

Revision History:

Rev	Description
A	FOR RESOURCE CONSENT
B	LANDSCAPE LAYOUT REVISED AND DRAINAGE NOTES ADDED
C	RESOURCE CONSENT
D	RESOURCE CONSENT

Drawn	Designed	Approved	Date
VK	DH	KA	22-08-2025
VK	DH	KA	18-09-2025
VK	DH	KA	11-11-2025
VK	DH	KA	13-11-2025



Client:

GENERUS LIVING GROUP

Project:

THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND

Drawing Title:

PROPOSED SW AND WW
DRAINAGE
SHEET 3 OF 3

Issue:

RESOURCE CONSENT

Scale @ A3:

1:750

Dwg No:

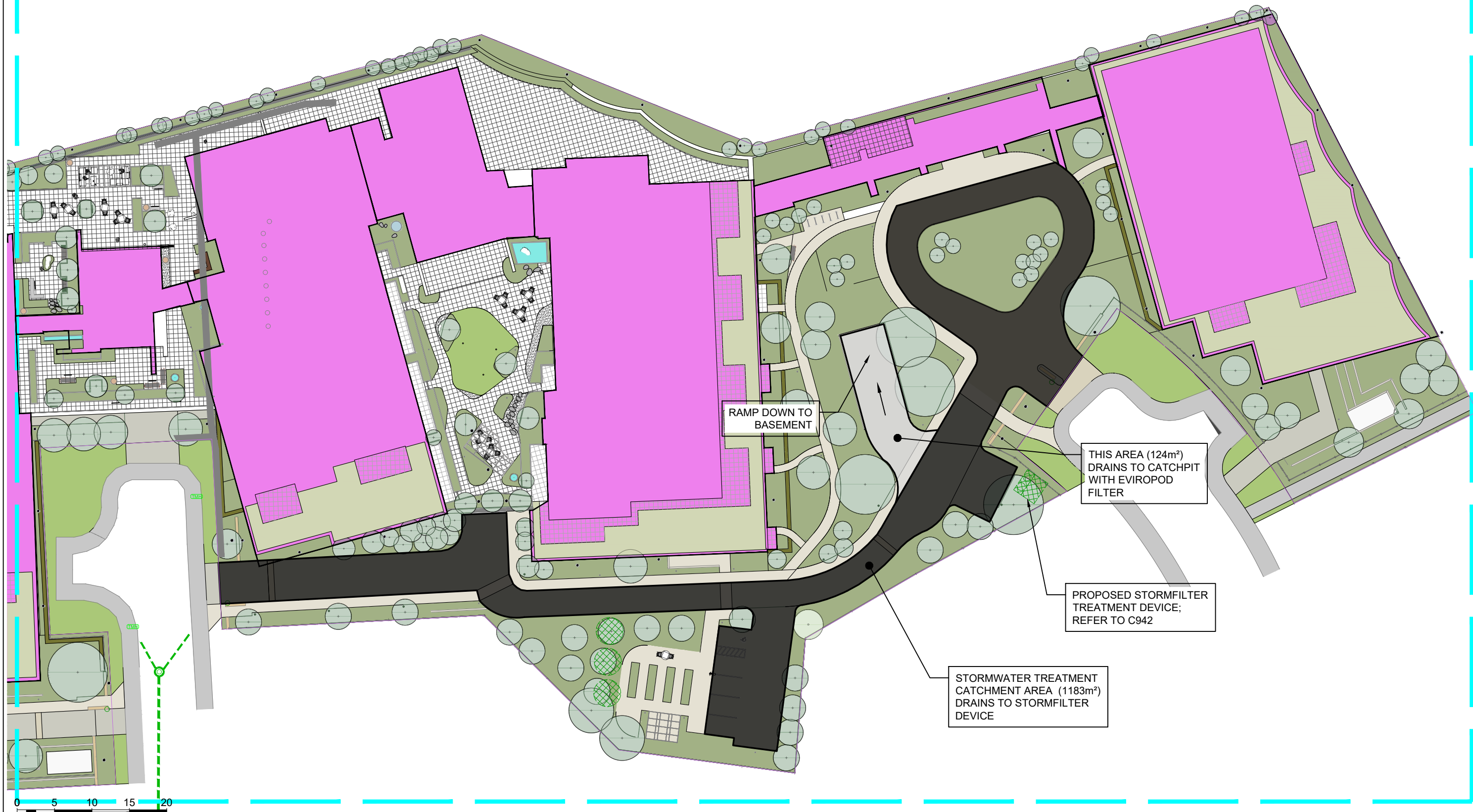
22064-C933

Rev:

D



WWW.CLCGROUP.CO.NZ P:09-576 3276	Revision History:						Client:		Drawing Title:		Issue:	
	Rev	Description	Drawn	Designed	Approved	Date	GENERUS LIVING GROUP		PROPOSED STORMWATER TREATMENT OVERALL		RESOURCE CONSENT	
	A	FOR RESOURCE CONSENT	VK	DH	KA	22-08-2025	Project: THE POINT, 217 KUPE STREET MISSION BAY, AUCKLAND				Scale @ A3:	
	B	LANDSCAPE LAYOUT REVISED	VK	DH	KA	18-09-2025					1:1000	
	C	FOR RESOURCE CONSENT	KH	DH	KA	11-11-2025					Dwg No:	
	D	FOR RESOURCE CONSENT	KH	DH	KA	13-11-2025					22064-C934	
											Rev:	D



Do Not Scale For Construction



Revision History:

Rev	Description	Drawn	Designed	Approved	Date
A	FOR RESOURCE CONSENT	VK	DH	KA	22-08-2025
B	LANDSCAPE LAYOUT AND NOTES REVISED	VK	DH	KA	18-09-2025
C	FOR RESOURCE CONSENT	KH	DH	KA	11-11-2025
D	FOR RESOURCE CONSENT	KH	DH	KA	13-11-2025



Client:
GENERUS LIVING GROUP

Project:
**THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND**

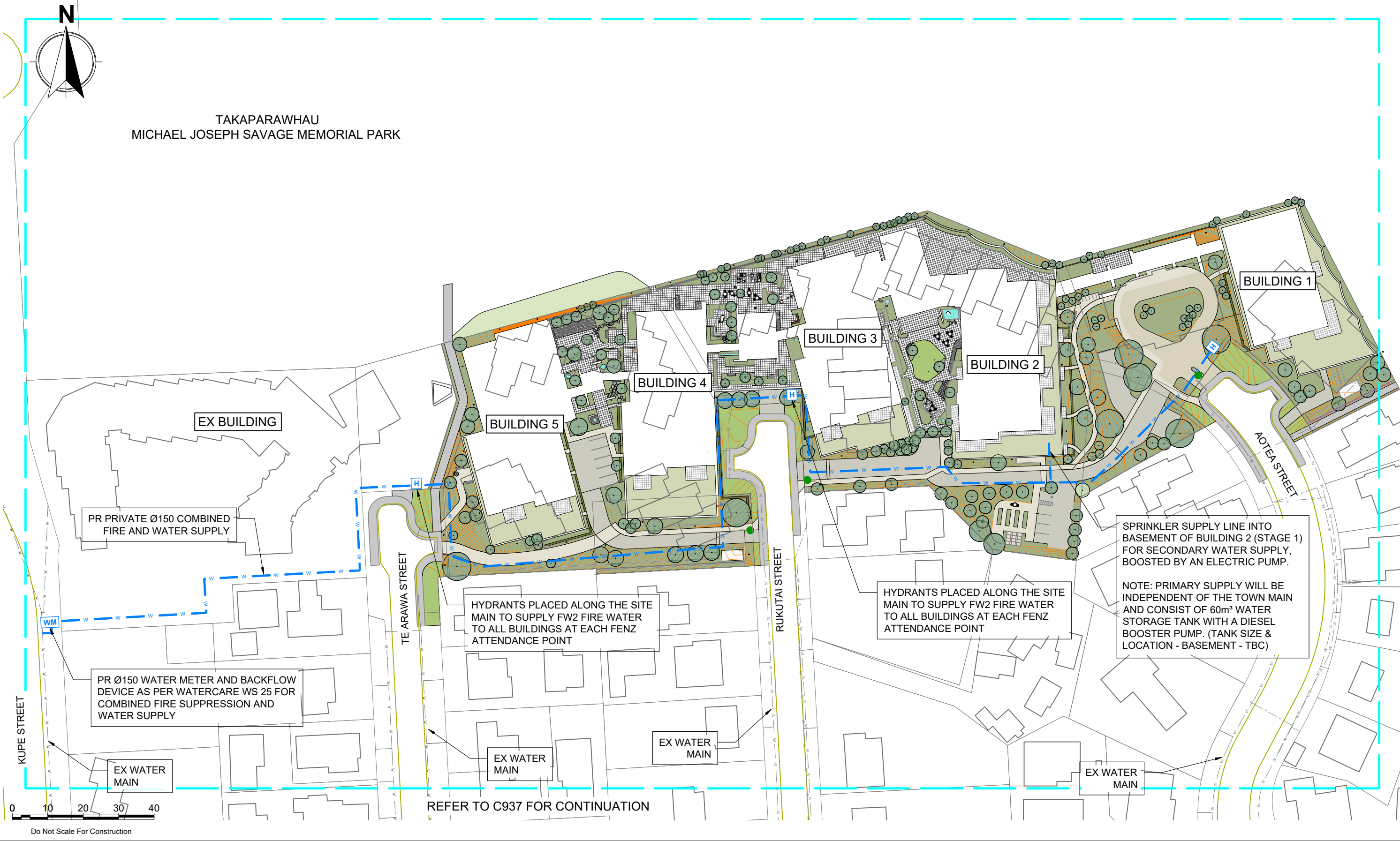
Drawing Title:
**PROPOSED STORMWATER
TREATMENT
SHEET 1 OF 1**


Issue:
RESOURCE CONSENT

Scale @ A3:
1:500

Dwg No:
22064-C935

Rev:
D






CLC
CONSULTING
WWW.CLCGROUP.CO.NZ P:09-576 3276

Revision History:

Rev	Description	Drawn	Designed	Approved	Date
A	FOR RESOURCE CONSENT	VK	DH	KA	18-09-2025
B	FOR RESOURCE CONSENT	VK	DH	KA	11-11-2025



Telarc.
Registered

Quality
ISO 9001

Client:
GENERUS LIVING GROUP

Project:
**THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND**

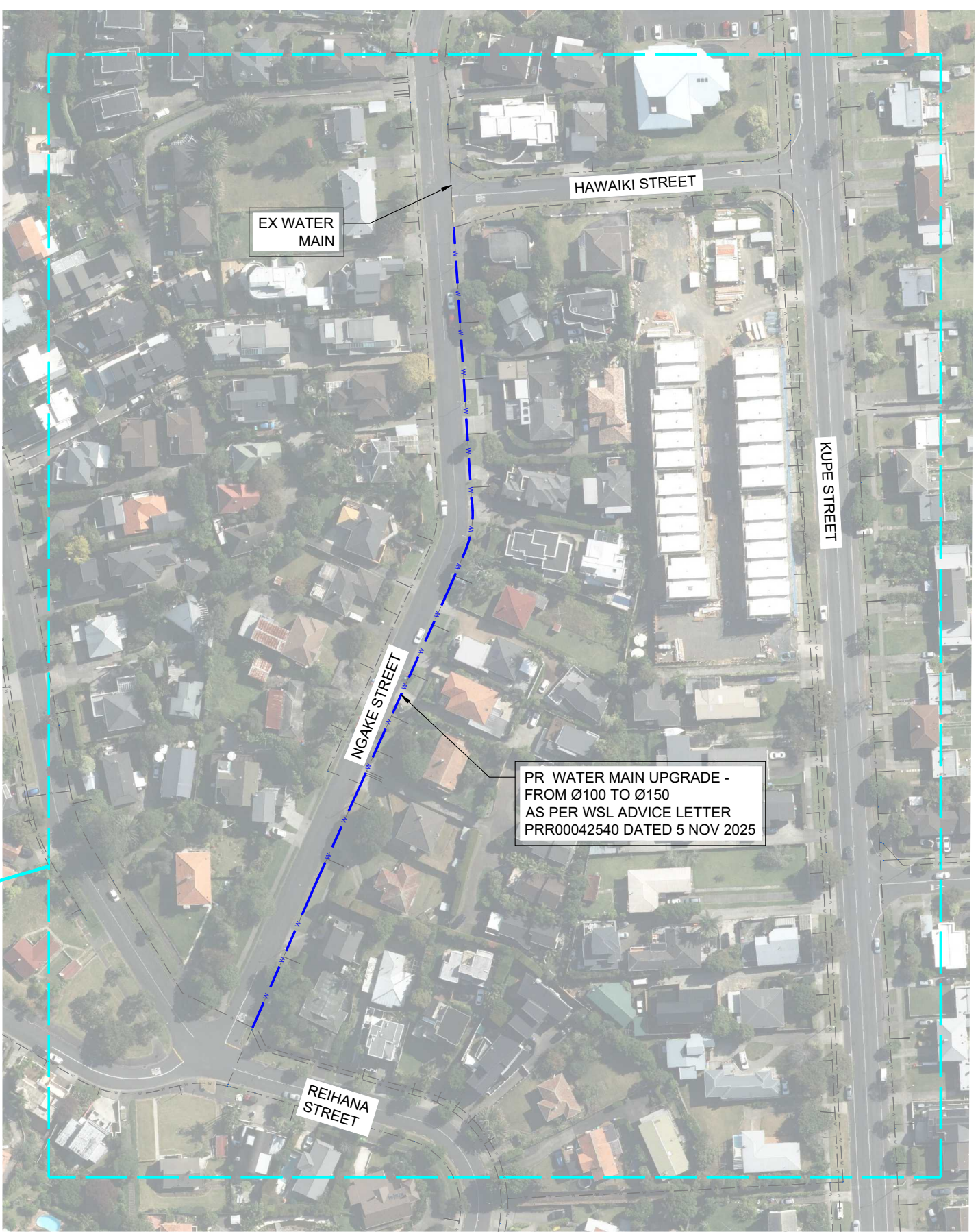
Drawing Title:
**PROPOSED
WATER SUPPLY
SHEET 1 OF 2**

Issue:
RESOURCE CONSENT

Scale @ A3:
1:1000

Dwg No:
22064-C936

Rev:
B



0 15 30 45 60
Do Not Scale For Construction



Revision History:

Rev	Description	Drawn	Designed	Approved	Date
A	FOR RESOURCE CONSENT	VK	DH	KA	11-11-2025



Client:

GENERUS LIVING GROUP

Project:

THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND

Drawing Title:

PROPOSED
WATER SUPPLY
SHEET 2 OF 2

Issue:

RESOURCE CONSENT

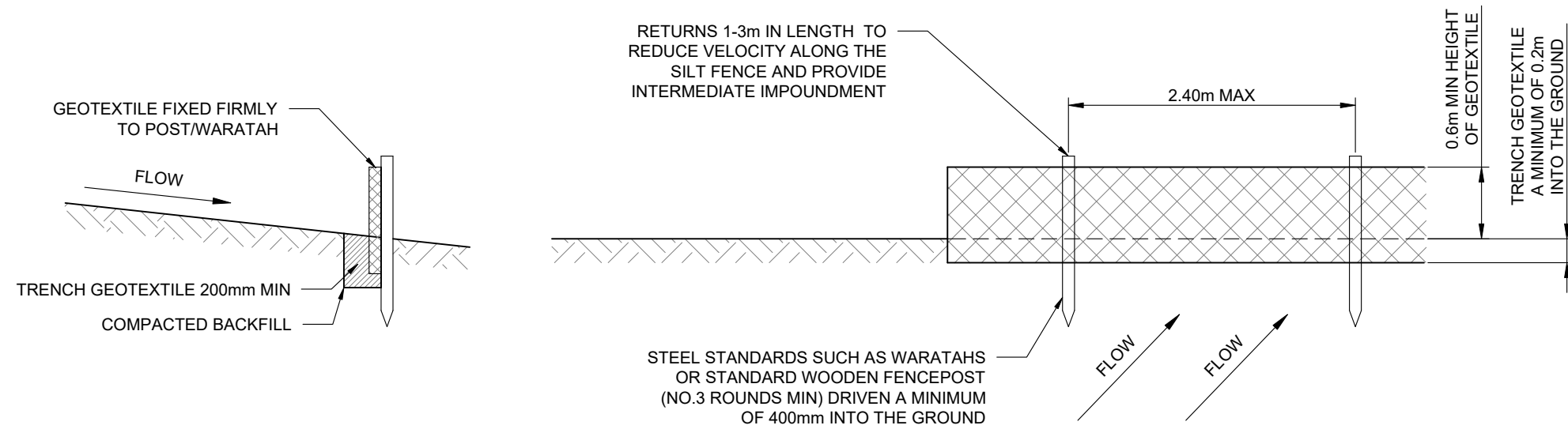
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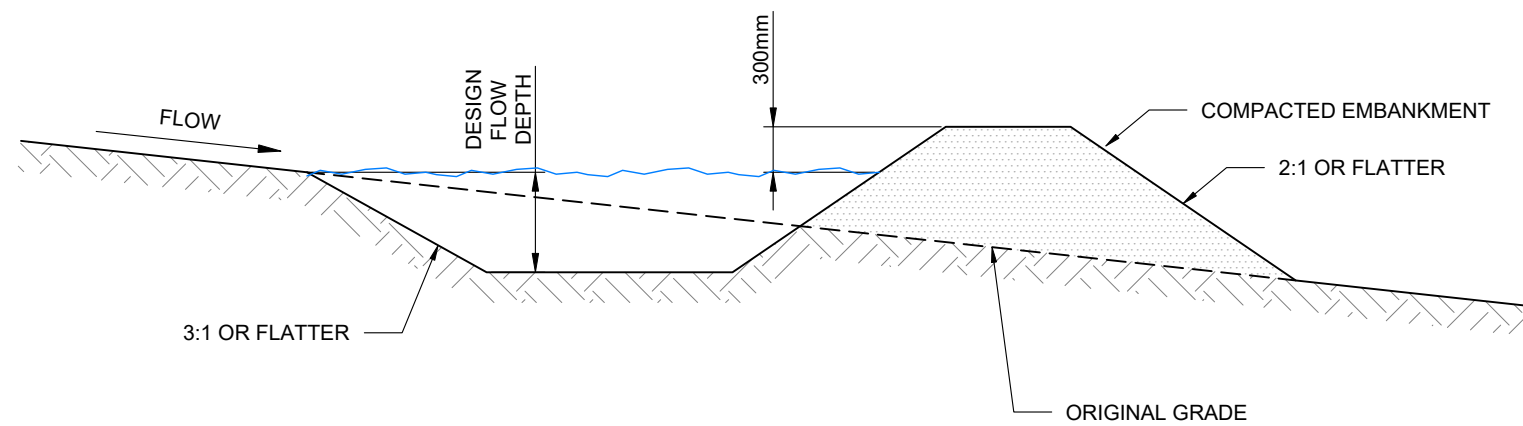
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22064-C937

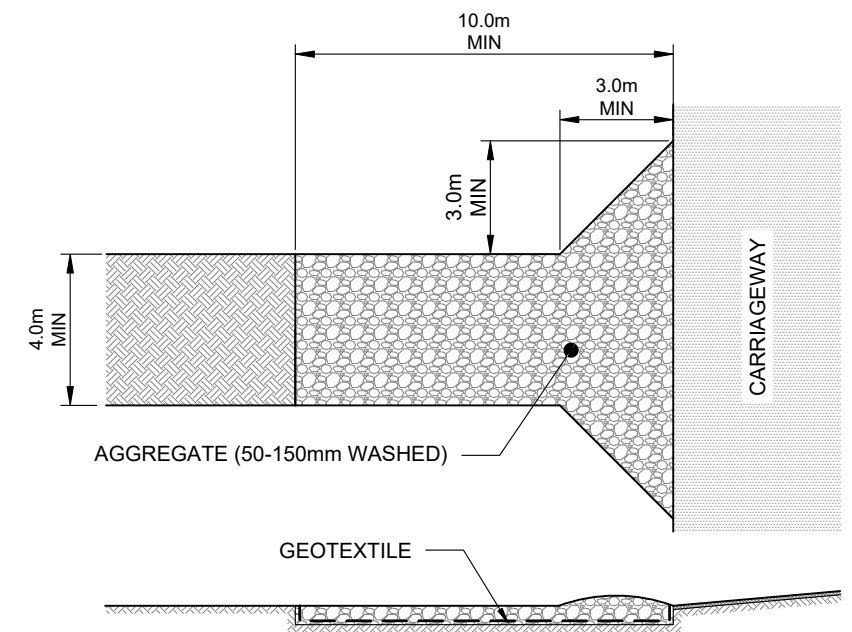
Rev:



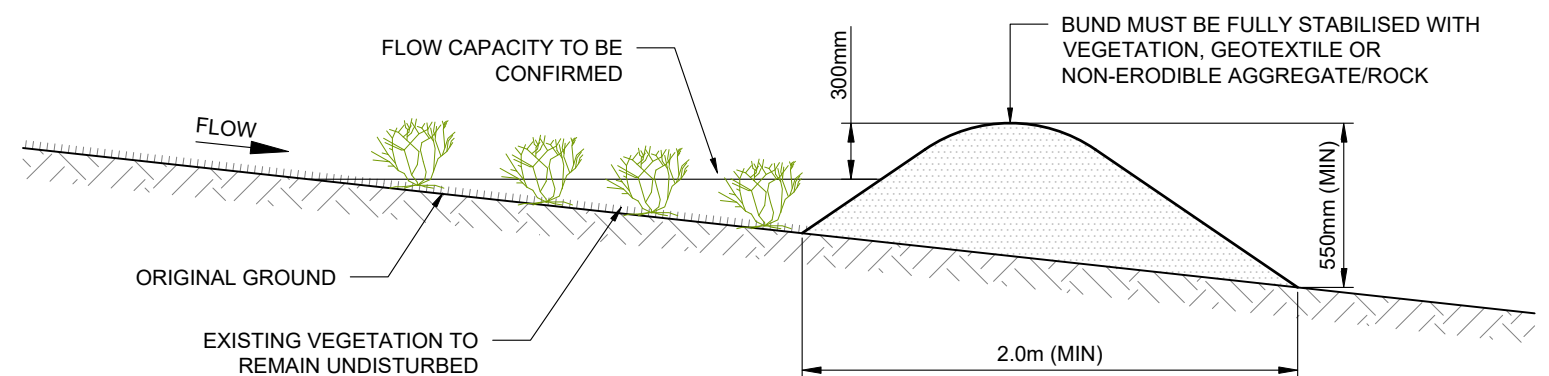
SILT FENCE DETAIL



DIRTY WATER DIVERSION



STABILISED ENTRANCEWAY



CLEAN WATER DIVERSION BUND



Revision History:

Rev	Description	Drawn	Designed	Approved	Date
A	RESOURCE CONSENT	VK	RC	KA	28-08-2025



Client:

GENERUS LIVING GROUP

Project:

**THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND**

Drawing Title:

**EROSION AND SEDIMENT
CONTROL DETAILS**

Issue:

RESOURCE CONSENT

Scale @ A3:

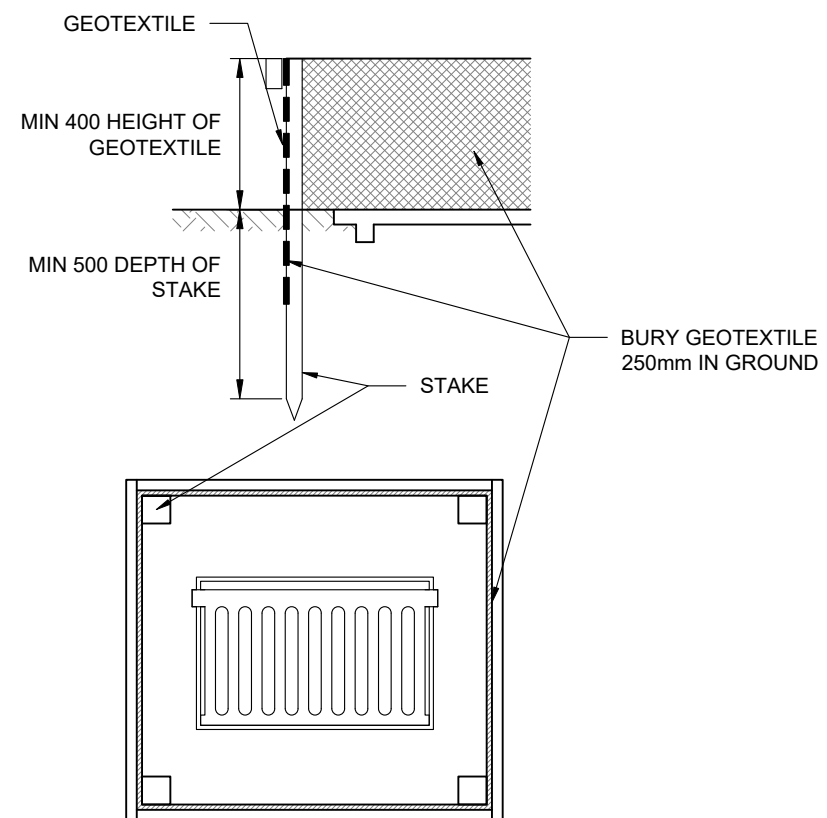
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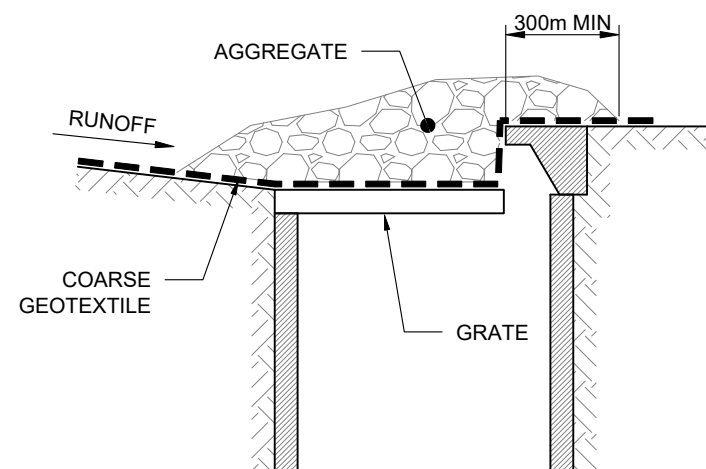
22064-C940

Rev:

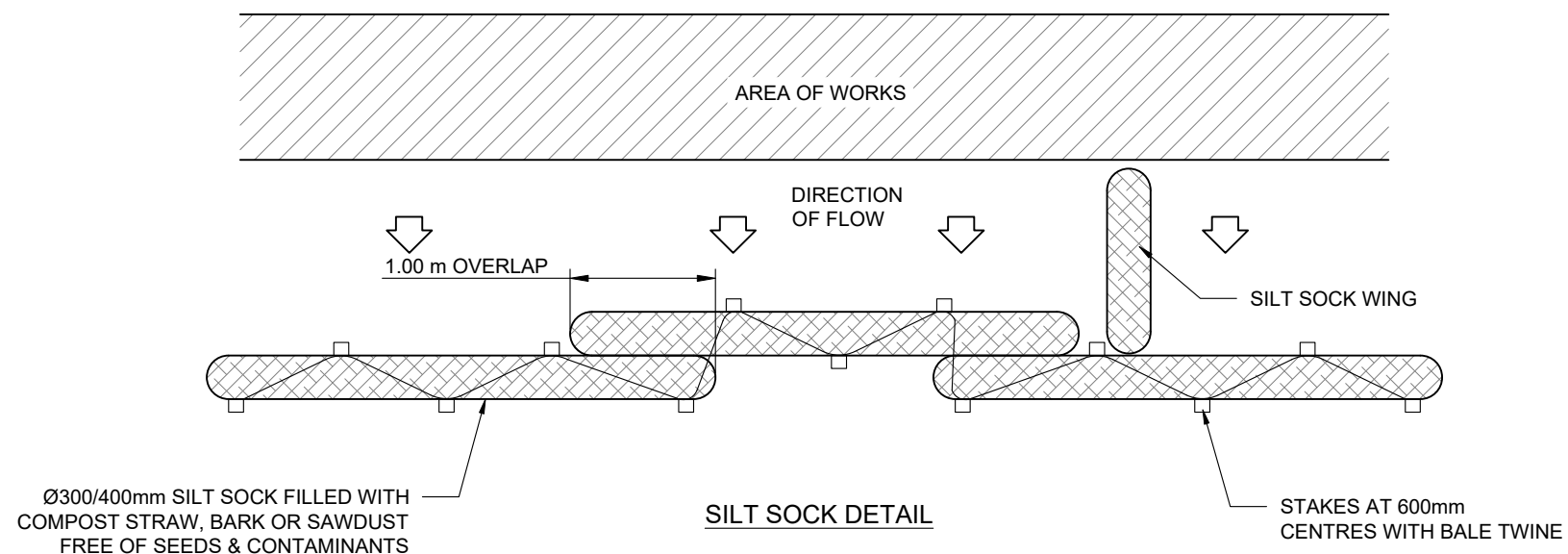
A



TYPE 1 - STORMWATER INLET PROTECTION



TYPE 2 - STORMWATER INLET PROTECTION



Revision History:

Rev	Description	Drawn	Designed	Approved	Date
A	RESOURCE CONSENT	VK	RC	KA	28-08-2025

Client:

GENERUS LIVING GROUP

Project:

**THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND**

Drawing Title:

**EROSION AND SEDIMENT
CONTROL DETAILS**

Issue:

RESOURCE CONSENT

Scale @ A3:

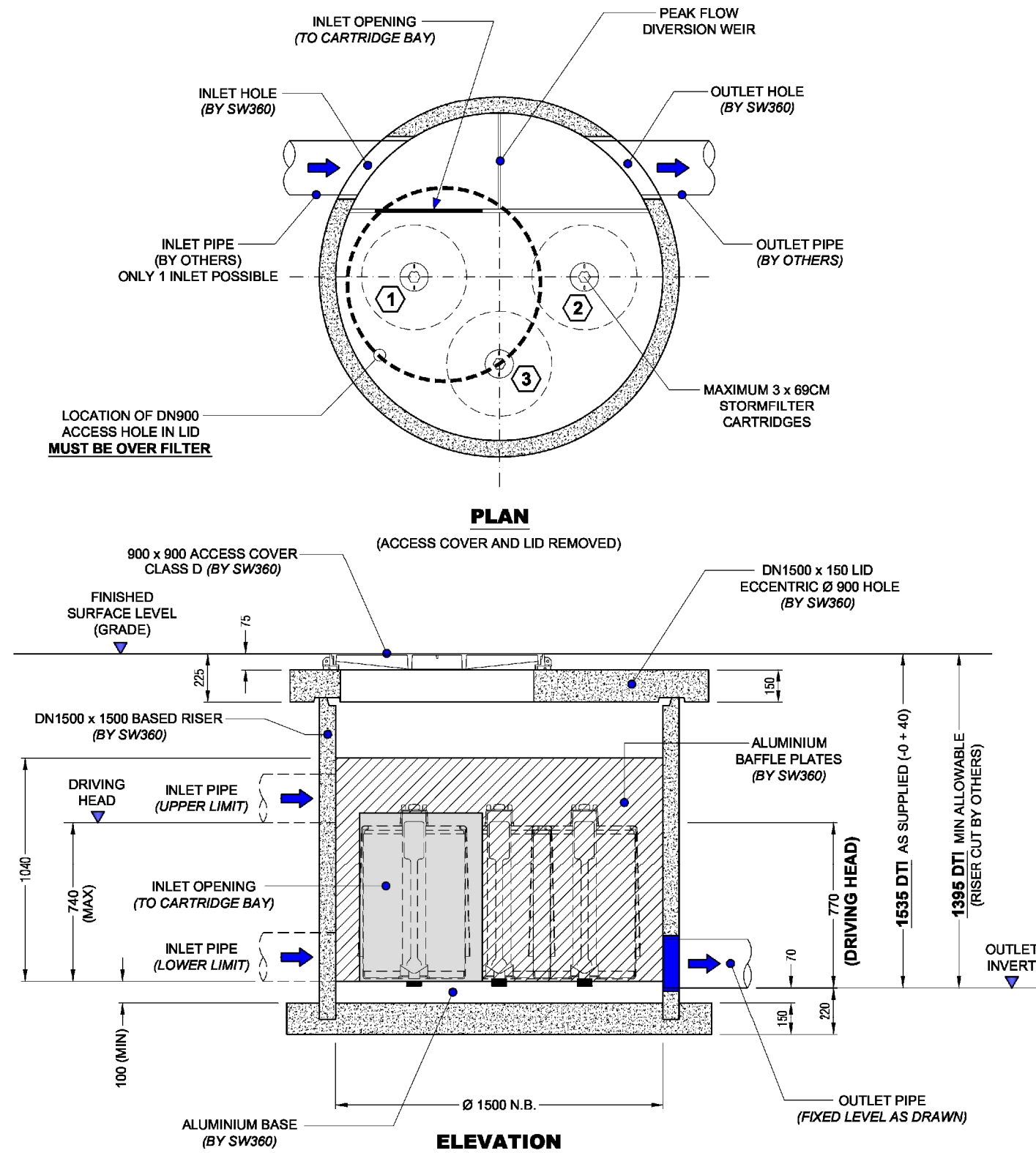
NA

Dwg No:

22064-C941

Rev:

A

**TO BE COMPLETED BY CUSTOMER / CONTRACTOR**

COMPANY :		P.O. NUMBER :	
SITE ADDRESS :			
SITE CONTACT & PHONE :			
PREFERRED DELIVERY DATE (TBC SW360) :			
STORMFILTER REFERENCE (IF APPLICABLE) :			
INLET PIPE Ø : DN225 RCRRJ - MAX DN300 PVC - MAX	PIPE MATERIAL : (PVC OR RCRRJ)	CORE DRILL Ø :	INLET (IL) :
OUTLET PIPE Ø : DN225 RCRRJ - MAX DN300 PVC - MAX	PIPE MATERIAL : (PVC OR RCRRJ)	CORE DRILL Ø :	OUTLET (IL) :
LID LEVEL (RL) :	DTI :	ORIENTATION : 180° (AS DRAWN) / 90° / 135°	
COMPLETED BY :		SIGNED :	DATE :

TO BE COMPLETED BY SW360

SW360 PRODUCT CODE :			
MEDIA TYPE (CIRCLE ONE) :	PERLITE	ZPG	OTHER :
CARTRIDGE QTY (STATE) :			PRE-INSTALLATION (Y/N) :
SP FLOW RATE (CIRCLE ONE) :	FULL (Ø 27.6 ID) BLACK/MUSTARD	3 QTR (Ø 24.0 ID) WHITE/OPAL	HALF (Ø 19.7 ID) GREEN
ACCESS COVER (CIRCLE ONE) :	900 x 900 WEB-FORGE / CLASS D		OTHER :
COMPLETED BY :	SIGNED :	DATE :	

NOTES

1. MANHOLE UNIT FITTED WITH 2 SWIFTLIFT ANCHOR POINTS. DO NOT EXCEED 60 DEGREE LIFT ANGLE. CONCRETE LID FITTED WITH 4 SWIFTLIFT ANCHOR POINTS.
2. UNIT SUPPLIED WITH INLET & OUTLET CORE DRILLED.
3. SEALING / GROUTING OF MANHOLE COMPONENTS AND PIPES BY CONTRACTOR. ENSURING LOCAL CODES AND REGULATIONS ARE COMPLIED WITH.
4. ANY RISERS REQUIRED TO INCREASE THE DEPTH TO INVERT (DTI) FROM THAT AS DRAWN TO BE SUPPLIED BY THE CONTRACTOR.
5. FOR A DTI EXCEEDING 5m PLEASE CONTACT **0800STORMWATER**.
6. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION RELATED EROSION RUNOFF.
7. BACKFILL, BEDDING AND BUOYANCY DESIGN BY ENGINEER OF RECORD
8. QTY OF CARTRIDGES BY ENGINEER OF RECORD.
9. CONCRETE MANHOLE RISERS ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AS/NZS 4058 : 2007
10. CONCRETE MANHOLE BASES ARE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH NZS 3101 : 2006 & NZS 3109 : 1997
11. CONCRETE LID DESIGNED AND MANUFACTURED TO HN-HO-72
12. FOR REQUIREMENTS OUTSIDE OF DRAWING SPECIFICATIONS PLEASE CONTACT **0800STORMWATER**.

APPROX WEIGHTS

MANHOLE SECTION INCLUDING CARTRIDGES : **2800 Kg**
(AS DELIVERED, BASED ON QTY 3 ZPG CARTS)
LID WEIGHT : **900 Kg**



0800 STORMWATER
sales@stormwater360.co.nz
www.stormwater360.co.nz

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STORMFILTER® PEAK DIVERSION
OFF - LINE CARTRIDGE FILTRATION SYSTEM
69cm CART / DN1500 x 1500 MH - TRAFFICABLE
GENERAL ARRANGEMENT

SCALE : N.T.S. DRG No : SF-MHPD-69-1500-T-20 REV : 0 DATE : 22.05.19

JOB NO :	REV	REVISION DETAIL	DATE
PROJECT :	A	FOR APPROVAL	22.05.19
DRN :	0	APPROVED	23.05.19
CKD :			

**Revision History:**

Rev	Description	Drawn	Designed	Approved	Date
A	FOR RESOURCE CONSENT	VK	DH	KA	22-08-2025
B	DETAIL REVISED	VK	DH	KA	18-09-2025
C	DETAIL REVISED	VK	DH	KA	11-11-2025

**Client:**

GENERUS LIVING GROUP

Project:

**THE POINT, 217 KUPE STREET
MISSION BAY, AUCKLAND**

Drawing Title:

**STORMWATER TREATMENT
DETAILS**

Issue:

RESOURCE CONSENT

Scale @ A3:

NA

Dwg No:

22064-C942

Rev:

C

Appendix G– Healthy Waters and Watercare Correspondence



5 November 2025

Jin Lee
Development Engineer
Auckland Council

Dear Jin,

Council Resource Consent number PRR00042540
217 Kupe ST Orakei 1071
Watercare application number – RC- 298839

Section 1 - Purpose

Watercare has reviewed the application for Resource Consent in relation to Watercare's ability to provide water and wastewater services to the proposed **252 new Independent Living Units (ILUs) within the five new buildings - East Cliffe Retirement Village**, and the proposed extension to our networks set out, in particular to the attached drawings.

Subject to the conditions below, we confirm that Watercare is able to provide **water** and **wastewater** services to the proposed subdivision, and that the proposed works under the resource consent application will meet our requirements for the vesting of public water supply and wastewater infrastructure.

Section 2 – General conditions

1. Watercare's confirmation in this letter is based on the application for resource consent as at today's date in particular to the attached **Infrastructure Report prepared by CLC Consulting Limited ; Dated: 26-Feb-2025 with Rev – C , Job No - 22064 including Project Drawings with Job No: 10476, Dwg No: A03.001 Rev-A, Fast track Referral Documentation and duly filled in WSL water and wastewater network sizing and capacity calculations & WSL Development Assessment Forms Dated: 22/07/2025 as part of the report**. Any amendment to the proposals set out in those documents will require further review and approval from Watercare and is not covered by this letter.
2. The applicant must produce under the engineering plan approval stage a completed design of the proposed water supply and wastewater infrastructure, including infrastructure to vest in Auckland Council and thereafter in Watercare (**public water supply and wastewater works**), in accordance with the current *Watercare Water and Wastewater Code of Practice for Land Development and Subdivision (Code of Practice)* as well as Watercare's standards for material supply, construction and asset data capture.
3. All public water supply and wastewater works required to service this subdivision/development shall be designed and constructed by the applicant at no cost to Watercare.



4. The public water supply and wastewater works must be demonstrated to comply with Watercare's requirements in accordance with Watercare's *Compliance Statement Policy, Part 1 for Land Development and Subdivision Works*.
5. Engineering plan approval must be obtained from Auckland Council for all public water supply and wastewater works before construction begins.
6. All connections to Watercare's water/wastewater networks shall be made in accordance with Watercare's connection processes and must comply with the Code of Practice.

Section 3 – Local conditions

This assessment is valid for 2 years from the date of this letter.

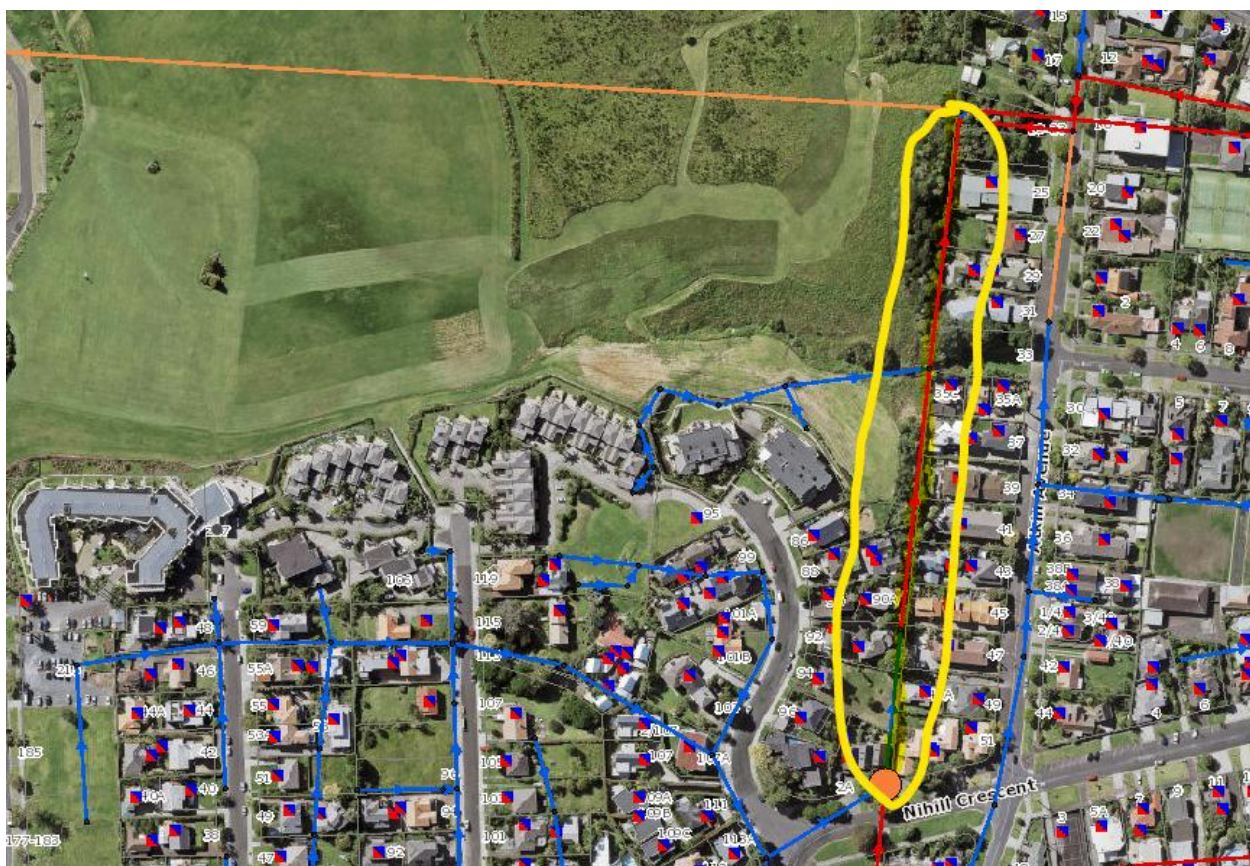
1. **There are constraints in Watercare's wastewater network at the time of this assessment** to accommodate the proposed **252 new Independent Living Units (ILUs) within the five new buildings - East Cliffe Retirement Village**. The following outcome of the application review is addressed:
 - a. There are current capacity constraints in the local network, particularly along the 450 mm wastewater line between Nihill Crescent and the 900mm Mission Bay transmission line.
 - b. These constraints are resulting in overflows at the upstream end of the line (WWMH with GID ID: 532465).
 - c. While the transmission line itself has available capacity (as reflected in the Watercare capacity constraints GIS map), the local network limitations are preventing additional flows from being accommodated at this stage.

As such, we are unable to accept any further volume into this section of the network in its current state, as this would increase the risk of further overflows.

To enable additional volume in the future, potential options include:

- d. Upgrading the existing sewer pipe to a larger size (which is currently 450mm gravity main from WWMH 532465 to WWMH 514583)
- or,
- e. Constructing additional sewer infrastructure/connection to increase capacity to the transmission line.
- f. Additionally, identifying and removing any stormwater that may be incorrectly connected to the foul sewer, would improve overall network performance.

The below is an indicative mark up of the upgradation required for the existing infrastructure



2. **There are constraints in Watercare's water network at the time of this assessment** and to be able to accommodate the proposed **252 new Independent Living Units (ILUs) within the five new buildings - East Cliffe Retirement Village** the following upgrades will be required:

- a. Based on the assessment, the proposed 252-unit retirement development can be adequately serviced by the existing 150 mm internal diameter (ID) 5631513 watermain along Kupe Street, as it has sufficient capacity to support the development, provided the requested upgrades are implemented. The watermain is looped through Kitemoana Street, which ensures sufficient capacity to meet both commercial and residential demands. Therefore, there is no need to connect to other streets for additional supply.

However, to maintain the required Level of Service (LOS) for this development, the following upgrades are necessary.

An upgrade of the current 100Ø CI watermain to a minimum size of 150 mm ID for an approximately 250 meters length of the watermain along Ngake Street is necessary, as outlined below.



Regarding fire supply, the existing reticulation system can only provide FW2 (25 L/s). As such, the developer will be required to install a tank or a tank-and-pump system to meet the fire flow and sprinkler demands for the site. If the proposed 60 m³ tank and pump system is sufficient to meet these requirements, we have no objections to its implementation.



3. Reassessment for water and wastewater capacity will be required if the construction of this development has not commenced within 2 years of the date of this letter.
4. Proposed water and wastewater connections at the time of this assessment are as shown in the drawings.

Any further details with respect to the Engineering design shall be investigated during EPA stage.



5. Watercare will review the proposed water and wastewater design after lodgement of the application to the Council for engineering plan approval and accompanying CS1 and CS2 if applicable.
6. All works on existing public wastewater drains and watermains shall be carried out only by a Watercare approved contractor at the applicant's expense.
7. Adequate provision shall be made during earthworks associated with construction to protect any existing public wastewater drains and watermains that traverse the site. Any damage to the drains or watermains that may occur during construction shall be the applicant's responsibility.
8. This letter does not constitute a guarantee from Watercare to provide a fire fighting capability in accordance with Fire and Emergency New Zealand Code of Practice.
9. Water pressure could change in the future. To comply with FW2 fire risk classification, the installation of a sprinkler system and/or booster pump may be required for commercial, industrial high-rise and mixed-use buildings.



10. Watercare approval is required before any individual building /lot is connected to the public water and/or wastewater network. An application for new connection shall be submitted to Watercare in conjunction with the application to Council for building consent.
11. Watercare infrastructure growth charges will apply to this development. Details of the charge are available on the website, watercare.co.nz.
12. Property service connections must comply with the requirements enumerated under Section 6.3.16.2 of the Auckland Code of Practice for Land Development and Subdivision Chapter 6 – Water.
13. Mixed-used development shall have two (2) separate bulk water meters, one (1) to service the residential units and one (1) to service the commercial units.

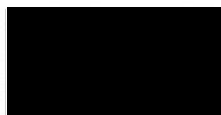
Section 4 – Advice notes

1. This approval does not relinquish **CLC Consulting Limited** of their responsibility to ensure the design complies with the requirements of Watercare Standards.
2. Watercare level of service can guarantee only for domestic water supply to a property with at least 25 litres per minute at 200 kPa at the outlet of the water meter.

Next step

To proceed with construction the applicant will be required to complete the design and lodge an engineering plan application with Auckland council

Yours faithfully,



Sri Velicherla
Development Engineer - Developer Services
Watercare Services Limited

Council Feedback – Infrastructure Report

Please see comments below from our Development Engineer, WSL and HW.

Please note that there are some aspects in terms of flood matters that HW is further investigating – these areas are noted in the comments below.

In addition to the comments below, I would just also highlight the upcoming plan changes with regards to flooding. As this may result in some changes for the subject site, the applicant is advised to consider this as relevant in subsequent assessments/design.

Please feel free to reach out if you have any questions.

Stormwater

- New impervious area > 5000 m² and therefore the applicant will require a Stormwater Management Plan - this is not a RMA matter but a LGA matter which is relevant for address.
 - Healthy Waters advises that this is considered a brownfields large site and recommend that the applicant progress with a Stormwater Management Plan as soon as possible. It is noted that the stormwater management/mitigation is outlined within their reporting from the perspective of alignment with rules in the AUP but will need to be updated to consider/refer to Schedule 4 of the Regionwide Network Discharge Consent for completeness. Please refer to: <https://www.aucklanddesignmanual.co.nz/en/developing-infrastructure/stormwater-network-discharge-consent-ndc.html>

Stormwater Network Discharge Consent (NDC)



The Regionwide Stormwater Network Discharge Consent (NDC) is a key tool in managing and integrating land uses, stormwater discharges and the region's built and natural water assets. The NDC authorises the diversion and discharge of stormwater from the current and future public stormwater network in the urban area. To account for the complexity of urban stormwater, the NDC outlines objectives ...

www.aucklanddesignmanual.co.nz

We can prepare an SMP

- Building over public stormwater lines >375 mm diameter for Building 2 and accessway between Buildings 1 and 2 has been identified.
 - Healthy Waters has expressed that this should be avoided where possible however if unable to be avoided, the applicant must provide clear and robust justification as to why in accordance with the criteria within the Stormwater Code of Practice (4.3.22).

The design we have presented in the infrastructure report maintains the catchment layouts/areas currently draining the public stormwater networks. E.g. It does not divert catchment areas from one pipe network to another. However, it does require build over as

identified above. If HW are not supportive of the proposed public extension under the building, then we propose Option B for HW consideration.

Option B Summary – See Attached Markup Plan

1. Redirect all or a portion of Catchments A (Kupe St Cul-de-sac Head) and Catchment B (Existing retirement village building) to a new public SW network in Reserve (along northern boundary of site) which connects to EX SW network 1. Diversion of all or a portion of these networks frees up capacity in Ex Network 3 for the additional flows added from Rukutai St Cul-de-sac head catchment discussed below.
2. Divert 2x Catchpits from Rukutai St Cul-de-sac Catchpits with a 45m public extension southward along Rukuatai ST to Ex public Network 3.
3. Drainage servicing Proposed buildings 1 to 5 can then all be private with no public network within the site area of Buildings 1 to 5. Private SW networks within site could drain along basement walls or under basement slab and connect to the new public network in the Reserve.

Option B Advantage

1. No public SW build over required.
2. Public WW drainage already proposed in Reserve on similar alignment to Option B SW so works in Reserve already required. Proposed pipes in reserve have good maintenance access.
3. Results in increased catchment area to Network 1 which is a larger network mainly in reserve area and closer to open watercourse outlet to sea. .
4. Decreased catchment area to Network 3 through residential properties and is likely under capacity.

Mitigation to predevelopment levels proposed which is generally acceptable under the RMA requirements and continued use of the public network connections. Further details required as part of BC and EPA process for detailed design and the required Stormwater Management Plan.

- Healthy Waters has identified that the downstream catchment area is sensitive and is pursuing further internal discussions on whether attenuation in general is supportable. **We need clarity from HW as to mitigation requirements prior to progressing the design and SMP.**
- It is acknowledged that the Infrastructure Report provides details on the potential effects on natural hazards from the perspective of development within the site however additional information and assessment is required to address the downstream sensitivity/floodplain, and whether there may be any effects on this existing flood hazard. **Need clarity on this. Are they asking for 1% Mitigation or modelling of downstream floodplain to confirm increase in 1% flows on floodplain will be less than minor?**
- Intentions of conditions proposed are generally acceptable but require some tinkering to align with current condition set and expectations. **OK**
- Climate change factor applied for attenuation is outdated using 13.2%, the SW COP requires this to be 17% . **Agreed**

Overland flows

- Note that catchment areas are taken from GeoMaps which is indicative only. This should be verified by the consultant and catchment area plans provided to verify.
 - Healthy Waters is pursuing further detail on this internally and will provide an update when ready.
- Proposal indicates changes to catchment areas as a result of regrading. A plan showing the catchment areas pre- and post- development should be provided.

Yes we can produce pre and post development catchment plans for OLFPs

- Locations where overland flow path channel cross section used in calculations should be shown on a plan. Yes we can do this.
- Hazard risk assessment is required as per AUP Rule E36.9(2) addressing (a) - (l) should be provided to address the increased risk of persons to overland flows e.g., elderly, non-able bodied persons, children, vehicles etc., who may be exposed to overland flows as a result of proposal.

Yes we can complete a Hazard Assessment as per E36

Water

- The commercial and residential demand has been included in the Rukutai Street area. It is recommended that the existing 100 mm ID pipe be upgraded to a 150 mm ID over approximately 700 m, from Tokomaru Street to Rukutai Street, by connecting to the principal mains and rider mains on the opposite side of the road, including the necessary road crossings. Current proposal does not require connection to Rukutai Street. Proposal just has connection from Kupe with good pressure and flow. Need to discuss further with Watercare.
- Based on hydrant test results, the FW2 requirement can be met by the nearby current reticulation system. However, the developer has not specified the sprinkler system requirements for the development, nor have they indicated any sprinkler connection from the water supply system to the development in this application. Therefore, we would not assess any fire flow demands beyond FW2.
- As the project is an apartment building, Watercare has assumed that the developer will install an on-site tank or a tank-and-pump system to meet the sprinkler requirements, if there are any. Please confirm on that.

Yes, 60m3 of Water storage with diesel booster pumps is proposed. Refer CLC Drawings 22064-C935 Rev A

Wastewater

- There are significant capacity issues in the downstream network, with a type 2 EOP currently operating in exceedance of 2 spills per year. Network performance in this

catchment is currently being monitored due to separation works having recently been carried out. Gauge data shows that separation works have not currently been sufficient to resolve overflow performance. Network upgrades are likely to be required to the downstream 450mm pipeline to resolve overflow performance.

- This may change depending on further information from the site, i.e. if the site currently has a stormwater connection to the wastewater network that will be removed through development total flows from the site may be reduced.

No we are not aware any SW from site connecting to Watercare wastewater network.

- Connection of this site will either require upgrades of the network to mitigate capacity issues or demonstration of the net reduction in flows from the site due to existing combined connection.

This goes against Watercare Capacity Mapas and advice in Watercare email dated 10 Feb 2024 that the wider town/suburb level has capacity (included in Infrastructure Report Rec F)

Earthworks

- Dust control measures are provided for and sufficient to address E12
- Erosion and sediment control not addressed by DE – likely to be addressed through conditions
- How long is expected for 'temporary' for the proposed temporary batters and shoring?
- Works extend beyond the site boundary e.g., diversion bunds north of the site. It appears the applicant has agreement to undertake these works, we agree with CLC that this consent would not allow the applicant to undertake works on others land.
- Temporary inground retaining is proposed along the northern boundary, will permanent retaining be installed also? If so, please provide a plan showing the location, extent and heights of proposed retaining and the intended retaining wall type.

Geotechnical

- Will staged completion reporting be pursued? Or is it the applicants preference to have completion reporting following completion of all works?
- Geotechnical reporting appears to have been undertaken but not supplied. Request that this be provided with lodgement for review and input. Geotechnical reporting should be prepared by a suitably qualified geotechnical engineer/engineering geologist or reviewed by a qualified geo-professional (CPEng or PEngGeol) to assess the revised proposal under E12.6.2(2) and E12.8.2(1)(c) (for instability on neighbouring land and private services) and E12.6.2(3) and E12.8.2(1)(j) (for the protection of public services). This should include the standard expectations of a GIR as described in the Auckland Code of Practice, Chapter 2 including (but not limited to):
 - Sufficient ground investigation.

- Geological cross section(s) through the site showing locations and depths of the completed soil investigation, position of the proposed building platform and retaining walls (if applicable), location of the lot boundary, estimated groundwater level(s), and the existing and the proposed ground levels and public services.
- Geotechnical review of proposed earthworks including geotechnical recommendations
- Slope stability assessment (and analyses if appropriate) for the proposed conditions.
- Geotechnical soil/rock parameters using ground conditions proven at the site.
- Comments on liquefaction and lateral spread risks
- Preliminary construction methodology and sequencing of works for the proposed excavations and construction of retaining walls proximal to the site boundary.
- Recommendations for proposed filling works including testing, specifications etc.

Comments on the potential effects of the proposed excavations and retaining on the existing neighbouring land, structures, buildings and any private and public services as a result of ground settlement (including consolidation and mechanically induced settlement) with considerations to condition, depth, age and construction type. If applicable, please provide preliminary calculations of deflection/induced (mechanical) settlement for the temporary and permanent retaining structures.