limited is seeking approval for the substantive Stage 2 application for the Auckland Surf Park project under the Fast-Track Approvals Act 2024 (FTAA).

The Stage 2 application comprises:

- **Section 127 variations** to parts of the existing Stage 1 resource consent, to amend the previously consented surf park and ancillary activities, visitor accommodation, data centre, solar farm, and associated civil, infrastructure, landscaping and ecological restoration works; and
- **A new Stage 2 resource consent** to authorise expansion of the project to include a hyperscale artificial intelligence data centre campus, three residential neighbourhoods, a village centre, live/work areas, Stage 5A Vacant Lot Subdivision, a solar farm extension, and associated civil, infrastructure, landscaping and ecological restoration.

No additional in-stream works are proposed as part of Stage 2 beyond those already consented under the Stage 1 consent, which includes the diversion of the upper reach of the central stream and a single culverted road crossing. Effects to the aquatic environment relevant to the Stage 2 application are limited to reclamation of a farm pond, construction of pedestrian bridges and construction of a stormwater outfall in proximity to the stream. To manage the potential effects on the freshwater environment, the applicant has provided an Ecological Impact Assessment and supporting engineering drawings.

The assessment concludes that, provided the works are undertaken in accordance with the application documents, which specifically note that no works within the bed and banks of the stream will occur under this consent, and related conditions of consent, that the potential effects associated with the works will be appropriately managed. I agree with this assessment.

4.0 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.* Prepared for AW Holdings 2021 Ltd. 8 June 2026. Prepared by Barker & Associates Limited (AEE)
- *Auckland Surf Park Community - Stage 2 Development – Ecological Impact Assessment.* Prepared for AW Holdings 2021 Ltd. June 2026. Prepared by Viridis Limited. (EcIA)
- *Civil Drawings, Stormwater Plan Sheet 8. Drawing No: 3325-2-4009, Rev: B (13/01/2026).* Prepared by McKenzie & Co Limited. (Plans)
- *Civil Drawings, Stormwater Plan Sheet 9. Drawing No: 3325-2-4010, Rev: B (13/01/2026).* Prepared by McKenzie & Co Limited. (Plans)

- *Civil Drawings, Stormwater Plan Sheet 10. Drawing No: 3325-2-4011, Rev: B (13/01/2026).* Prepared by McKenzie & Co Limited. (Plans)
- *Civil Drawings, Stormwater Plan Sheet 11. Drawing No: 3325-2-4012, Rev: B (13/01/2026).* Prepared by McKenzie & Co Limited. (Plans)

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

The applicant has identified reasons for consent relating to the pedestrian bridge and reclamation of a farm pond (which meets the definition of a lake under the RMA) under chapter E3 of the Auckland Unitary Plan (AUP). I agree with these reasons for consent.

I note that a stormwater outlet from constructed Wetland 2 is shown on Stormwater Plans drawings *3325-2-4011, Rev: B* and *3325-2-40112 Rev: B* to be located in close proximity to the center line of the stream. However, the EcIA and AEE specifically note that no works within the stream are applied for under this consent. No reason for consent for a stormwater outfall in the bed of a stream is listed and I therefore assume that this stormwater outfall will be located outside the wetted habitat associated with the stream.

6.0 Specialist Assessment

The potential environmental effects of the proposed stream works and lake works are limited to reclamation of a farm pond and construction of a pedestrian bridge. As noted above, my assessment assumes that stormwater outfalls from the constructed wetlands will not extend into the bed and banks of the stream.

6.1 Pedestrian Bridge

Based on drawing '*Stormwater Plan Sheet 10. Drawing No: 3325-2-4011, Rev: B (13/01/2026),* together with the proposed consent condition 243 which requires design certification of the Pedestrian Bridge I confirm that permitted activity standards E3.6.1.16 will be met and no effects to the stream will result.

6.2 Reclamation of the farm pond

The EcIA describes the farm pond located in the corner of a paddock at the eastern end of 1320 Dairy Flat as potentially containing pollution-tolerant fish such as native shortfin eel and pest species gambusia. The EcIA recommends that fish capture and relocation be undertaken and I note that draft conditions include a requirement for a Native Freshwater Habitat Assessment to be undertaken at least 10 days prior to reclamation of the pond. The aim of the Native Freshwater Habitat Assessment is to confirm if fish occur in the pond, in which case a Native Freshwater Fish Relocation Plan will be presented to Council for certification. I agree that implementation of these measures will ensure that no effects on freshwater fauna will result from the activity.

6.3 – Conclusion

Noting that no works associated with stormwater outfalls will occur within the stream bed and banks under this consent, I am in agreement with the AEE and EcIA that effects on freshwater ecology will be adequately addressed and no residual adverse effects will result from Stage 2 works.

7.0 Section 67 Information Gap

Regarding the proposed works as they relate to freshwater ecology, I have identified that there are no section 67 information gaps.

8.0 Recommendation

Based on the information available regarding the proposal's works in proximity to the stream, and reclamation of the farm pond, including implementation of a Native Freshwater Habitat Assessment and potential Native Freshwater Fish Relocation Plan, I support the application.

9.0 Proposed Conditions

Table 1 below contains the stream and lake works related conditions proposed by the applicant. I have followed the numbering of Draft Conditions as presented in the Auckland Surf Park Community - Stage 2 - Draft Resource Consent Conditions.

Table 1 – Applicants Proposed Consent Conditions.

Condition	Proposed Conditions	Comment or suggestion
1	The Consent Holder must undertake the works in general accordance with the application formally received by the Environmental Protection Authority on [*insert date*], and the following documents: (a) Application form and Statutory Analysis and Assessment of Environmental Effects prepared by Barker & Associates Ltd titled "Auckland Surf Park Community - Stage 2	I agree with this condition.

	and s.127 for Stage 1" and dated [*insert date*]; (b) The reports listed at Attachment 1; and (c) The drawings and plans listed at Attachment 2.	
224	**Native Freshwater Habitat Assessment** At least ten (10) working days prior to commencing reclamation of the farm pond located at the eastern end of 1320 Dairy Flat Highway, the Consent Holder must submit a 'Native Freshwater Habitat Assessment' that has been prepared by a suitably qualified and experienced freshwater ecologist. The purpose of the Native Freshwater Habitat Assessment is to determine the requirement for a Native Freshwater Fish Relocation Plan (Condition (225)).	I recommend the following amendment: At least ten (10) working days prior to commencing reclamation of the farm pond located at the eastern end of 1320 Dairy Flat Highway, the Consent Holder must submit a 'Native Freshwater Habitat Assessment' that has been prepared by a suitably qualified and experienced freshwater ecologist. The purpose of the Native Freshwater Habitat Assessment is to determine the requirement for a Native Freshwater Fish Relocation Plan (Condition (225)). <u>The Native Freshwater Habitat Assessment must provide written confirmation and site photos detailing the presence of aquatic fauna to the Consent Authority for certification. Earthworks or reclamation must not commence until the Consent Authority has provided certification on the requirement for a Native Freshwater Fish Relocation Plan.</u>
225	If the Native Freshwater Habitat Assessment required by Condition (224) concludes that there is habitat present capable of supporting native fish, the Consent Holder must submit a 'Native Freshwater Fish Relocation Plan' to the Consent Authority for certification. The purpose of the Native Fish Capture and Relocation Plan is to ensure fish will be appropriately removed prior to commencement of works from the on-site	I recommend the following amendment: If the Native Freshwater Habitat Assessment required by Condition (224) concludes that there is habitat present capable of supporting native fish, the Consent Holder must submit a 'Native Freshwater Fish Relocation Plan' to the Consent Authority for certification. The purpose of the Native Fish Capture and Relocation Plan is to ensure fish will be appropriately removed prior to

	freshwater features subject to works, to avoid fish mortality. The Native Freshwater Fish Relocation Plan must be prepared by a suitably qualified and experienced freshwater ecologist, and must include the following detail: (a) The timing, duration and methodologies used for fish capture and transportation (b) Specific measures for ensuring fish elsewhere in the catchment do not enter the works area; (c) A description and assessment of the quantum and availability of suitable aquatic quality habitat at the relocation site; (d) Storage and transport measures including prevention of predation and death during capture; (e) Euthanasia methods for diseased or pest species; and (f) The names, experience, and qualifications (including any necessary permits) of those involved in undertaking the fish relocations.	commencement of works from the on-site freshwater features subject to works, to avoid fish mortality. The Native Freshwater Fish Relocation Plan must be prepared by a suitably qualified and experienced freshwater ecologist, and must include the following detail: (a) The timing, duration and methodologies used for fish capture and transportation (b) Specific measures for ensuring fish elsewhere in the catchment do not enter the works area; (c) A description and assessment of the quantum and availability of suitable aquatic quality habitat at the relocation site; (d) Storage and transport measures including prevention of predation and death during capture; (e) Euthanasia methods for diseased or pest species; ~~and~~ (f) The names, experience, and qualifications (including any necessary permits) of those involved in undertaking the fish relocations~~.~~; and (g) 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: i. Immediately cease reclamation (including dewatering) upon

		accidental discovery of any unexpected aquatic fauna and notify the Council. ii. Ensure aquatic fauna are left in a suitable environment where they will be unharmed while the NFCRP is updated. iii. Update the NFCRP to address handling and relocation of the unexpected aquatic fauna to be submitted to Council for re-certification. iv. Only re-commence the capture and relocation upon re-certification of the NFCRP.
226	**Fish Relocation** Prior to the reclamation of the farm pond located at the eastern end of 1320 Dairy Flat Highway, a suitably qualified and experienced freshwater ecologist must be appointed to implement the Native Freshwater Fish Relocation Plan if required under Condition (225). The Native Freshwater Fish Relocation Plan must be implemented prior to any reclamation commencing, and the appointed ecologist must be on site during the reclamation to rescue and relocate any native fish present.	I agree with this condition
227	If a Fish Relocation is required under Condition (226), the Consent Holder must provide a Fish Salvage Report detailing the relocation site, the species and number of freshwater fauna relocated prior to and during reclamation, to the Consent Authority within 5 days of completion of the native fish capture and relocation. These results must be uploaded into NIWA's New Zealand	I agree with this condition

	Native Freshwater Fish database.	
243	**Pedestrian Bridges - Detailed Design Certification** Prior to the commencement of any construction works associated with the pedestrian bridge(s), the consent holder must submit to the Council for certification, detailed design drawings and supporting documentation for the pedestrian bridge(s). The detailed design must: (a) Be prepared and certified by a Chartered Professional Engineer (CPEng) in accordance with relevant current New Zealand standards and industry best practice, including; (b) Demonstrate that the pedestrian bridge is structurally adequate for all anticipated loads, including pedestrian, wind, seismic, and any maintenance or service loads; (c) Include all relevant details such as foundations, substructure, superstructure, connections, materials, durability measures, and safety features including handrails and slip resistance; (d) Include details of any erosion or scour protection works, which must be limited to a maximum of 5 metres in length upstream and 5 metres in length downstream of the bridge; (e) Demonstrate that any in-stream bed disturbance associated with construction activities must not exceed 10 metres upstream and 10 metres downstream of the	I agree with this condition

	bridge, excluding the footprint of the bridge structure; (f) Demonstrate that the design and location of the bridge will not result in more than minor bed erosion, scouring, or undercutting immediately upstream or downstream of the bridge; and (g) Address constructability and any temporary works required to safely construct the bridge. Construction of the pedestrian bridge(s) must not commence until the Council has provided written certification that the detailed design meets the requirements of this condition.	