Beachlands South Fast-track

Auckland Council Specialist Memo

Annexure P:

Healthy Waters and Flood Resilience

Hillary Johnston

20 October 2026

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name:	Beachlands South
Fast-Track application number:	EPA reference: FTAA-2606-1256 Council reference: BUN60467962

2.0 TECHNICAL SPECIALIST MEMO – HEALTHY WATERS & FLOOD RESILIENCE

To:	Brooke Dales – Lead Planner Adonica Giborees – 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 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:	20 October 2026

3.0 DOCUMENTS REVIEWED

This memorandum has been prepared based on documentation provided prior to 20 October 2026 including:

- *Beachlands South, Fast-track Approval Substantive Application, Assessment of Environmental Effects and Statutory Analysis*, dated 26 June 2026 and prepared by Unio Environmental
- *Beachlands South – Rules Assessment*, dated 26 June 2026, and prepared by Unio Environmental
- Attachment 2: *Beachlands South Overall Masterplan* – Revision A, dated 15 June 2026 and prepared by Jasmax
- Attachment 9: *Beachlands South Fast Track, Infrastructure Report* (including appendices), dated 24 June 2026, and prepared by Harrison and Grierson
- Attachment 9F: *Stormwater Management Plan, Beachlands South* – Version 2, dated 24 June 2026, and prepared by Harrison and Grierson
- Attachment 9V: *Stormwater Drawings* – Rev A, dated April 2026, and prepared by Harrison and Grierson
- Attachment 9W: *Stormwater Drawings* – Rev A, dated June 2026, and prepared by Harrison and Grierson
- Attachment 9X: *Stormwater Drawings* – Rev A, dated April 2026, and prepared by Harrison and Grierson
- Attachment 9Y: *Stormwater Drawings* – Rev A, dated May 2026, and prepared by Harrison and Grierson
- Attachment 9ZD: *Scheme Plans 1* – Rev A, dated 25 May 2026, and prepared by Harrison and Grierson
- Attachment 9ZE: *Scheme Plans 2* – Rev A, dated 25 May 2026, and prepared by Harrison and Grierson
- '*S67 – Stormwater Assessment – Downstream Flood Effects: Beachlands South Fast Track Consent'* memo dated 19 October 2026, and prepared by Harrison and Grierson

4.0 ADDITIONAL REASONS FOR CONSENT NOT INCLUDED IN AEE / INCORRECT 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.
- E8.4.1(A11) – The proposal involves the diversion and discharge of stormwater runoff from a new stormwater network within the project area. This is a discretionary activity.

The Application outlines that stormwater management for the development is intended to be authorised under Auckland Council's Regionwide Network Discharge Consent (RWNDC). The proposed Stormwater Management Plan (SMP) has been prepared to support this approach and identifies the development as a *Greenfield* under the RWNDC framework. It is understood that the SMP is an evolution of the SMP originally prepared in support of Private Plan Change 88 (PPC88), and has been further refined to support the current fast-track application.

Compliance with the RWNDC objectives and requirements, in particular flooding effects on finished floor levels downstream of the proposed development, has been a key area of discussion between HWFR and the Applicant. This is further discussed in more detail in the following sections of this memo. The Applicant's assessment outlined in the additional memo (dated 19 October 2026) indicates that there are

potential solutions available that would result in no increases in flooding to properties downstream of the development. However, as these solutions have not been finalised, HWFR have recommended additional conditions of consent to ensure this outcome can be secured. If these conditions cannot be complied with, the development will not be able to be authorised under the RWNDC as it would not be compliant with Objective O3.1 of Schedule 2 which requires '*Avoid the increase of existing flooding or creation of new flooding of habitable floors as a result of urban development and intensification*'.

If the proposed development will not result in impacts to existing floor levels downstream and the SMP is adopted under the RWNDC, a separate private stormwater diversion and discharge consent is not required for impervious areas which discharge to the proposed public stormwater network. However, consent may still be required for any sites which discharge directly to the receiving environment via private stormwater network. Any decision issued should clearly identify where stormwater discharges and diversions are authorised by the granted approvals, and where stormwater discharges are intended to rely on separate authorisation under the RWNDC.

5.0 SPECIALIST ASSESSMENT

The Applicant, Beachlands South Limited Partnership, has applied for consents and approvals to establish the Beachlands South development – a master planned mixed-use community comprising of residential and commercial development, visitor accommodation, education facilities, open space and ecological restoration areas, and associated subdivision, earthworks, and infrastructure.

The development is primarily proposed on land that was rezoned through PPC88 which was made operative 21 January 2025. The plan change introduced the Beachlands South Precinct (I458) and includes the implementation of a Stormwater Management Area – Flow 1 (SMAF) overlay.

Existing Environment

The site includes approximately 268ha of land which is primarily occupied by the Formosa Golf Course and Resort. The hydrology of the site includes a network of permanent and intermittent streams, wetlands, floodplains, overland flow paths. Existing flood hazard features, including flood-prone areas and overland flow paths, are present across of the site and have influenced the layout and design of the proposed development (Figure 1)



Figure 1. Existing Flood Hazards, development site (Auckland Council GeoMaps, extracted September 2026)

Engagement with the Applicant

HWFR representatives have engaged extensively with the Applicant's Agents including Stormwater Engineers throughout the pre-application and fast-track approvals application processes. This has included a number of general project overview briefings, specific stormwater focused briefing meetings, as well as more detailed discussion on matters raised by HWFR as part of preliminary S67 recommendations.

A wide range of technical clarifications have been discussed with remaining key areas of interest discussed in the following sections of this memo.

Flooding Effects

Assessment Scenarios

HWFR have engaged in ongoing discussion with the Applicant's Engineers on the precinct provisions relating to flooding effects and mitigation of the effects of climate change. HWFR initial position, based on the interpretation of the AUP I458 Beachlands South provisions, was that when assessing the effects of flooding that the pre-development scenario would *not* include climate change with the post-development scenario including both climate change and maximum probable development.

Following discussions with the Applicant's Engineers, review of the PPC88 stormwater joint witness statement (JWS), and review of the relevant sections of the PPC88 decision report, HWFR acknowledges that the precinct provisions are ambiguous and do not provide clear direction to support HWFR initial position.

Considering the above, HWFR agree with the Applicant's Engineers that, for the purpose of this application, the effects of climate change are considered in both pre-development and post-development scenario in line with the approach generally accepted by HWFR for assessing flood related effects of development within existing urban zoned land. Therefore, the approach undertaken by the Applicant's Engineers is accepted in this context.

HWFR will seek the Applicant's Engineers to provide additional assessments on the potential effects of climate change. However, these would be undertaken as a suite of additional comparative scenario assessments and can be completed following the decision on this application, but prior to any authorisation of stormwater discharges from the proposed development under the RWNDC.

Areas of Interest

HWFR have identified key areas of interest in relation to remaining matters in discussion, these are outlined within Figure 2 and Figure 3. Within the areas of interest, the flood mapping provided by the Applicant's Engineers indicates flooding encroaching around building footprints with several finished floor levels appearing to be set relatively low in relation to both the existing stream banks and the mapped flood levels (Figure 3). This includes residential buildings at 167 – 189 Jack Lachlan Drive (along the true left bank) and commercial building at 190 Jack Lachlan Drive. Further areas of interest include the Jack Lachlan Drive bridge crossing and the Pine Harbour Marina Wastewater Pump Station.

The SMP for the development identified increases in flood levels downstream of the development across all modelled scenarios. In Section 6.3.5 of the SMP it is concluded that these increases will have an immaterial impact due to the existing high flood levels in the receiving environment and due to minimal changes in flood hazard classification.



Figure 2 – Increase in 1% AEP flooding with area of concern circled in red (Figure reproduced from SMP)



Figure 3. 167 – 189 Jack Lachlan Drive, indication of existing stream level relative to floor level (Google Street View, 2026)

As part of preliminary engagement, HWFR recommended that the Applicant provide further information to support the conclusions in the SMP. The Applicant's Engineer provided further information on the increases in flooding within the highlighted area of interest within Attachments 9F.1 and 9F.2 of the application. This information is generally limited to the existing residential properties at 167-189 Jack Lachlan Drive and does not include the commercial building at 190 Jack Lachlan Drive, the Jack Lachlan Drive bridge crossing, or the Pine Harbour Marina Wastewater Pump Station. While the Applicant's Engineers have provided some response information for the commercial building at 190 Jack Lachlan Drive this does not include an assessment of potential effects against the observed increases in flooding at this location.

The information within Attachments 9F.1 and 9F.2 of the application demonstrated that increases in stream peak flood levels for the 1% AEP rainfall event including 3.8-degree climate change may result in an increase flooding to the existing building floor levels at 169 and 189 Jack Lachlan Drive. At 169 Jack Lachlan Drive the modelled increase was indicated as 31mm (from 29mm to 60mm). At 189 Jack Lachlan Drive the modelled increase was indicated as 28mm (from 210mm to 238mm).

Following further discussions with the Applicant's Engineer, an additional memo (dated 19 October 2026) was prepared by the Applicants Engineer's to further address concerns in relation to the finished floor levels of the existing buildings at 167-189 Jack Lachlan Drive. The Applicant's Engineers undertook further investigation and modelling , identifying that additional flood management solutions could be provided within the proposed development to mitigate the potential impacts to existing buildings at 167-189 Jack Lachlan Drive. While the additional memo focused on these properties only, the additional mitigation solutions may also address the potential increases in flooding to 190 Jack Lachlan Drive, the Jack Lachlan Drive bridge crossing, and the Pine Harbour Marina Wastewater Pump Station.

At this stage, the solutions presented have not been finalised and are considered conceptual only. HWFR requires further validation to be carried out as part of the subsequent design stages and have

recommended conditions of consent be included that secure the outcome of the solutions put forward, being that the proposed development will result in no impacts to finished floor levels downstream.

To confirm that the model is fit for purpose and to appropriately interrogate any observed differences between the pre-development and post-development scenarios, HWFR recommends that the Applicant provides the hydraulic model, including the accompanying model build report, to HWFR for review. HWFR notes that the model review will be required prior to authorisation of discharges under the RWNDC to validate that the proposed development meets the necessary requirements.

Damming Effects

It is proposed to achieve peak flow attenuation of post-development flows from the development by utilising existing road embankments and associated culverts under Jack Lachlan Drive. No information is currently available to inform the design, construction, or condition of these existing structures, with the Auckland Council GeoMaps indicating the existing culverts were constructed sometimes in the 1990s. The culverts were likely installed to maintain the conveyance of the existing watercourses under the road embankment rather than to provide peak flow attenuation as their intended primary or secondary function. Therefore, the current peak flow attenuation provided by the existing culverts is considered to be due to the structures being inadvertently undersized relative to the upstream catchment.

HWFR understands that further to the proposed upgrade of the road corridor, the Applicant is not proposing to carry out any additional physical works on the existing embankments or culverts. However, the Applicant is proposing to utilise the existing embankments and culverts to provide attenuation of post-development peak flows and utilise this arrangement to mitigate potential effects from flooding on the downstream receiving environment.

There are two culverts located under Jack Lachlan Drive downstream of the proposed development which are outlined in Figure 5 and Figure 4 below. The flood assessment provided by the Applicant's Engineers indicates that the proposed development will reduce the flood levels upstream of the Western Culvert. Based on the earthworks plans presented in Attachment 9L, the reduction in flood levels does not appear to be due to the proposed development increasing the storage volume upstream of the culvert embankment. Instead, the reduction in peak flood levels appears to be due to the reduction in the post-development catchment area discharging to this location, as outlined in the 19 October 2026 memo. Overall, the development is considered to maintain the pre-development function of this culvert and no further assessments are required at this location subject to verification of the model results.

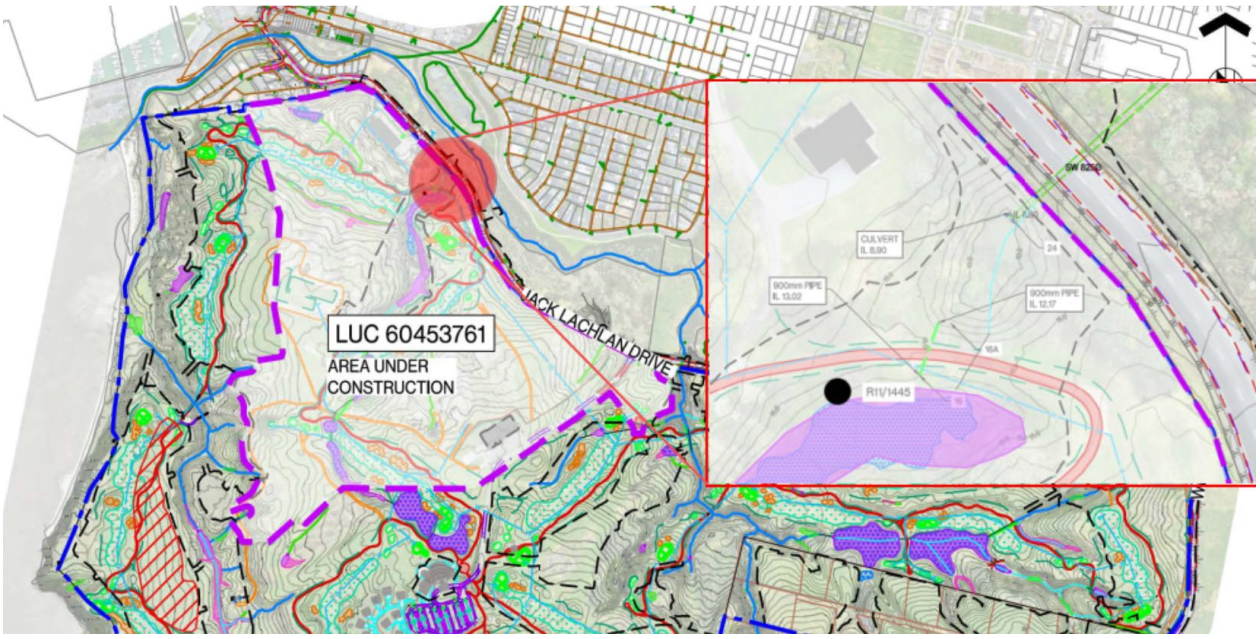


Figure 4. Western Culvert

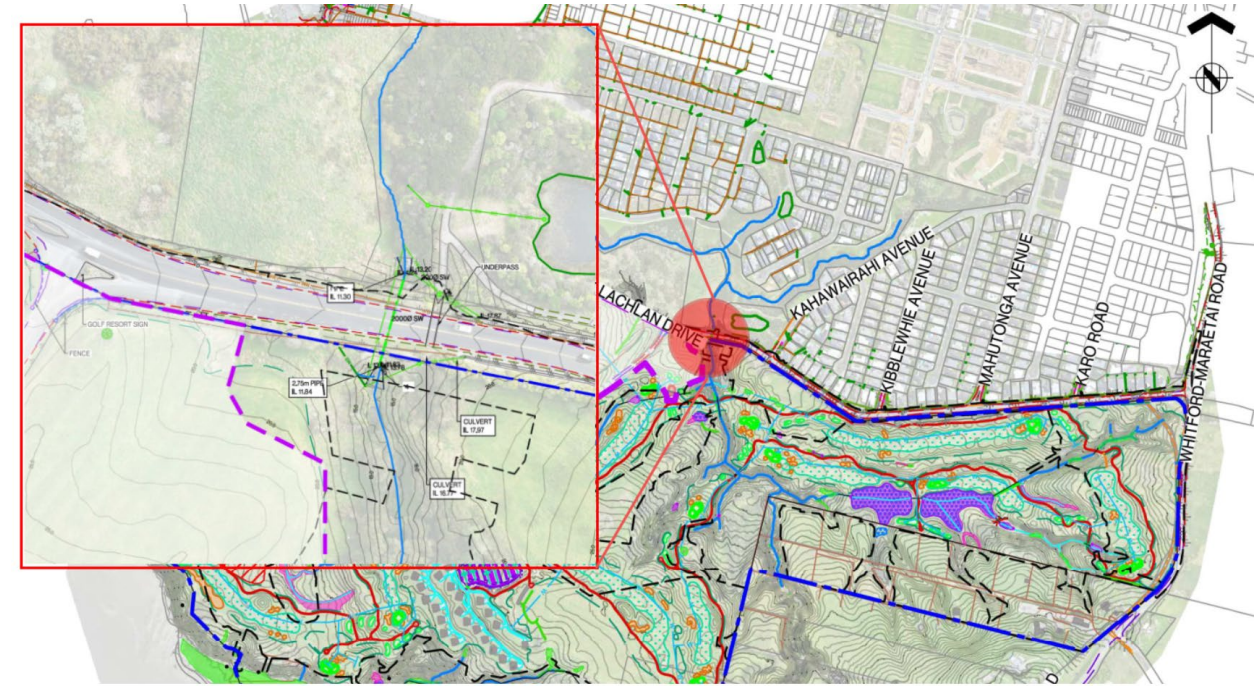


Figure 5. Eastern Culvert

At the location of the Eastern Culvert, the flood assessment provided by the Applicant's Engineers with the application indicated an increase in peak flood levels exceeding 500mm across all modelled scenarios. The Applicant's Engineer has not provided detail on the changes in post-development ponded depth or volume. The Applicant's Engineer has also not identified the existing embankment height.

Additional information provided by the Applicant's Engineer in the 19 October 2026 memo suggests that further mitigation could be implemented within the development that would result in a lower peak flood level increase. However, as these solutions have not been finalised they are only considered conceptual at this stage.
Based on the information provided to date, HWFR has residual concerns with regards to the Jack Lachlan Drive Eastern Culvert and recommends that the Applicant's Engineer provides further information prior to decision being made on this application to establish whether the existing structure will become a dam, ensure that appropriate consents have been applied for in this regard, and that the potential effects from the proposed development have been adequately assessed and can be managed and/or mitigated.

HWFR has assumed that should the Panel determine that the existing embankment and culvert is considered a dam, that the Applicant would apply for the relevant consent/s and provide any necessary supporting information. HWFR considers that this additional information should also include determination of whether the existing structure would qualify as a *Large Dam* under the New Zealand Building Act 2004. This is considered relevant to Council as an asset owner as it could result in ongoing financial obligations in order to ensure that the structure is operated and maintained in a way that meets the necessary legal and regulatory requirements. The Council does not wish to accept ownership of a Large Dam due to the ongoing associated financial obligations.

It is understood that a regulatory damming specialist has been engaged to review the application on behalf of Council who have provided advice on whether the Jack Lachlan Drive embankment and culvert are considered a dam, and whether additional consent/s are required.

Irrespective of the final decision made by the Panel on whether the existing embankment and culvert will be considered as a dam, HWFR recommends the following is provided by the Applicant:

- A condition assessment of the existing embankment and culvert and an assessment of the potential downstream effects if the embankment and culvert were to fail resulting in a sudden and uncontrolled release of ponded water, which could be addressed by carrying out a Dam Potential Impact Classification (PIC) assessment.

This is due to the limited information currently available on the design, construction, or condition of the existing embankment and culvert including the geotechnical and structural integrity of the overall structure. Therefore, it is unclear whether the existing embankment and culvert are suitable to accommodate the post-development increases in peak flood levels and volumes and deliver the proposed peak flow attenuation function without increasing the downstream risk to life to people and risk of damage to property and infrastructure.

Overland Flow Paths

HWFR have identified several locations where proposed overland flow paths traverse private lots and where the associated flood hazards exceed ARR H1 classification. Areas where flood hazards exceed ARR H1 classifications can be unsafe for the public, noting that some areas of proposed public roads are subject to ARR H5 classification which is considered unsafe for people, vehicles, and buildings.

The Applicant's Engineers have not demonstrated that sufficient space and easement width has been set aside for the overland flows traversing private lots and have not addressed overland flow paths will be managed to ensure flood risk to people, property, and infrastructure is tolerable or acceptable.

On this basis, HWFR recommends that the Applicant provides further information to demonstrate that the overland flow paths can be managed in a way that does not create risks to people and property. Should the Panel determine that the request from HWFR is not necessary then HWFR recommends a condition of consent to ensure that a detailed overland flow path report is prepared prior to Engineering Plan Approval (EPA) that demonstrates compliance with the relevant Council standards and ensures safe management of overland flows is provided for.

Public Assets

Land size and configuration

HWFR have raised concerns that the provided engineering plans do not provide sufficient information to enable HWFR to confirm that adequate land size and configuration have been set aside to accommodate public stormwater management devices such that these can meet the relevant Council guidelines and standards including the Stormwater Code of Practice and GD01. HWFR also advised the Applicant that the land should be free of retaining structures.

Other than confirmation that the design will meet the relevant Council guidelines no further information has been provided by the Applicant's Engineers. On this basis, HWFR cannot confirm that sufficient space has been provided to accommodate the necessary design outcomes, including the operation and maintenance activities, without incurring significant traffic management and establishment costs. Therefore, HWFR has recommended additional consent conditions to secure this outcome at Engineering Plan Approval stage (EPA), noting that any approvals of departures from design standards are at the discretion of HWFR as the future asset owner, and devices which cannot be practicably maintained cannot be accepted in public ownership.

Land ownership

HWFR advised the Applicant that any land proposed to be vested for stormwater purposes be identified as 'Land in Lieu of Reserve for Drainage Purposes' rather than 'Local Purpose (Drainage) Reserve'. This terminology enables the land to be transferred under the Local Government Act instead of the Reserves Act and is preferred for the ease of ongoing processes associated with routine operation, maintenance, renewal, and upgrade activities associated with stormwater infrastructure, while still enabling the land to be vested for drainage purposes. HWFR understand that the Applicant will update the scheme plans to reflect this and this is accepted by HWFR.

HWFR advised the Applicant's Agents that the public stormwater devices including associated ancillary structures and maintenance access should be located completely within the parcel proposed to be vested. Access easements over third party land cannot be accepted due to potential ongoing challenges with accessing devices for inspections and disruption to private landowners, over whose land the proposed access easement is granted, during maintenance operations. HWFR recommends that the scheme plans are updated to incorporate access tracks into the parcels proposed to be vested. Should the Panel determine that the request from HWFR is not necessary then HWFR recommends an advice note to be added to Condition 162.

6.0 SECTION 67 INFORMATION GAP

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

S67 Matters

Flooding effects

HWFR recommends that the Applicant's Engineer provide a copy of the hydraulic model for interrogation, together with the model build information. The modelling information will enable HWFR to confirm that the model is fit for purpose, to verify the potential downstream flooding effects of the development, and to confirm whether the proposed stormwater management approach can achieve the intended outcomes including avoiding increased flooding of existing habitable floors.

Damming

In relation to the proposed reliance on the existing Jack Lachlan Drive embankment and Eastern Culvert for peak flow attenuation, HWFR recommends that the Applicant provides:

- A condition assessment of the existing embankment and culvert; and
- An assessment of the potential downstream effects if the embankment and culvert were to fail resulting in a sudden and uncontrolled release of ponded water. This could be addressed by carrying out an equivalent Dam Potential Impact Classification (PIC) assessment.

This information is necessary as the proposal relies on the existing embankment and culvert to provide attenuation of post-development flows, while limited information is currently available regarding the design, condition, and structural or geotechnical integrity of these structures. The information is required to demonstrate that the proposed attenuation can be achieved without resulting in an unacceptable increase in risk to people, property, or downstream infrastructure.

OLFP Assessment / further information

HWFR recommends further assessment of the proposed overland flow paths including confirmation that sufficient space is available to safely convey predicted flows within the development and that appropriate provision can be made for overland flow paths traversing private lots.
This information is necessary to demonstrate that the proposed development can safely accommodate overland flows and that the design can achieve an acceptable level of flood risk without relying on future design changes that may materially affect the proposed site layout.

Operation and maintenance access

HWFR requests further information demonstrating that sufficient land has been provided for the operation and maintenance of proposed public stormwater management devices. In particular, the plans should demonstrate provision for:

- Sufficient maintenance access around the perimeter of each device;
- Access for equipment and/or machinery required to undertake maintenance activities; and
- Appropriate laydown and drying areas for maintenance activities.

This information is necessary to demonstrate that the proposed stormwater devices can be practicably operated and maintained over their design life and that sufficient land has been allocated for the infrastructure proposed to vest in Council, without relying on access over third-party land or future departures from Council design requirements.

7.0 RECOMMENDATION

Overall, HWFR does not oppose the proposed development from a stormwater and flooding perspective, subject to the satisfactory resolution of the outstanding matters identified through the section 67 process and compliance with the recommended conditions of consent.

Significant engagement has occurred with the Applicant's Engineers, and additional information provided during this process has identified that there are feasible additional flood mitigation measures can potentially be implemented within the proposed development extents to address the potential downstream flooding effects of the development. In particular, additional mitigation has been identified that could avoid increases in flooding of existing habitable floors downstream. While aspects of this mitigation remain subject to further design and validation, HWFR considers that the intended outcomes could potentially be secured through conditions of consent.

Residual matters remain including the proposed reliance on the existing Jack Lachlan Drive embankment and culvert for peak flow attenuation, and the detailed management of overland flow paths. These matters should be resolved through the outstanding section 67 response and/or the recommended conditions of consent, as applicable.

8.0 PROPOSED CONDITIONS

HWFR have reviewed the proposed conditions of consent and only provide comments on conditions relevant to its area of expertise. 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 been commented on in respect of compliance with the overarching SMP, and therefore RWDNC.

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

Condition	HWFR Comment – 09.10.2026
DISTRICT LAND-USE CONSENT CONDITIONS (LUCXXXX) AND REGIONAL EARTHWORKS CONDITIONS (LUCXXXX)	
~~[107] Stormwater runoff from all impervious areas other than roofs must be either:~~ ~~(a) Treated at source by a stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'; or~~ ~~(b) Treated by a communal stormwater management device or system that is sized and designed in accordance with 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)' that is I458~~	Do not support the exclusion of roof runoff from treatment requirements. This approach is not consistent with the RWNDC, which requires stormwater quality management for all impervious areas. Consider revising the condition to require stormwater treatment in accordance with the approved SMP, rather than exempting roof runoff by default: The recommended amendments to this condition are relevant if the Applicant is seeking authorisation under the RWNDC.

~~Beachlands South Auckland Unitary Plan Operative in Part 29 designed and authorised to accommodate and treat stormwater from the site; or~~ ~~(c) Where alternative devices are proposed, the device must demonstrate it is designed to achieve an equivalent level of contaminant or sediment removal performance to that of 'Guidance Document 2017/001 Stormwater Management Devices in the Auckland Region (GD01)'~~ [107] All stormwater runoff from impervious surfaces within the site shall be managed in accordance with an approved Stormwater Management Plan (SMP). The consent holder shall ensure that all stormwater management devices are constructed, operated, and maintained in accordance with the approved SMP and any subsequent amendments approved by Council.	
[108] New buildings, and additions to buildings must be constructed using inert cladding, roofing and spouting building materials that do not have an exposed surface made from contaminants of concern to water quality (i.e. zinc, copper and lead).	Condition supported. Condition 150 duplicates similar requirements. Condition 150 preferred over Condition 108.
[109] All new dwellings must designed to have non-potable water requirements (for toilets, laundry and gardens) supplied by rainwater tanks (or bladders) ~~sized in accordance with the table below~~ implemented in accordance with an approved SMP. Rain tank/bladder capacity for attached housing and apartment typologies can be provided in either individual or as communal rainwater systems. *Alternatively* [109] All new dwellings must designed to have non-potable water requirements (for toilets, laundry and gardens) supplied by rainwater tanks (or bladders) sized in accordance with the table below. Rain tank/bladder capacity for attached housing and apartment typologies can be provided in either individual or as communal rainwater systems.	Do not support this condition. The prescribed bedroom / tank-size ratios are not clearly aligned with the hydrology mitigation requirements of the RWNDC. It may be more appropriate for the condition to require non-potable water requirements to be implemented in accordance with an approved SMP, rather than specifying fixed storage volumes. *Alternatively* should this condition remain, an advice note could be added which clarifies that compliance with this condition does not constitute compliance with the RWNC.

<table>
<tr><td><u>Advice note: Compliance with this condition does not constitute hydrology mitigation requirements of the RWNDC.</u></td><td></td></tr>
<tr><td>[110] All new buildings (except dwellings as provided for in condition [106] above must be designed to have non-potable water requirements supplied by rainwater tank. Rainwater tanks can be provided as either individual or communal rainwater systems.

<u>Advice note: Compliance with this condition does not constitute hydrology mitigation requirements of the RWNDC.</u></td><td>Condition supported. It is recommended that an advice note is added which clarifies that compliance with this condition does not constitute compliance with the RWNC.</td></tr>
<tr><td>[112] The minimum sizes for rainwater tanks (or bladders) shall be as set out below:

All dwellings except apartments
<table><tr><th>Dwelling type</th><th>Minimum tank (or bladder)</th></tr><tr><td>1 bedroom (includes Studio)</td><td>1000L</td></tr><tr><td>2 bedroom</td><td>2000L</td></tr><tr><td>3 bedroom</td><td>3000L</td></tr><tr><td>4+bedrooms</td><td>5000L</td></tr></table>
Apartments
<table><tr><th>Dwelling type</th><th>Minimum tank (or bladder)</th></tr><tr><td>1 bedroom (includes Studio)</td><td>1000L</td></tr><tr><td>2 bedroom</td><td>2000L</td></tr><tr><td>3 bedroom</td><td>2000L</td></tr><tr><td>4 bedroom</td><td>2000L</td></tr><tr><td>5+ bedrooms</td><td>2500L</td></tr></table></td><td>Refer comments under Condition [109].</td></tr>
<tr><td colspan="2">STORMWATER DISCHARGE CONDITIONS (DISXXXX)</td></tr>
<tr><td>[149] Prior to the commencement of any discharge of any post development stormwater from the site, the SMP referenced in Condition 1 must be certified by the Council. The SMP must be prepared by the Consent Holder in consultation with Ngāi Tai ki Tāmaki (as required by Condition [XX]) and submitted to Auckland Council (Healthy Waters) for certification. The SMP must be consistent with the relevant objectives of the Council's Regionwide Network Discharge Consent. The SMP must include:

(a) Details of any feedback provided by Ngāi Tai ki Tāmaki on the design of stormwater management devices; and
(b) Identification of any Ngāi Tai ki Tāmaki feedback not incorporated, with reasons.

Advice Note: Certification of the SMP by Auckland Council</td><td>Condition supported.</td></tr>
</table>

(Healthy Waters) in accordance with this condition does not, of itself, constitute adoption of the SMP under the Council's Regionwide Network Discharge Consent.	
[149A] The development must not result in an increase in existing flooding, or the creation of new flooding, of any existing habitable floor downstream of the development. *Advice Note: Compliance with Condition [149A] shall be demonstrated through providing a copy of the hydraulic model and supporting model build information to Auckland Council for review and verification.*	Additional recommended condition and advice note. This condition will ensure the intended outcome of the development. Compliance with this condition will enable the authorisation under the RWDNC to be sought.
[149B] Prior to the commencement of any discharge of any post development stormwater from the site, the Consent Holder shall undertake an inspection of the existing private basin outlets identified in the SMP and provide written confirmation from a suitably qualified and experienced practitioner that the outlets are in sound structural and operational condition. Where the inspection identifies any outlets that are damaged, obstructed, or otherwise not fit for purpose, the Consent Holder shall repair, upgrade, or replace the outlets as necessary.	Additional recommended condition. In accordance with the assessment provided in Section 5 above, an additional condition is recommended requiring an assessment of the existing culverts ('private basin outlets') within the development site.
[149C] Prior to the commencement of any discharge of any post development stormwater from the site, the Consent Holder shall undertake a condition assessment of the existing Jack Lachlan Drive Eastern Culvert embankment and culvert structure. The condition assessment shall be undertaken by a suitably qualified and experienced engineer and shall include: i. Evaluation of the structural integrity, condition, and functionality of the embankment and culvert; and ii. Assessment of the potential downstream effects that could occur in the event of embankment	Additional recommended condition. In accordance with the assessment provided in Section 5 above, an additional condition is recommended requiring a condition assessment of the existing Jack Lachlan Drive Eastern Culvert embankment and culvert structure and an assessment of the potential downstream effects if the embankment and culvert were to fail. This assessment could be addressed by carrying out a Dam Potential Impact Classification (PIC) assessment. This is assessment is sought as information is not currently available on the design, construction, or condition of the existing embankment and culvert.

and/or culvert failure. The assessment shall be submitted to the Council for certification. Any remedial works identified by the assessment as necessary to ensure the ongoing integrity and performance of the embankment and culvert shall be completed to the satisfaction of the Council prior to the commencement of any discharge of post-development stormwater from the site. *Advice note: A Dam Potential Impact Classification (PIC) assessment, prepared by a suitably qualified and experienced engineer, may be used to satisfy the assessment of the potential downstream effects that could occur in the event of embankment and/or culvert failure.*	
[150] The Consent Holder shall ensure that new buildings under this consent must be constructed using cladding, roofing and spouting building materials that avoid the use of contaminant generating building products which have: (a) Exposed surfaces(s) or surface coating of metallic zinc or any alloy containing greater than 10% zinc; or (b) Exposed surfaces(s) or surface coating of metallic copper or any alloy containing greater than 10% copper; or (c) Exposed treated timber surface(s) or any roof material with a copper containing or zinc-containing algaecide.	Condition supported.
[151] For all stormwater management devices (including but not limited to ponds, wetlands, outlet structures, and outfalls), the Consent Holder must engage a SQEP to prepare an OMP setting out the principles for the general operation and ongoing maintenance of the stormwater system and associated management devices.	Condition supported.
[152] For any stormwater devices intended to vest in Auckland Council, a Draft OMP must be submitted to Healthy Waters for approval at the time of application for	Condition supported.

Engineering Plan Approval (EPA). The Draft OMP must be prepared in accordance with the Healthy Waters Operation and Maintenance Plan Template (6 July 2023) or any subsequent updates.	
[153] The OMP required by Condition [151] and Condition [152] must include, but not be limited to: (a) A detailed technical data sheet; (b) All requirements as defined within Auckland Council's Stormwater Management Devices Design Guidelines Manual (TP10) and/or Guideline Document 2016/001 (GD01), as applicable; (c) Clear identification of responsibility for both short-term and long-term maintenance of the stormwater devices; (d) A programme for regular maintenance and inspection of the stormwater system; (da) A programme for regular monitoring of the northern spillway of Stormwater Pond 1 outlining potential maintenance and performance solutions, if required, to ensure flow discharge from the subject site is in accordance with the Stormwater Management Plan certified under Condition [XX]. (e) A programme for the collection and disposal of debris and sediment from the stormwater management devices; (f) A programme for post-storm maintenance; (g) A programme for inspection and maintenance of outfall erosion; (h) General inspection checklists for all components of the stormwater system, including roadside catchpits, recharge pits, and outfalls; (i) A programme for inspection and maintenance of vegetation associated with the stormwater devices; and (j) A methodology for the ongoing control and eradication of established pest species and invasive weeds within both terrestrial and	Condition supported. It has been assumed that this condition sets out the inclusions for the OMP required by both Condition [151] and Condition [152] also. Amendments sought to provide clarity.

aquatic areas of the stormwater device. *Advice Note: For stormwater assets to vest in Council, the OMP must be consistent with Healthy Waters' operational requirements and approved prior to construction commencing on those devices.*	
[153A] The OMP required by Condition [151] must include, but not be limited to the inspection, operation, maintenance, repair, and renewal requirements for all privately owned stormwater infrastructure, including culverts, outfalls, basins, wetlands, and any other stormwater management devices or structures that contribute to stormwater conveyance, flood management, or attenuation outcomes .	Additional recommended condition. This condition is recommended to clarify some of the inclusions for the OMP required by Condition 151, to ensure that privately owned stormwater management devices that provide a key function achieve ongoing flood management and attenuation.
[154] The stormwater management system must be managed in accordance with the final OMP. Any amendments to the OMP must be submitted to the Council for certification, in writing prior to implementation. The OMP must be updated and submitted upon request to the Council for confirmation.	Condition supported.
[154A] 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 152].	Additional recommended condition. This is a common condition used by HWFR intended to ensure that stormwater devices proposed for future vesting in Council ownership are appropriately maintained during the establishment period, when the risk of sediment accumulation, vegetation establishment, and construction-related damage is highest. The condition helps ensure that devices are functioning as designed and are transferred to Council in good operational and physical condition.
[154B] 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:*	Additional recommended condition. This is a common condition used by HWFR intended to ensure that stormwater devices proposed for future vesting in Council ownership are appropriately maintained during the establishment period, when the risk of sediment accumulation, vegetation establishment, and construction-related damage is highest. The condition helps ensure that devices are functioning as designed and are transferred to Council in good operational and physical condition.

• *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.*	
[155] A maintenance record for the stormwater management system certified under Condition [XX] must be provided to the Council on request. The maintenance record must provide details of all maintenance including inspections and servicing for the preceding three years.	Condition supported.
[156] A residential stormwater operation and maintenance manual must be created by the Consent Holder for any privately owned and operated stormwater device within individually owned lots. This manual must be provided to owner(s) of the lot(s). This manual must also include standard detail drawings of the stormwater devices with recommendations in terms of impervious area discharge. A consent notice will be entered onto the title of the lot to require the correct operation and maintenance of the stormwater device in perpetuity.	Condition supported. Minor amendment suggested to clarify that this condition is in relation to the operation and maintenance of devices within individually owned lots, such as stormwater tanks etc.
SUBDIVISION CONDITIONS (SUBXXXX)	
[162] Easements in gross for the purposes identified on the scheme plans referenced in Condition [1] and Appendix 1 to the conditions, must be created and included in a memorandum of easements endorsed on the survey plan and be granted or reserved. The Consent Holder must meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title. *Advice Note:* *The rights and powers granted by any easement created in favour*	Advice note recommended to allow HWFR to review and certify access arrangement of the easements.

of Auckland Council for access to, and operation and maintenance of, public stormwater management devices shall be reviewed and certified by the relevant Council asset owner prior to the easement instrument being finalised.	
[163] The Consent Holder must obtain written confirmation from Council (Healthy Waters) that the proposed drainage reserves and stormwater devices shown as '~~Local Purpose (Drainage) Reserve to Vest~~ Land-in-lieu of reserve to vest (drainage purposes)' on the approved plans referenced in Condition [1] and Appendix 1 to the conditions shall or shall not vest in the Council ~~as 'Land-in-lieu of reserve to vest (drainage purposes).'~~. (a) If the 'Land-in-lieu of reserve to vest (drainage purposes)' is to vest then, in accordance with s239, these reserves must vest free of encumbrances, transformers and structure unless the structure is associated with stormwater devices. The Consent Holder must meet all costs associated with the vesting of the reserves. (b) If the 'Land-in-lieu of reserve to vest (drainage purposes)' is not to vest then the land will fall under the obligation of an Incorporated Society or equivalent legal body (Society), as per Condition [XX]. *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. If the Consent Holder wishes to retain any private structures, rights or encumbrances on land to be vested, it will require a certificate of acceptance from the Manager Land Advisory Services under section 239(2) on behalf of the local board.*	Amendments sought. The condition currently references two different forms of land vesting. HWFR has requested that the scheme plans are amended to reference only '*land in lieu of reserve to vest (drainage purposes)*'. Amendments to this condition are recommended to align with that request and to provide clarity regarding the intended vesting arrangement. The condition is otherwise supported.
[163A] Except where associated with culvert headwalls and stormwater outlets, there must be no retaining walls located within 'Land-in-lieu of reserve to vest (drainage purposes)' vested in Council.	Additional condition recommended to ensure that Council is not vested with retaining walls that create ongoing structural, maintenance, inspection, asset management, and liability obligations within drainage reserve land.

[166] Where the Consent Holder proposes to provide private wastewater, water supply and stormwater services for the Project, the infrastructure shall be constructed in accordance with the engineering plans referenced in Condition [1] and Appendix 1 to the conditions and be constructed to a public standard. The infrastructure required to service each superlot, stage or part thereof shall be constructed and operational prior to the issue of a s224(c) certificate.	Condition supported.
[168] Prior to commencement of any public infrastructure or public road works required for the development (as indicated on the approved plans in Condition [1]), the Consent Holder must provide design plans and specifications for any works required in respect to this consent which are proposed to vest, to the satisfaction of the Council. Details of the SQEP who will act as the Consent Holder's representative for the duration of the development must also be provided with the application for any Engineering Plan Approval.	Condition supported.
[169] A pre-construction meeting must be held by the Consent Holder, prior to commencement of the construction of any stormwater reserves and/or stormwater devices intended to be vested as public, that: (a) Is arranged five Working Days prior to initiation of the construction of any intended public stormwater assets on the site; (b) Is located on the subject area; (c) Includes representation from the Council, including but not limited to Auckland Council Healthy Waters – Operations Team; and (d) Includes representation from the site stormwater engineer (or) contractors who will undertake the works and any other relevant parties.	Condition supported.
[170] The following information must be made available before or at the meeting:	Condition supported.

(a) Timeframes for key stages of the works authorised under this consent; (b) Contact details of the site contractor and site stormwater engineer; and (c) Construction plans approved (signed/stamped) by the Council. *Advice Note: To arrange the pre-construction meeting required by this consent, please contact the Council on email at monitoring@aucklandcouncil.govt.nz.*	
[171] Where infrastructure is proposed to form part of a public reticulation network, any engineering plans submitted for approval must detail all the proposed public infrastructure works associated with the subdivision stage or part thereof, and be in accordance with current Council Engineering Standards and Guidelines, including but not limited to: • Public Stormwater Reticulation • Public Stormwater Management Devices • Public Wastewater Reticulation • Public Water Reticulation • Public Reserves	Condition supported. Minor amendment sought for clarification.
[172] The engineering plans must include but not be limited to the following information: (a) As part of the application for Engineering Plan Approval, a registered engineer must: i. Certify that the proposed stormwater system or devices proposed have been designed in accordance with the Council's Code of Practice for Land Development and Subdivision: Chapter 4 – Stormwater or as otherwise approved in the SMP. ii. Certify that the proposed water supply and wastewater system have been designed in accordance with the approved Engineering Plans referenced	Condition supported. Advice notes recommended to clarify the design outcomes of any proposed public stormwater devices.

in Condition [1] and Appendix 1 to the conditions. iii. Provide a statement that the proposed infrastructure has been designed for the long-term operation and maintenance of the asset. iv. Confirm that all practical measures are included in the design to facilitate safe working conditions in and around the asset. (b) The proposed stormwater system must be designed to identify health and safety risks for the public, operating personnel, contractor and Council employees. (c) The proposed stormwater system must have an asset life of a minimum of 100 years. (d) Require the design of infrastructure and devices (including communal devices) to be efficient and effective, with consideration given to whole lifecycle costs, ease of access and operation, and integration with the built and natural environment. *Advice Notes:* • *Maintenance access to all stormwater management devices and associated structures shall be designed and constructed to the satisfaction of Healthy Waters and Flood Resilience* • *A gross pollutant trap (GPT) must be installed upstream of all stormwater management devices such that stormwater runoff passes through the GPT prior to entering the device.* • *High-flow bypass to all stormwater management devices shall be designed to the satisfaction of Healthy Waters and Flood Resilience.*	
[172A] At Engineering Plan Approval the Consent Holder must prepare an overland flow path management report and submit to Council for review and approval. The overland flow path management report must	In absence of further information on overland flow paths sought to be included within the S67, an additional condition is recommended.

demonstrate compliance with the overland flow path management requirements of the Auckland Transport Design Manual and the Auckland Council Stormwater Code of Practice unless otherwise approved by Council.	
[175] Where Auckland Council Healthy Waters has accepted the reticulated stormwater network as acceptable for vesting as public, the Consent Holder must design and construct connections to the public stormwater reticulation network to serve the development in accordance with the requirements of the utility provider and the approved engineering plans as required by Condition [1] and Appendix 1 to the conditions. Certification from the utility provider that works have been satisfactorily undertaken must be provided when applying for a certificate under section 224(c) of the RMA. *Advice Notes:* • *Acceptable forms of evidence include Engineering Approval Completion Certificates.* • *Public connections are to be constructed in accordance with the Stormwater Code of Practice.* • *Alterations to the public stormwater reticulation network require Engineering Plan Approval.*	Condition supported.
[179] Prior to the issue of the section 224(c) certification for a stage, superlot or part thereof, all hard and soft landscape works proposed within the local purpose drainage reserves within the stage, superlot or part thereof which are to be vested must be implemented and be in accordance with the Beachlands South Open Space Strategy and any Engineering Plan Approval. *Advice Note: Practical completion will be determined by the Manager Parks Planning prior to the issue of the certificate required under 224(c) to demonstrate development of the drainage reserve has been satisfactorily implemented and to formalise the commencement of the maintenance period.*	Condition supported.

[197] The necessary easements for each lot, as shown on the approved scheme plan(s), shall be included in a memorandum of easements endorsed on the survey plan and must be created, granted or reserved as necessary. The Consent Holder shall meet the costs for the preparation, review, and registration of the easement instruments on the relevant records of title. Any other required easements needed to facilitate the development shall also be included on the survey plan. These easements may include (but are not limited to) the following: (a) Right to convey electricity, water and telecommunications (both standard and in Gross) (b) Right to drain stormwater and sewage (both standard and in Gross) (c) Maintenance (d) Right of Way (e) Maintenance and Eave Overhang (f) Party Wall *Advice Note:* *The rights and powers granted by any easement created in favour of Auckland Council for access to, and operation and maintenance of, public stormwater management devices shall be reviewed and certified by the relevant Council asset owner prior to the easement instrument being finalised.*	Advice note recommended to allow HWFR to review and certify access arrangement of the easements.
[206] A Consent Notice pursuant to section 221 of the RMA must be registered on the Records of Title of any lot to require the correct operation and maintenance of any privately owned and operated stormwater device in accordance with the OMP as required by Conditions [150] to [155] of SUBXXX. This condition must be registered as a consent notice on the record(s) of title of the relevant lots to ensure that it is complied with on a continuing basis.	*Condition supported – for the maintenance of private devices but links to overall RWNDC compliance*