THOMSON SURVEY LIMITED

SURVEYORS AND RESOURCE PLANNERS

Our Reference: 10886

26 June 2026

Resource Consents Department
Far North District Council
JB Centre
KERIKERI

Dear Sir/Madam

RE: Proposed multi lot subdivision and discharge consent – 2052 SH 10, Waipapa – 2052 S H 10 Waipapa Limited (Director Paul Vegar)

I am pleased to lodge on behalf of the applicant, an application for a multi unit subdivision and discharge consent on land in three titles at 2052 SH10 Waipapa, zoned Commercial under the Operative District Plan, and Mixed Use under the Proposed District Plan. The activity is a discretionary activity.

The application, including a Form 9, is attached. The appropriate fee for the number of lots being proposed, and the discharge consent, has been paid separately.

Regards

Lynley Newport
Senior Planner
THOMSON SURVEY LTD

315 Kerikeri Road, Kerikeri
P.O. Box 372, Kerikeri 0245, New Zealand.
Email: Kerikeri@tsurvey.co.nz
denis@tsurvey.co.nz, sam@tsurvey.co.nz

Telephone: **09 4077360**
Facsimile: **09 4077322**
*After Hours:*Director: Denis Thomson 09 4071372
*After Hours:*Office Manager: Sam Lee 021 1370060

Te Kaunihera o Te Hiku o te Ika
Far North District Council

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Form 9). Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a council Resource Consent representative to discuss this application prior to lodgement?

◯ Yes ☑ No

2. Type of consent being applied for

(more than one circle can be ticked):

- ◯ Land Use
- ◯ Fast Track Land Use*
- ◯ Change of Consent Notice (s.221(3))
- ◯ Certificate of Compliance (s.139)
- ◯ Extension of time (s.125)
- ☑ Discharge: Total voume = 2,160.00 m³
  Note; volumes >3m³ requires NRC Consent.
- ☑ Subdivision
- ◯ Existing Use Certicicate (s.139A)
- ◯ Consent under National Environmental Standard
  (e.g. Assessing and Managing Contaminants in Soil)
- ◯ Other (please specify)

**The fast track is for simple land use consents and is restricted to consents with a controlled activity status.*

3. Would you like to opt out of the fast track process?

☑ Yes ◯ No

4. Consultation

Have you consulted with Iwi/Hapū? ◯ Yes ☑ No

If yes, which groups have you consulted with?

Who else have you consulted with?

For any questions or information regarding iwi/hapū consultation, please contact:
The Resource Consents Planning Technicians, **planning_technicians@fndc.govt.nz**

5. Applicant details

Name/s: 2052 S H 10 Limited (Director Paul Vegar)

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

Have you been the subject of abatement notices, enforcement orders, infringement notices and/or convictions under the Resource Management Act 1991? ◯ Yes ☑ No

If yes, please provide details.

6. Address for correspondence

Name and address for service and correspondence (if using an Agent write their details here)

Name/s: Lynley Newport at Thomson Survey Ltd

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.

7. Details of property owner/s and occupier/s

Name and Address of the owner/occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s: 2052 SH10 Waipapa Limited

Property address/ location: refer Item 5

8. Application site details

Location and/or property street address of the proposed activity:

Name/s: see item 7

Site address/ location: 2052 SH 10
WAIPAPA
Postcode 0930

Legal description: Lot s1 & 2 DP 203824 & 1 other **Val Number:**

Certificate of title: NA131A/749; NA131A/750; NA132C/411

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ☑ Yes ○ No

Is there a dog on the property? ○ Yes ☑ No

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details. This is important to avoid a wasted trip and having to re-arrange a second visit.

Building is currently still leased so notice will need to be given to Tenants

9. Description of the proposal

Please enter a brief description of the proposal here. Please refer to Chapter 4 of the *District Plan, and Guidance Notes*, for further details of information requirements.

Subdivision of land zoned Commercial in the ODP and Mixed Use in the PDP, to create a total of 16 lots; plus
Discharge Consent pursuant to the Regional Plan.

If this is an application for a Change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s), with reasons for requesting them.

The proposal has been prepared in accordance with the following version of the FNDC Engineering Standards:

○ 2009 ☑ 2023

10. Would you like to request public notification?

○ Yes ☑ No

11. Other consent required/being applied for under different legislation

(more than one circle can be ticked):

☑ **Building Consent** Enter BC ref # here (if known)

○ **Regional Council Consent (ref # if known)** Ref # here (if known)

○ **National Environmental Standard Consent** Consent here (if known)

○ **Other (please specify)** Specify 'other' here

12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL)? ◯ Yes ☑ No ◯ Don't know

Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result? ☑ Yes ◯ No ◯ Don't know

☑ Subdividing land
◯ Changing the use of a piece of land
◯ Disturbing, removing or sampling soil
◯ Removing or replacing a fuel storage system

13. Natural hazards (National Policy Statement for Natural Hazards 2025)

Is the site subject to known or potential natural hazards (for example, flooding, coastal inundation, erosion, or unstable land), as contemplated by the National Policy Statement for Natural Hazards 2025? ◯ Yes ☑ No

If yes, please identify the relevant natural hazard(s) by ticking the applicable box(es) below:

◯ Flooding
◯ Landslips
◯ Coastal Erosion
◯ Coastal Inundation
◯ Active Faults
◯ Liquefaction
◯ Tsunami

Please ensure all relevant technical reports are submitted with the application.

14. Assessment of environmental effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as written approvals from adjoining property owners, or affected parties.

Your AEE is attached to this application ☑ Yes

15. Draft conditions:

Do you wish to see the draft conditions prior to the release of the resource consent decision? ☑ Yes ◯ No

If yes, please be advised that the timeframe will be suspended for 5 working days as per s107G of the RMA to enable consideration for the draft conditions.

16. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write in full) Paul Vegar

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

Fees Information
An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees
I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: (please write in full) Paul Vegar

Signature:
(signature of bill payer) [redacted] Date 22-Jun-2026

MANDATORY

17. Important Information:

Note to applicant
You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application
Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement.

A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:
Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, **www.fndc.govt.nz** These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

18. Declaration

The information I have supplied with this application is true and complete to the best of my knowledge.

Name (please write in full) Paul Vegar

Signature [redacted] Date 22 June 2026

[illegible] required by the application is made by electronic means

See overleaf for a checklist of your information...

Checklist of your information

Please tick if information is provided

- ◯ Payment (cheques payable to Far North District Council)
- ◯ A current Certificate of Title (Search Copy not more than 6 months old)
- ◯ Details of your consultation with Iwi and hapū
- ◯ Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- ◯ Applicant / Agent / Property Owner / Bill Payer details provided
- ◯ Location of property and description of proposal
- ◯ Assessment of Environmental Effects
- ◯ Written Approvals / correspondence from consulted parties
- ◯ Reports from technical experts (if required)
- ◯ Copies of other relevant consents associated with this application
- ◯ Location and Site plans (land use) AND/OR
- ◯ Location and Scheme Plan (subdivision)
- ◯ Elevations / Floor plans
- ◯ Topographical / contour plans

Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application. Please also refer to the RC Checklist available on the Council's website. This contains more helpful hints as to what information needs to be shown on plans.

2052 S H 10 Waipapa Limited (Director Paul Vegar)

PROPOSED SUBDIVISION
Under the Operative Far North District Plan
& Proposed District Plan
&
DISCHARGE CONSENT
Pursuant to the Regional Plan for Northland
(transfer of functions)

2052 State Highway 10, Waipapa

PLANNER'S REPORT &
ASSESSMENT OF ENVIRONMENTAL EFFECTS

Thomson Survey Ltd
Kerikeri

1.0 THE PROPOSAL

The applicant proposes to re-develop land in three adjacent titles at 2052 SH 10, Waipapa. Due to historical development on the sites, building and services crossed title boundaries, the three titles are held together under the Building Act such that they cannot be separately disposed of. The re-development involves land in all three titles, and once given effect to there will be no need to hold any titles together under the Building Act because there will be no buildings over new boundaries.

The applicant intends to re-purpose the existing commercial building on the site to create four separate fee simple titles, with fire wall separation. These are shown Lots 1-4 on the Scheme Plan(s) attached in Appendix 1. Other existing buildings and structures will be, or already have been, removed to allow a further 12 lots – numbered 5-16 on the attached Scheme Plan(s). Lot 17 provides for common services and parking/manouevring and traffic circulation and is to be owned in equal shares by Lots 1-16.

In addition, Lot 7 is to be utilised for on site wastewater treatment infrastructure, with all other lots having drainage easement over that Lot. Refer to Scheme Plan(s) and also to the On site Wastewater System Design Report supporting this application.

Lot sizes are as follows:

Lot 1 90m^2; (boundary based on existing fire wall separation)

Lots 2-4	182m^2;

All of the above lots are within the existing building. Lot 1 will accommodate three separate units/tenancies (Units 1-3 in the Fire Engineering Report supporting this applicaiton), while Lots 2-4 will accommodate one unit apiece.

Lots 5 & 6	96m^2;
Lot 7	274m^2 to accommodate wastewater infrastructure;
Lots 8 & 9	145m^2;
Lot 10	206m^2;
Lot 11	220m^2;
Lots 12-16	131m^2.
Lot 17	1,815m^2 to be held in shares

The intended use of the lots is mixed use commercial units. The average occupancy of the commercial units is anticipated to be 3 persons per unit. The types of commercial activity envisaged are small commercial, light industrial and warehouse/storage businesses. The wastewater collection, treatment and disposal system proposed for the site is based on this scenario, but for 18 lots, rather than 16 – effectively a design to cater for more lots than those now proposed. In regard to the Fire Report's occupancy figures, please note that these numbers are for the purpose of NZBC C clauses only (Building Code requirements).

The proposal provides for 40 car parking spaces, within the shared Lot 17. These will be allocated to the various commercial activities within each lot.

The three adjacent titles have two licensed crossing places to SH 10, one for commercial use, the other for residential use. It is proposed to retain two licensed crossings, but to separate them, and operate one as an entry only and the other as an exit only. The latter will be further south than the existing crossing. NZTA has been consulted and has provided conditional approval.

Due to the volume of discharge, exceeding 2,000l/day, discharge consent is required pursuant to the Regional Plan's Rule C.6.1.3.2. The nature of the discharge is essentially domestic and it is understood that the District Council has transferred/delegated powers to process applications for discharge of up to 3,000l/day. This proposal's discharge rate is less than 3,000l/day.

An assessment of the proposal against the relevant provisions of both the Operative and Proposed District Plans follows in Section 5 of this Planning Report/AEE.

The site is zoned Commercial under the Operative District Plan and Mixed Use under the Proposed District Plan. The applicant intends to provide for on-site wastewater treatment and disposal, and stormwater management has been designed. The application site has existing connection(s) to Council reticulated water supply and it is intended to utilise these

connections for the future lots. Fire Fighting water supply is available through Council hydrants in road reserve.

The application is supported by architectural plans in Appendix 2; Engineering Assessment Report attached in Appendix 5; Wastewater Report attached in Appendix 6; Traffic Assessment Report attached in Appendix 7; and a Fire Engineering Report, for Lots 1-6 only attached in Appendix 9. There is also a Fire Report, associated with the "subdivision" of the existing commercial building, into four separate titles and the design of the building to enable this.

1.2 Scope of this Report

This assessment and report accompanies the Resource Consent Application made by the applicant, and is provided in accordance with Section 88 and Schedule 4 of the Resource Management Act 1991. The application seeks consent to subdivide land in three titles into 16 fee simple titles, as a discretionary activity subdivision; and for discharge consent pursuant to the Regional Plan for Northland, also as a discretionary activity. The information provided in this assessment and report is considered commensurate with the scale and intensity of the activity for which consent is being sought. Applicant details are contained within the Application Form 9.

2.0 PROPERTY DETAILS

Location:	2052 SH 10, Waipapa. Location map attached in Appendix 3.
Legal description:	Lots 1 & 2 DP 203824 and Lot 2 DP 205437
Records of Title:	NA132C/411 and NA131A/749 & NA131A/750. Copies of titles attached in Appendix 4.

3.0 SITE DESCRIPTION

3.1 Physical & Mapped characteristics

The site's physical characteristics are described in the various supporting reports. There is an existing two-level commercial structure and single level residential dwelling with associated garage. Access is existing directly off SH 10. The site is mostly in hard surface, but with some grassed area adjacent to the northern boundary.

The site is reasonably level. Zoned Commercial in the ODP, the site shares boundaries with Residential Zoned land on its northern and eastern boundaries. The site has a Mixed Use zone in the PDP, with those same boundaries with General Residential zoning.

The site is not subject to any hazard and is not subject to any resource overlay in either the ODP or PDP.

3.2 Legal Interests on Titles

The titles are subject to a number of easements. Several of these will be cancelled because the easements will become redundant through the re-development of the site. Those to be cancelled are listed on the face of the Scheme Plan(s).

NA131A/749 & NA131A/750		
D599042.3	Right of way	To be cancelled
D599042.4	Drain water in gross in favour of FNDC	To be cancelled
D5999042.5	Telecommunications in gross	To be cancelled
D5999042.6	Electricity in gross	To be cancelled
8749234.1	Crossing Notice	SH crossing notice
6990072.1 & 8336811.1	Certificates pursuant to s77 of the Building Act – the latter also affects NA132C/411 (below)	
NA132C/411		
D519485.2	Consent Notice requiring that any application for effluent disposal under the building act be accompanied by a report from a suitably qualified registered engineer	Able to be complied with
8749272.1	Crossing Notice	SH crossing notice
8336811.1	Certificates pursuant to s77 of the Building Act	

3.3 Consent History

The property file contains a large consent history, both in terms of building and resource consents. Not all are relevant to the sites themselves, having been focused on the Mawson Avenue residential development over the years as opposed to the sites' Commercial Zoned area.

Resource Consent History:

There were a series of TCP (Town and Country Planning) subdivisions linked to the underlying title, and focused on Mawson Avenue residential development, dating from 1971 through to 1993, the only relevant one (in terms of the current site), being 791318-TCPSUB, issued in 1981. This subdivided a part of the current application site land, however, it has since been superseded by subsequent consents.

RC 1960641-RMASUB, issued in 1996, and its subsequent variation 1970240, created two new residential allotments from land to the northwest and northeast of the application site and are not overly relevant.

RC 2000569-RMASUB – a boundary adjustment subdivision issued in 2000 – featured a minor boundary change to better accommodate proposed commercial building;
RC 2000630-RMALUC, issued in 2000 was to construct said commercial building, and to convert the existing house into offices.

RC 2010152-RMASUB, issued in 2000, was another boundary adjustment subdivision, creating what is now Lot 2 DP 205437.

RC 2030569-RMALUC, issued in 2003, provided for the relocation of office buildings; and 2071026-RMA348, issued in 2007, provided for reciprocal rights of way at the properties' Stage Highway crossing.

Building Consent History:

BC history dates back to 1965. The more recent and relevant building consents include:

BC 1999-3048, issued in 1999 for a relocated building for office use;
BC 2003-987, issued in 2003, to relocate a building within the site;
BC 2010-294, issued in 2019 for the installation of a septic tank; pump line and irrigation field (system to be disestablished);
BC-1999-3335, issued in 1999 for the two storey commercial building on site; and
BC-2006-1415, issued in 2006 for an extension to that building.

4.0 SCHEDULE 4 – INFORMATION REQUIRED IN AN APPLICATION

Clauses 2 & 3: Information required in all applications

(1) An application for a resource consent for an activity must include the following:	
(a) a description of the activity: .	Refer Sections 1 and 5 of this Planning Report.
(b) an assessment of the actual or potential effect on the environment of the activity:	Refer to Section 6 of this Planning Report.
(b) a description of the site at which the activity is to occur:	Refer to Section 3 of this Planning Report.
(c) the full name and address of each owner or occupier of the site:	This information is contained in the Form 9 attached to the application.
(d) a description of any other activities that are part of the proposal to which the application relates:	Refer to Sections 3 and 5 of this Planning Report for existing activities within the site.

(e) a description of any other resource consents required for the proposal to which the application relates:	The application is for a commercial subdivision and development pursuant to the Operative District Plan (and Proposed District Plan should this take legal effect prior to consent being issued for this application); and for a discharge consent pursuant to the Regional Plan for Northland.
(f) an assessment of the activity against the matters set out in Part 2:	Refer to Section 7 of this Planning Report.
(g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b), including matters in Clause (2): (*a) any relevant objectives, policies, or rules in a document; and* *(b) any relevant requirements, conditions, or permissions in any rules in a document; and* *(c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).*	Refer to Sections 5 & 7 of this Planning Report.
(3) An application must also include any of the following that apply:	
(a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)):	Refer sections 3 and 5.
(b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A)):	There is no existing resource consent. Not applicable.
(c) if the activity is to occur in an area within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011, an assessment of the activity against any resource management matters set out in that planning document (for the purposes of section 104(2B)).	The site is not within an area subject to a customary marine title group. Not applicable.

Clause 4: Additional information required in application for subdivision consent

(4) An application for a subdivision consent must also include information that adequately defines the following:	
(a) the position of all new boundaries: *(b) the areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan:* *(c) the locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips:* *(d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips:* *(e) the locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A:* *(f) the locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A):* *(g) the locations and areas of land to be set aside as new roads.*	Refer to Scheme Plans in Appendix 1.

Clause 5: Additional information required for application for reclamation – not applicable.

Clause 6: Information required in assessment of environmental effects

(1) An assessment of the activity's effects on the environment must include the following information:	
(a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:	Refer to Section 6 of this planning report. The activity will not result in any significant adverse effect on the environment.
(b) an assessment of the actual or potential effect on the environment of the activity:	Refer to Section 6 of this planning report.
(c) if the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use:	Not applicable as the application does not involve hazardous installations.
(d) if the activity includes the discharge of any contaminant, a description of— *(i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and* *(ii) any possible alternative methods of discharge, including*	The subdivision does not involve any discharge of contaminant.

discharge into any other receiving environment:	
(e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:	Refer to Section 6 of this planning report.
(f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted:	Refer to Section 8 of this planning report.
g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:	The Discharge Consent will contain standard conditions in regard the monitoring and performance of the Wastewater system.
(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).	No protected customary right is affected.

Clause 7: Matters that must be addressed by assessment of environmental effects (RMA)

(1) An assessment of the activity's effects on the environment must address the following matters:	
(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:	Refer to Sections 6 and 8 of this planning report and also to the assessment of objectives and policies in Section 7.
(b) any physical effect on the locality, including any landscape and visual effects:	Refer to Section 7. The proposed activity will have less than minor adverse effects on the physical environment and landscape and visual amenity values.
(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:	Refer to Section 7. The proposal will result in no adverse effects in regard to habitat and ecosystems.
(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:	Refer to Section 7, and above comments
(e) any discharge of contaminants into the environment, including any	The proposal will not result in the discharge of contaminants, nor any unreasonable emission of noise.

unreasonable emission of noise, and options for the treatment and disposal of contaminants:	
(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.	The application site is not subject to natural hazards and does not involve hazardous installations.

5.0 COMPLIANCE ASSESSMENT

5.1 Weighting assessment

The Operative District Plan is the only "Operative" plan. However, it is possible that this application will not have been consented, i.e. will still be in process, when decisions on submissions to the PDP are notified to submitters and the PDP has legal effect alongside the ODP. On that assumption, this application also considers the PDP when assessing compliance,

In terms of assessing the weighting to be given to the two plans when assessing this application, in this instance the property has a Commercial Zone in the ODP and Mixed Use Zone in the PDP. This PDP zone and where it applies, attracted several submissions. Most favoured the concept of a Mixed Use Zone, but not necessarily the provisions to apply to it, nor its location. There remains potential, therefore, for appeal, by submitters who did not have their submissions accepted.

Whilst it is likely that the Mixed Use Zone itself, and its intent, will remain, its final 'form' is not yet beyond challenge. On this basis it is difficult to give a proposed plan zoning more weighting than the operative plan zoning, at this point in time.

5.2 Operative Far North District Plan

The site is zoned Commercial, and has no resource features.

Subdivision Minimum Lot Sizes:

Table 13.7.2.1: Minimum Lot Sizes

(vi) COMMERCIAL ZONE

Controlled Activity Status (Refer also to 13.7.3)	**Restricted Discretionary Activity Status (Refer also to 13.8)**	**Discretionary Activity Status (Refer also to 13.9)**
The minimum lot sizes are 3,000m² (unsewered) and 250m² (sewered).		The minimum lot size is 2,000m² (unsewered). There is no limit for sewered lots, provided that servicing of the lot (including car parking, loading etc), can be achieved.

Some lots are proposed to be as small as 90m2. However, all lots can be adequately serviced. The subdivision component of the development is therefore a **discretionary** activity.

Land Use – Zone Rules:

Buildings are existing and are less than 12m in height – permitted.
7.7.5.1.2 applies a Sunlight plane on boundaries adjoining Residential zoning. The application site has two such boundaries – the boundary with Lots 7-10; and the boundary with Lots 11-16. The existing two storey commercial building is not on a boundary with a residential zone. Other existing buildings, likely to be removed, comply.

7.7.5.1.3 Visual Amenity and Environmental Protection applies on these same boundaries and it is intended that this rule is complied with.

Part (b) of the above rule requires the landscaping of road frontage, something that can be provided, whilst taking care not to block visibility to state highway.

The property has no 'pedestrian frontage' notation and the proposal does not involve any residential development.

It is assumed that the property is part of the Council's urban (Waipapa) stormwater system. In the event that it is not, then Rule 7.7.5.1.11 Stormwater is breached and consent will need to be sought for that breach.

District Wide Rules:

There is no excavation/filling rule applying to the Commercial Zone. The site is not mapped as being subject to any hazard. It contains no resource feature to which Chapter 12 would apply.

In regard to Chapter 15.1, there are no longer any requirements for the number of car parks. Notwithstanding that, car park dimensions are to standard, and manouevring and traffic circulation within the site can be catered for. It is proposed to shift an existing highway crossing and replace two existing side by side crossings, both providing for two way access/egress, with two separated crossings, one for entry only and one for exit only. Technically the Council may consider the shifting of an existing crossing to Limited Access State Highway to require consent pursuant to Rule 15.1.6C.1.1(e)(i). If this is the case, it does not alter the category of activity, which remains discretionary.

I have not identified any breaches of the traffic intensity rule, noting this is a subdivision, not a land use application, and noting that there are three titles, with two licensed crossings

5.3 Proposed Far North District Plan

The Proposed District Plan (PDP) was publicly notified on 27th July 2022 and some rules were given immediate legal effect. Decisions on Submissions (and therefore when legal effect is granted for the PDP in its entirety pursuant to those decisions) may be publicly notified prior to any consent being issued for this application. An assessment of rules already having legal effect follows, and after that there is an assessment against rules in the PDP applying to the site should consent not be issued until after the PDP has legal effect in its entirety.

In regard to district wide considerations in the PDP, the only rules in the Subdivision chapter that were marked as having immediate legal effect were those pertaining to Environmental Benefit Subdivisions (not applicable in this instance); Subdivision of a site within a heritage area overlay (again not applicable); Subdivision of a site that contains a scheduled heritage resource (again not applicable); Subdivision of a site containing a scheduled site and area of significance to Maori (not applicable); and Subdivision of a site containing a scheduled SNA (not applicable).

There were two earthworks rules and associated standards in the PDP with legal effect. These rules can both be complied with via conditions of consent – ADP applying, and Erosion and Sediment Control measures.

In summary, I have not identified any rules in the PDP that had immediate legal effect when the PDP was first notified, and that must therefore be considered in determining activity status for this proposal.

Should the remainder of the PDP have legal effect whilst this application is with the Council, the following assessment is offered:

The site is proposed to be zoned Mixed Use. This has a minimum lot size of 250m^2 for sewered sites and no minimum lot size for sewered sites as a discretionary activity. The reason I have referred to 'sewered' is that it is proposed to have a reticulated communal wastewater collection, treatment and disposal system shared amongst all lots, with the appropriate easement in place. In any event, the subdivision would be regarded a discretionary subdivision activity under the PDP due to proposed lot sizes.

In the Mixed Use Zone, commercial activity is a permitted activity subject to certain criteria. This proposal does not involve any application for land use, only the subdivision of land to enable future land uses.

In terms of building height, the same 12m limit applies to new buildings as in the ODP. The PDP's Sunlight rule applies on boundaries with the General Residential zone and is more nuanced than the equivalent rule in the ODP in that it takes into account the angle of the sun. However, existing buildings either are not on a zone interface or they comply.

The PDP requires a 3m boundary setback from General Residential boundaries. There are existing buildings on one such boundary, but that is an existing situation, i.e. this proposal does not create a new boundary with land zoned GR.

The PDP has a similar, but potentially more stringent road frontage landscaping requirement:
1. Where a site adjoins a road boundary, at least 50% of that road boundary not occupied by buildings or driveways shall be landscaped with plants or trees.

2. The landscaping shall be a minimum height of 1m at installation and shall achieve a continuous screen of 1.8m in height and 1.5m in width within five years, except for service stations which are not subject to landscaping height requirements.

The only concern with such a rule is where the requirement for landscaping might interfere with sight distances. Notwithstanding that, the landscaping on the road frontage appears achievable.

In addition, side boundaries with the General Residential Zone have fencing and landscaping requirements:

Site boundaries that adjoin any zone other than Mixed Use, Light Industrial or Heavy Industrial must:
1. be fenced with a solid fence or wall with a minimum height of 1.8m; or
2. be landscaped with plants or trees with a minimum height of 1m at installation and shall achieve a continuous screen of 1.8m in height and 1.5m in width within five years; or
3. be screened with a combination of (1) and (2) above.

Fencing already exists and option 1 is likely to be the option most practicable on the affected boundaries. Note, however, that this rule should not be required to be complied with until such time as development actually occurs on the new lots.

The PDP contains a 'coverage' standard for the Mixed Use Zone:

1. At least 10% of the site shall be planted in grass, vegetation or landscaped with permeable material; and

2. The stormwater collection system is designed in accordance with Far North District Council Engineering Standards April 2022. Where a connection to Council's reticulated stormwater system is not available the stormwater must be disposed of within the site.

An engineering / site suitability report is required to determine compliance with these standards.

The site has extensive impermeable coverage already (existing use right). A coverage rule, based on % coverage, is required to be assessed where new lot boundaries are being created, particularly where the size/area of a lot is being reduced. In regard to the existing single storey buildings on the site, these are intended for removal/relocation and as such no breach is anticipated on the lots currently shown as accommodating those buildings.

In regard to the double storey commercial building already on site, the new Lots 1-4 will basically have 100% coverage because of that existing building. As such consent is required under the PDP for breaches of the above referenced 'coverage' rule, for Lots 1-4. An Engineering Assessment Report supports the application and this addresses stormwater management in its Section 8.

District wide rules relevant to the proposal are those related to access and parking. Any altered access to the State Highway requires the approval of NZTA as a restricted discretionary activity

under the PDP. Conditional approval has been provided by NZTA. The crossings proposed lead directly off state highway onto Lot 17, owned in 1/16th shares by all other lots.

No minimum number of car parking spaces apply. Accessible spaces and loading bays will be provided in compliance with standards. Dimensions and manouevring space for car park spaces that are provided will comply with standards. Trip generation will not be known until land use activities establish on each of the lots. It is doubtful, noting the size of the lots, that any individual lot will breach trip generation thresholds.

Unlike the ODP, the PDP contains both a volume and an area permitted threshold for earthworks – 200m^3 earthworks per site, over an area of 2,500m^2. The subdivision itself will involve only minimal earthworks for crossing works and infrastructure (including wastewater) installation, although trenching is likely excluded from the definition of earthworks. No breach has been identified.

5.4 Regional Plan

Rule C.6.1.3 On-site Effluent Discharge - Permitted Activity specifies a daily discharge threshold of 2000 L/day. The proposed system will accommodate 2,160 L/day – a minor breach. Discharge consent is therefore required pursuant to C.6.1.3. I understand the inability to comply with C.6.1.3 results in discretionary activity status under C.6.1.5.

6.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

6.1 Allotment Sizes and Dimensions

The properties that make up the subdivision site are zoned Commercial n the ODP and Mixed Use in the PDP. I am of the belief that the sites can be regarded as sewered given the proposed communal system, requiring discharge consent, proposed for the development. The proposed lot sizes do not comply with controlled activity minimum lot sizes, and the subdivision is a discretionary activity accordingly. Nonetheless the vacant lots are capable of providing for modestly sized commercial units. Lots 1-4 are within an existing building. The ODP does not require a minimum square building envelope within a site.

Lot 1 will contain three separate units/tenancies, two on the ground floor, and one on the first floor. A Fire Engineering Report has been commissioned, primarily for building consent purposes, but showing that the lots/units within the existing building can be established as separate lots with appropriate Fire Safety measures in place.

The Mixed Use Zone has no minimum building envelope requirement either.

Supporting reports show that the sites are capable of supporting the proposed development in terms of allotment size and dimension.

6.2 Natural and Other Hazards

The site is not subject to any natural hazards. A natural hazards assessment is contained within the Engineering Assessment prepared by Haigh Workman, Section 5. The Assessment concludes low risk of any natural hazard.

6.3 Water Supply

The application site is within a public water supply area. The sites have two existing connections and it is proposed to utilise these connections for the proposed lots. Refer to the Engineering Assessment Report supporting the application. Reliance is being placed on two fire hydrants within state highway, one opposite the site entrance and a second to the south, with 135m should be adequate for fire fighting water supply. The hydrant positioning and performance should be reviewed for fire fighting requirements.

6.4 Energy Supply & Telecommunications

Each lot will have connection to services.

6.5 Stormwater Disposal

The application is supported by an Engineering Assessment, prepared by Haigh Workman Civil and Structural Engineers – refer to Appendix 5. The Assessment's section 8 addresses stormwater management. The Assessment describes existing site drainage, sets out the regulatory framework for stormwater management under the Operative District Plan, the Regional Plan, and the Council's Engineering Standards.

The proposal will eventually result in an anticipated 94% impermeable coverage of the overall site, compared to an estimated 53% current coverage. There is no limit specified in the ODP, however, the PDP requires 10% permeable coverage on a site. Consent is not being sought for any breach at this point in time in regard to proposed vacant lots, as the amount and timing of any development on these lots is not yet known. Because the existing building is going to be 'separated' into four fee simple titles, a breach of the 10% permeable will result on Lots 1-4. Consent is required pursuant to the PDP.

The Haigh Workman report discusses the effects of runoff and a proposed stormwater management system. It assesses the stormwater management pursuant to the criteria in Chapter 11.3 of the ODP.

It is proposed to attenuate the additional runoff over and above the existing consented development, back to pre development levels for the 10% AEP. The proposed methodology of described in the Haigh Workman report.

6.6 Sanitary Sewage Disposal

The site will be serviced by a communal wastewater system, with discharge of a domestic nature, and producing daily discharge slightly over the permitted threshold in the Regional Plan. The application is supported by a Wastewater Report, with proposed design, and accompanying AEE, prepared by Haigh Workman – refer to Appendix 6.

6.7 Easements for any purpose

Easements are proposed as shown on the Scheme Plan – essentially a single easement in favour of all lots for sewer treatment and disposal, over all of Lot 7. A series of redundant easements will be cancelled.

6.8 Property Access

A Traffic Assessment Report supports the application – refer Appendix 7.

Access is proposed to be via two one way crossings, separated by landscaped verge. The northern entrance is to be entry only, and the southern crossing an exit only crossing. This replacement will replace the existing side by side registered crossing places (x 2). The proposal has been put to NZTA who have responded with the following assessment and conditions – their email is attached in Appendix 8:

Our assessment has considered the following:

- *The proposed subdivision will result in three existing record of titles being subdivided into 16 freehold lots with one shared JOAL.*

- *This section of State Highway 10 is a limited access road with two existing crossing places authorised for the subject site - CP's 56A and 57B. They have been authorised as separate crossings but have been constructed as on larger joint crossing. This crossing will no longer exist following the subdivision and land use consent being implemented.*

- *Two separate vehicle crossings have been proposed as an entry and exit only flow. Each crossing will require a new Section 91 notice to be imposed on the record of title and allocated new references - CPs 56B and 57C.*

- *The proposed traffic generation for the site is 312 vehicles per day, with 64 peak hour movements. This is not dissimilar from the existing commercial activity operating on site.*

- *NZTA considers the proposed vehicle crossings and transport generation to be appropriate in this environment, subject to compliance with the conditions below. Please note this is an urban section of the state highway, and the inspection of the vehicle crossing will be undertaken by the District Council; approval of the design and a CAR is still required from NZTA.*

<u>Conditions</u>:

1. *The existing vehicle crossing (NZTA ref. 56A and 57B) located at approx. 1683410.9701, 6103806.9914 shall be permanently closed, including reinstatement of any fence line, grassed areas, berm, highway drainage or kerb. Reinstatement works shall be consistent with the adjacent road reserve treatment, to the satisfaction of the New Zealand Transport Agency Network Manager.*

2. *The proposed vehicle crossings (NZTA ref. 56B and 57C) shall be constructed in general accordance with the plans prepared by Haigh Workman Ltd titled "DWG ACCESS", Dwg No. RDP01 dated 18/05/2026.*
3. *Prior to undertaking works in the road reserve, detailed design drawings must be provided to and approved by the NZ Transport Agency that demonstrate any proposed changes to the existing kerb and channel.*
4. *Prior to the issuing of a certificate pursuant to Section 224(c) of the Resource Management Act 1991, the consent holder shall provide to Council confirmation that the New Zealand Transport Agency has been advised of relevant similar documentation (such as: draft LT (Land Transfer) plan, ML plan (for Māori Land), SO (Survey Office) plan), to facilitate the registration of any new Crossing Place (CP) Notices against those new titles, under Section 91 of the Government Roading Powers Act 1989.*

The applicant has considered the conditions and accepts them.

Internal to the site it is intended to form 40 car park spaces, accessible parking as required, and loading spaces as required. The lot accommodating the parking and manouevring area is to be owned in equal shares by all lots. The layout provides for the safe and efficient circulation of traffic and pedestrians within the site.

The crossings will be sealed or concrete surface, as will the car parking and manouevring area internal to the site.

6.9 Building Locations

The existing house on the property, historically converted to office space, will eventually be removed from the site. The existing large commercial building will remain. The vacant lots are small in size and any building constructed within them will be correspondingly small. The lots can nonetheless accommodate buildings suitable for a variety of commercial uses.

6.10 Preservation and enhancement of heritage resources (including cultural), vegetation, fauna and landscape, and land set aside for conservation purposes

The site is zoned Commercial in the ODP and Mixed Use in the PDP, both zones encouraging commercial use. The site has no resource feature overlays. It contains no high or outstanding landscape or natural values, and no areas of significant indigenous vegetation or habitat. There is no land set aside for conservation purposes within the application site.

There are no listed or mapped Sites of Significance to Maori on the application site, nor any historic buildings, sites, notable trees or archaeological sites as mapped and/or listed in the District Plan or Far North Maps.

6.11 Soil

The site is urban with existing development. The proposal does not adversely impact on the life supporting capacity of soils.

6.12 Access to, and protection of, waterbodies

There are no qualifying water bodies to which access is required to be provided.

6.13 Land use compatibility (reverse sensitivity)

The site is zoned for Commercial use and has historically been used for both commercial and residential use. There is residential zoned land on the site's northwestern and northeastern boundaries. Boundary treatment will include fencing and/or vegetative screening, and appropriate building setback. I believe the potential for reverse sensitivities issues arising can be satisfactorily mitigated. It should be noted that the Mixed Use Zone encourages mixed commercial and residential uses, inferring these activities are considered compatible in the zone.

6.14 Proximity to Airports

The site is outside of any identified buffer area associated with the Bay of Islands Airport.

6.15 Natural Character of the Coastal Environment

The site is not within the Coastal Environment.

6.16 Energy Efficiency and renewable Energy Development/Use

Individual future lot owners may take the opportunity to install energy efficiency devices when they build.

6.17 National Grid Corridor

The National Grid does not run through the application site.

7.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS – DISCHARGE CONSENT

The application is supported by an Onsite Wastewater System Design Report by Haigh Workman Civil & Structural Engineers – Refer Appendix 6. This identifies the anticipated wastewater generation and outlines the proposed treatment system. The report's appendices include an Assessment of Environmental Effects, utilising the NRC's form AEE7; and Onsite Wastewater Disposal Investigation (FNDC Engineering Standards 2023).

8.0 STATUTORY ASSESSMENT

8.1 Far North District Plan Objectives and Policies

Objectives and policies relevant to this proposal are considered to be primarily those listed in Chapters 13 (Subdivision); and 7.7 (Commercial Zone), of the District Plan.

Subdivision Objectives & Policies

Objective 13.3.1 is an enabling objective, seeking to provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District. The Commercial Zone is intended to retain the style and atmosphere of existing commercial areas, and to confirm that future commercial development in the District will be concentrated in the existing commercial areas. The Commercial Zone enables commercial and other activities to establish in centres within urban areas so as to provide for the everyday commercial needs of the people of the District.

I believe the proposal to be entirely consistent with Objective 13.3.1. The commercial use of the site will be consistent with the commercial activities in the immediate area.

The proposal is appropriate for the site and does not adversely affect any of the matters listed in Objective 13.3.2.

Objectives 13.3.3 and 13.3.4 refer to outstanding landscapes or natural features; and scheduled heritage resources; and to land in the coastal environment. Utilising / re-development on commercial zoned land with none of the above listed features, is consistent with these objectives. The proposed development will not create any adverse effects on the values and character outlined in the two objectives.

Development is existing to some extent, and the site can sustain on site servicing (Objective 13.3.5).

The site is not known to contain any sites of cultural significance to Maori, or wahi tapu (Objective 13.3.7 and Policy 13.4.11).

The sites will have power connections (13.3.8).

The proposal will make efficient use of existing services (13.3.10).

The proposal has had regard to the matters listed in Policy 13.4.1, where relevant.

Access to the site is off existing public roads via existing (albeit shifted) crossings (13.4.2 and 13.4.5).

The site is not subject to any significant hazard (13.4.3).

The site is not known to contain any heritage resources and is not in the coastal environment. It does not contain any outstanding landscape of natural features (13.4.6).

The site has connections to Council's reticulated water supply (13.4.8).

S6 matters (National Importance) have been adequately considered. The proposal is an appropriate use of the site (13.4.13).

The subdivision has had regard to the underlying zone's objectives and policies, where relevant (13.4.14).

In summary, I believe the proposal to be consistent with the above Objectives and Policies.

Commercial Zone Objectives and Policies

There is a single objective applying to the Commercial Zone, and four policies –

7.7.3.1 To achieve the development of commercial areas in the District accommodating a wide range of activities that avoid, remedy or mitigate the adverse effects of activities on other activities within the Commercial Zone and on the natural and physical resources of the District.

7.7.4.1 That the Commercial Zone be applied to areas which are traditional commercial centres, and also to areas where the provision of commercial activity would not have adverse environmental effects, and would contribute to the needs and well being of the community.

7.7.4.2 That the range of activities provided for in the Commercial Zone be limited only by the needs for the effects generated by the particular activity to be consistent with other activities in the zone.

7.7.4.3 That standards be applied that protect visual and environmental amenity within the Commercial Zone, and the amenity of adjacent zones.

7.7.4.4 That stormwater disposal systems do not result in suspended solids, industrial by-products, oil, or other contaminated substance or waste entering the stormwater collection system in concentrations that are likely to pose an immediate or long term hazard to human health or the environment.

The application site is already utilised for commercial purposes. The proposal sees the site re-developed to provide for a range of small scale commercial activities, with one central parking and manouevring area, accommodating a range of activities to service the community. Adverse effects can be appropriately avoided, remedied or mitigated such that they are less than minor. The proposal is consistent with the zone's objective.

Policy 7.7.4.1 is aimed more at the Councl's zoning policy than individual property owners. Policy 7.7.4.2 appears to encourage a range of activities in the zone, provided the effects generated are consistent with other activities in the zone. I believe any effects of this proposal will be consistent with other similar activities in the Waipapa Commercial Zone.

The proposed activities that may occur within the future lots will be able to protect visual amenity, particularly on road frontage and with boundaries with residential zoned land.

Stormwater management is addressed in the Engineering Assessment Report supporting the application and is considered appropriate for the site.

8.2 Proposed District Plan (PDP)

The sites are zoned Mixed Use in the PDP. The proposed lot sizes do not comply with the PDP's controlled activity minimum lot size and instead are a discretionary activity. An assessment follows, utilising the Recommended updated Subdivision provision wording resulting from the PDP's hearings process.

SUB-O1 *Subdivision results in the efficient use of land, which:*
a. achieves the objectives of each relevant zone, precinct, development area, overlays and the district wide provisions;
b. contributes to the existing and planned local character and sense of place;
c. avoids reverse sensitivity issues that would prevent or adversely affect activities already established on land from continuing to operate;
d. avoids land use patterns which would prevent land from achieving the objectives and policies of the zone in which it is located;
e. does not increase risk from natural hazards or risks are mitigates and existing risks reduced; and
f. manages adverse effects on the environment.

The subdivision results in the efficient use of land, and is consistent with the zone's objectives. The development will be consistent with the planned character of the area, creating a mini 'precinct' of small scale commercial activities around the perimeter of a centralised parking and pedestrian area. The risk of reverse sensitivity issues arising is mitigated by complying with boundary treatment measures required by the PDP where a Commercial Zone borders a General Residential Zone. The proposed land use will not prevent the land from achieving the objectives of the zone. There is no increased risk from natural hazards and less than minor adverse effects on the environment.

SUB-O2 *Subdivision provides for the:*
a. Protection of highly productive land; and
b. Protection, restoration or enhancement of Outstanding Natural Features, Outstanding Natural Landscapes, Natural Character of the Coastal Environment, ~~Areas of High Natural Character, Outstanding Natural Character~~, wetland, lake and river margins, ~~Significant Natural Areas~~ areas of significant indigenous vegetation and significant habitats of indigenous fauna, Sites and Areas of Significance to Māori, and Historic Heritage.

N/A. The site does not feature any of the matters addressed in the above objective.

SUB-O3 *Infrastructure is planned to service the proposed subdivision and development where:*
a. there is existing infrastructure connection, infrastructure should provided in an integrated, efficient, coordinated and future-proofed manner at the time of subdivision; and
b.where no existing connection is available infrastructure ~~should be~~ is planned and ~~consideration be given to~~ connections made with the wider infrastructure network.

The application site is not within an area of benefit for Council's sewerage reticulation and will be self sufficient in regard to wastewater treatment and disposal. The sites are connected to public water supply. The applicant proposes to provide appropriate on-site stormwater management. The site is serviced by State Highway network, not Council's.

SUB-O4
Subdivision is accessible, connected, and integrated with the surrounding environment including by ~~and~~ providing for:
a. Safe transport connections including active modes of public transport where practicable;
b. new, and connection to existing public open spaces;
c. esplanade where land adjoins the coastal marine area; and

d. esplanade where land adjoins other qualifying water bodies.

Only part (a) is relevant and access to the site is existing. The proposal intends to upgrade those existing access arrangements to ensure minimal impact on the state highway network.

SUB-OX
Subdivision protects the long-term availability and productive capacity of highly productive land by avoiding inappropriate subdivision that would compromise its use for farming and forestry activities.

N/A noting the zoning and absence of highly productive land.

SUB-OY
Subdivision occurs in a sequenced and coherent manner in locations and at a rate that enables growth and development to be supported by additional infrastructure.

The proposed development is of a level provided for in the PDP as a discretionary activity, in an area proposed to be zoned for Mixed Use commercial/residential use. The site is bordered on two sides by residential zoning, and the site is suitable for use for small scale commercial activities, arranged as a 'hub', providing a transition area between residential and commercial / light industrial activities.

SUB-P1 *Enable boundary adjustments that: ….*

Not relevant – application is not a boundary adjustment.

SUB-P2 *Enable subdivision for the purpose of public works, infrastructure, reserves or access.*

Not relevant – application does not involve public works, infrastructure, reserves or access lots.

SUB-P3 *Provide for subdivision where it results in allotments that:*
a. are consistent with the planned environment ~~purpose, characteristics and qualities~~ of the zone or precinct;
b. comply with the minimum allotment sizes for each zone or precinct;
c. have an adequate size and appropriate shape to contain a building platform; and
d. have legal and physical access.

The lots are consistent with the planned environment of the zone, but do not meet the minimum lot sizes to apply to that zone (as a controlled activity). Each lot can, however, accommodate a building platform for commercial use of some kind, and the sites have legal and physical access.

~~SUB-P4~~
~~Manage subdivision of land as detailed in the district wide, natural environment values, historical and cultural values and hazard and risks sections of the plan~~

SUB-P5
Manage subdivision design and layout in the General Residential, Mixed Use, Medium Density Residential, Town Centre and Settlement zoneto
provide for safe, connected and accessible environments by:
a. minimising vehicle crossings that could affect the safety and efficiency of the current and future transport network;

b. avoid cul-de-sac development unless the site or the topography prevents future public access and connections;
c. providing for development that encourages social interaction, neighbourhood cohesion, a sense of place and is well connected to public spaces;
d.contributing to a well connected transport network that safeguards future roading connections; and
e. maximising accessibility, (including for emergency response)
connectivity by creating walkways, cycleways and an interconnected transport network; and
f. providing additional infrastructure where required..

The proposal does not change the number of existing crossings. It is not really a cul-de-sac development in the sense that there is an entry and an exit to and from the one parking area associated with the individual lots. The "hub" style re-development will encourage a sense of place and commercial enterprises that complement each other. Access directly to state highway in a speed restriction area is ideal for the proposal.

SUB-P6 *Require infrastructure to be provided in an integrated and comprehensive manner by:*
a. demonstrating that the subdivision will be appropriately serviced (including telecommunications) and integrated with existing and planned infrastructure if available; and
b. ensuring that the infrastructure is provided is in accordance with the planned environment ~~purpose, characteristics and qualities~~ of the zone.

Power and telecommunication services will likely be provided to the site. The proposal is intending to be serviced by on-site infrastructure in terms of wastewater and stormwater management, and connect to Council water supply.

SUB- P7
Require the vesting of esplanade reserves or esplanade strips when subdividing to specific allotment sizes land adjoining the coast or other qualifying water bodies.

The site does not adjoin any waterbody.

SUB-P8 *Avoid rural lifestyle subdivision in the Rural Production zone unless the subdivision: ....*

Site is not zoned Rural Production.

SUB-PX
Avoid subdivision that:
a. Within the Horticulture Precinct, is not provided for in PREC1-P5:
b. In all other parts of the Rural Production Zone:…..

Site is not zoned Rural Production, nor in the proposed Horticulture Precinct.

SUB-P9
~~Avoid subdivision [sic] rural lifestyle subdivision in the Rural Production zone and~~ Restrict rural residential subdivision inthe Rural Lifestyle zone unless the development ~~achieves the environmental outcomes required in the management plan subdivision rule~~. ….

The site is not zoned Rural Lifestyle.

SUB-P10
To protect amenity and character by avoiding the subdivision of minor residential units from principalresidential units where resultant allotments do not comply with minimum allotment size and resi dential density.

Not applicable. There are no minor residential units.

SUB-P11 *Consider the following matters where relevant when assessing and managing the effects of subdivision:*
~~Manage subdivision to address the effects of the activity requiring resource consent including (but not limited to) consideration of the following matters where relevant to the application:~~
a. The potential for reverse sensitivity effects that would prevent or adversely affect activities already established on land from continuing to operate;
b. consistency with the scale, density, design and character of the environment and purpose of the zone;
c. the location, scale and design of buildings and structures;
d.the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; or the capacity of the site to cater for on-site infrastructure associated with the proposed activity;
e. managing natural hazards;
f. Any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and
g. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

I believe any reverse sensitivity issues that may arise because of a zone interface, can be satisfactorily mitigated. Site size, along with bulk and location requirements applying to each site, will result in small self contained commercial units on each of the vacant sites. Lots 1-4 already support an existing commercial building. The site is not subject to hazard and there are no known adverse effects on historic heritage or cultural values, natural features and landscapes, natural character or indigenous biodiversity values.

Mixed Use Zone objectives and policies are addressed below.

MUZ-O1
The Mixed Use zone is the focal point for the district's commercial, community and civic activities, and provides for compatible residential development ~~where it~~ that complements ~~and is not incompatible with~~ these activities.

MUZ-O2
Development in the Mixed Use zone is of a form, scale, density and design quality that contributes positively to the vibrancy, safety and amenity of the zone.

MUZ-O3
Enable land use and subdivision in the ~~Light Industrial~~ mixed use zone where there is adequacy and capacity of available or programmed development infrastructure to support it.

MUZ-O4
The adverse environmental effects generated by activities within the zone are managed, in particular at zone boundaries.

MUZ-O5
Residential activity in the Mixed Use zone is located above commercial activities to ensure active street frontages, except where the interface is with the Open Space zone.

The proposal is consistent with the above objectives. The zone provides for a mix of commercial and residential use, but does not dictate that there must be a mix. Sites may be utilised for either, or in some cases both residential and commercial use within the same site. The latter is not envisaged. Small scale commercial development in this location will complement the transition between existing commercially used land in the immediate vicinity, and the

adjacent residential zoned Mawson Avenue housing area. The proposed development is within a semi serviced area. Adverse effects can be appropriately managed.

MUZ-P1
Enable a range of commercial (including supermarkets), community, civic and residential activities in the Mixed Use zone where:
a. they support the function, role, sense of place and amenity of the zone, while recognising the existing environment; and
b. there is:
- *i. existing infrastructure to support development and intensification, or*
- *ii. additional infrastructure capacity can be provided to service the development and intensification.*

The proposal is consistent with the enabling intent of the above policy.

~~***MUZ-P2***~~
~~*Require all subdivision in the Mixed Use zone to provide wastewater, stormwater and potable water supply the following reticulated services and local electricity distribution network to the boundary of each lot and encourage all subdivision to provide the following reticulated services to the boundary of each lot: a. telecommunications: i. fibre where it is available; ii. copper where fibre is not available; iii. copper where the area is identified for future fibre deployment. b. local electricity distribution network.; and c. wastewater, potable water supply and stormwater where they are available.*~~

MUZ-P3
Require development in the Mixed Use zone to contribute positively to:
a. high quality streetscapes;
b. pedestrian amenity;
c. safe movement of people of all ages and abilities;
d. community well-being, health and safety; and
e. traffic, parking and access needs.

The proposed development is on a site with highway frontage, which is not generally conducive to high quality streetscapes. However, this section of the highway, within the northern extent of Waipapa and still within the speed restriction area, does already have a reasonably attractive streetscape in regard to roadside landscaping and plantings.

Pedestrians are not generally encouraged in this part of Waipapa, along state highway, with any footpaths restricted to the adjacent retail area to the south of the site. Traffic, parking and access needs are provided for in a safe and efficient manner.

MUZ-P4
Require development in the Mixed Use zone that is adjacent to Residential and Open Space zones to maintain the amenity values of those areas, having specific regard to:
a. visual dominance;
b. privacy;
c. shadowing;
d. ambient noise; and
e. light spill.

It is intended that future development on the zone interface with residential zoned land will have regard to the matters listed in the above policy.

MUZ-P5
Restrict activities that are likely to have an adverse effect on the function, role, sense of place and amenity of the Mixed Use zone, including:
a. residential activity~~, retirement facilities~~ supported residential care and visitor accommodation on the ground floor of buildings, to locations outside of the Pedestrian Frontage Overlay; ~~except where a site adjoins an Open Space zone;~~
~~b. light or heavy industrial activity;~~
c. storage and warehousing;
d. large format retail activity and trade suppliers; ~~and~~
e. waste management activity;
f. Retirement villages; and
g. Educational facilities

The site is outside a pedestrian frontage overlay, and is not intended to support any of the other referenced activities.

MUZ-P6
Promote energy efficient design and the use of renewable electricity generation in the construction of mixed use development.

Energy efficient design for suture development has not been a feature of this application.

MUZ-P7
Consider the following effects when assessing applications to establish residential, ~~early childhood,~~ retirement and education facilities:…

The application does not propose to establish any of the activities listed.

MUZ-PXX
Avoid the establishment of:
a. residential activity, visitor accommodation or supported residential care on the ground floor of a building within the pedestrian frontage overlay;
b. Industrial and offensive trade activities and landfill; and
c. primary production and rural industry

The proposal avoids a-c.

MUZ-P8
~~Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration~~ Consider of the following matters where relevant when assessing and managing the effects of land use and subdivision in the Mixed Use zone~~: to the application~~:
a. consistency with the scale, density, design, amenity and character of the planned mixed use environment;
b. the location, scale and design of buildings or structures, outdoor storage areas, parking and internal roading;

c. opportunities for connectivity, within and between developments, public open space, services and facilities;
d. at zone interfaces:
i. any setbacks, fencing, screening or landscaping required to address potential conflicts;
ii. any adverse effects on the character and amenity of adjacent;
e. the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; including:
i. opportunities for water sensitive design ~~low impact design~~ methods;
ii. management of three waters infrastructure and industrial and trade waste;
f. managing natural hazards;
g. the adequacy of roading infrastructure to service the proposed activity;
h. any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity, and
i. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

I believe adequate regard has been had to all of the above matters to the extent they are relevant.

In summary, the proposal is consistent with the proposed PDP's Mixed Use zone objectives and policies.

8.3 Regional Plan Policies relevant to Discharge Consent

The discharge consent a discretionary activity. An assessment against relevant policies in the Regional Plan follows.

Policy D.1.1 When an analysis of effects on tangāta whenua and their taonga is required
A resource consent application must include in its assessment of environmental effects an analysis of the effects of an activity on tangāta whenua and their taonga if one or more of the following is likely:
1) adverse effects on mahinga kai or access to mahinga kai, or
2) any damage, destruction or loss of access to wāhi tapu, sites of customary value and other ancestral sites and taonga with which Māori have a special relationship, or
3) adverse effects on indigenous biodiversity in the beds of waterbodies or the coastal marine area where it impacts on the ability of tangāta whenua to carry out cultural and traditional activities, or
4) the use of genetic engineering and the release of genetically modified organisms to the environment, or
5) adverse effects on tāiapure, mataitai or Māori non-commercial fisheries, or
6) adverse effects on protected customary rights, or
7) adverse effects on sites and areas of significance to tangāta whenua mapped in the Regional Plan (refer I Maps |Ngā mahere matawhenua).

There are no listed / scheduled wahi tapu sites or other sites of significant to tangata whenua within the area of works. The site is not near a waterbody. The works will not adversely impact on mahinga kai. The works are not in or adjacent to a stream bed or coastal marine area. The works do not involve genetic engineering or genetically modified organisms. The site is not coastal and does not impact on any fisheries or protected customary rights.

In summary I do not believe the works will result in any adverse effects on tangata whenua or their taonga.

Policy D.2.2 Social, cultural and economic benefits of activities
Regard must be had to the social, cultural and economic benefits of a proposed activity, recognising significant benefits to local communities,...

The proposal will have positive effects insofar as providing for a small scale commercial hub serving the community, providing for on-site servicing.

F.1.2 Water quality
Manage the use of land and discharges of contaminants to land and water so that:
1) existing water quality is at least maintained, and improved where it has been degraded below the river, lake or coastal water quality standards set out in H.3 Water quality standards and guidelines, and
2) the sedimentation of continually or intermittently flowing rivers, lakes and coastal water is minimised, and
3) the life-supporting capacity, ecosystem processes and indigenous species, including their associated ecosystems, of fresh and coastal water are safeguarded, and the health of freshwater ecosystems is maintained, and
4) the health of people and communities, as affected by contact with fresh and coastal water, is safeguarded, and
5) the health and safety of people and communities, as affected by discharges of sewage from vessels, is safeguarded, and
6) the quality of potable drinking water sources, including aquifers used for potable supplies, is protected, and
7) the significant values of outstanding freshwater bodies and natural wetlands are protected, and
8) kai is safe to harvest and eat, and recreational, amenity and other social and cultural values are provided for.

The proposed activity will be carried out in such a way so as to achieve the objectives under F.1.2 above in regard to water quality.

Policy D.4.3 Municipal, domestic and production land wastewater discharges
An application for resource consent to discharge municipal, domestic, horticultural or farm wastewater to water will generally not be granted unless:
1) the storage, treatment and discharge of the wastewater is done in accordance with recognised industry good management practices, and
2) a discharge to land has been considered and found not to be environmentally, economically or practicably viable.

The discharge is not to water. The storage, treatment and discharge of the wastewater, which is domestic in nature and only resulting in slightly more volume of daily discharge than the permitted volume, will be done in accordance with recognised industry good management practices.

In summary I consider the works to be consistent with the relevant objectives and policies in the Proposed Regional Plan (Appeals Version).

8.4 Part 2 Matters

5 Purpose

(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.

(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

The proposal provides for peoples' social and economic well being, and for their health and safety, while sustaining the potential of natural and physical resources, safeguarding the life-supporting capacity of air, water, soil and the ecosystems; and avoiding, remedying or mitigating adverse effects on the environment.

6 Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

(f) the protection of historic heritage from inappropriate subdivision, use, and development:

(g) the protection of protected customary rights:

(h) the management of significant risks from natural hazards.

The site does not exhibit any s6 Matters of National Importance.

7 Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

(a) kaitiakitanga:

(aa) the ethic of stewardship:

(b) the efficient use and development of natural and physical resources:
(ba) the efficiency of the end use of energy:
(c) the maintenance and enhancement of amenity values:
(d) intrinsic values of ecosystems:
(e) [Repealed]
(f) maintenance and enhancement of the quality of the environment:
(g) any finite characteristics of natural and physical resources:
(h) the protection of the habitat of trout and salmon:
(i) the effects of climate change:
(j) the benefits to be derived from the use and development of renewable energy.

Relevant matters within s7 have had regard to.

8 Treaty of Waitangi
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The principles of the Treaty of Waitangi have been considered and it is believed that this proposed subdivision does not offend any of those principles.

In summary, it is considered that all matters under s5-8 inclusive have been adequately taken into account.

8.5 National and Regional Policy Statements & Environmental Standards

I have not identified any relevant national policy statements or environmental standards.

The Regional Policy Statement for Northland contains objectives and policies related to infrastructure and regional form and economic development. These are enabling in promoting sustainable management in a way that is attractive for business and investment. The proposal is consistent with these objectives and policies.

9.0 CONSULTATION & S95 ASSESSMENT

9.1 S95A Public Notification Assessment

A consent authority must follow the steps set out in s95A to determine whether to publicly notify an application for a resource consent. Step 1 specifies when public notification is mandatory in certain circumstances. None of these circumstances exist. Step 2 of s95A specifies the circumstances that preclude public notification. No such circumstance exists. Step 3 of s95A must therefore be considered. The application is not subject to a rule or national environmental standard that requires public notification. This report and AEE concludes that the activity will not have, nor is it likely to have, adverse effects on the environment that are more than minor. In summary public notification is not required pursuant to Step 3 of s95A.

9.2 S95B Limited Notification Assessment

A consent authority must follow the steps set out in s95B to determine whether to give limited notification of an application for a resource consent, if the application is not publicly notified pursuant to s95A. Step 1 identifies certain affected groups and affected persons that must be notified. No affected group of persons as listed in s95B exist in this instance. Step 2 of s95B specifies the circumstances that preclude limited notification. Neither circumstance exists and Step 3 of s95B must be considered. The application is not for a boundary activity. The s95E assessment below concludes that there are no affected persons to be notified.

9.3 S95D Level of Adverse Effects

The AEE in this report assesses effects on the environment and concludes that these will be no more than minor.

9.4 S95E Affected Persons

A person is an 'affected person' if the consent authority decides that the activity's adverse effects on the person are minor or more than minor (but are not less than minor). A person is not an affected person if they have provided written approval for the proposed activity. In this instance the proposal is not considered to result in any adverse effects of a minor or more than minor nature on either road or southern boundary (with other Commercial activities). The appropriate boundary treatments in terms of screening/landscaping and distance from boundary will ensure less than minor effects on zone interfaces.

Given the above and the urban/commercial zoning of the site, I am of the opinion that there are no affected persons in regard to internal boundaries. NZTA has been consulted – refer to Appendix 8.

10.0 CONCLUSION

The site is considered suitable for the proposed development. Effects on the wider environment are, I believe, capable of remedy and mitigation through conditions of consent, such that they will be no more than minor.

The proposal is considered consistent with the relevant objectives and policies of the Operative and Proposed District Plans, and relevant objectives and policies of the Regional Policy Statement, and consistent with Part 2 of the Resource Management.

There is no District Plan rule or national environmental standard that requires the proposal to be publicly notified. I have not identified any affected persons.

It is requested that the Council give favourable consideration to this application and grant consent.

Signed Dated 26th June 2026
Lynley Newport,
Senior Planner
Thomson Survey Ltd

11.0 LIST OF APPENDICES

Appendix 1 Scheme Plan(s)

Appendix 2 Architectural and Site Plans

Appendix 3 Location Plan

Appendix 4 Record of Title & Relevant Instruments

Appendix 5 Engineering Assessment

Appendix 6 Wastewater Report

Appendix 7 Traffic Assessment Report

Appendix 8 Consultation with NZTA

Appendix 9 Fire Report

Appendix 1

Scheme Plan(s)

THAT LOT 17 HEREON (LEGAL ACCESS) BE HELD AS TO 16 UNDIVIDED 1/16 SHARES BY THE OWNERS OF LOTS 1 - 16 HEREON ASTENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLES BE ISSUED IN ACCORDANCE THEREWITH. SEE

EXISTING EASEMENTS CREATED BY D599042.3, D599042.4, D599042.5 & D599042.6 ARE TO BE CANCELED PURSUANT TO SECTION 243(E).

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT TO DRAIN & TREAT SEWAGE	(A)	LOT 7 HEREON	LOTS 1 - 6 & LOTS 8 - 16 HEREON

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
Comprised In: NA132C/411, NA131A/749 & NA131A/750
Total Area: 4288m²
Zoning: Commercial
Resource features: NIL

This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

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Bar Scale 1:400 @ A3

THOMSON SURVEY LIMITED
315 Kerikeri Rd
P.O. Box 372 Kerikeri
Email: kerikeri@tsurvey.co.nz
Ph: (09) 4077360
www.tsurvey.co.nz
Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOTS 1 & 2 DP 203824 & LOT 2 DP 205437

2052 STATE HIGHWAY 10, WAIPAPA

PREPARED FOR: P. VEGAR

	Name	Date
Survey		
Design		
Drawn	KY	22.05.26
Rev		
Rev	KY	04.06.26

ORIGINAL
SCALE 1:400
SHEET SIZE A3

10886 Scheme 20260604

Surveyors Ref. No: 10886

Sheet 1 of 1

THAT LOT 17 HEREON (LEGAL ACCESS) BE HELD AS TO 16 UNDIVIDED 1/16 SHARES BY THE OWNERS OF LOTS 1 - 16 HEREON ASTENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLES BE ISSUED IN ACCORDANCE THEREWITH. SEE

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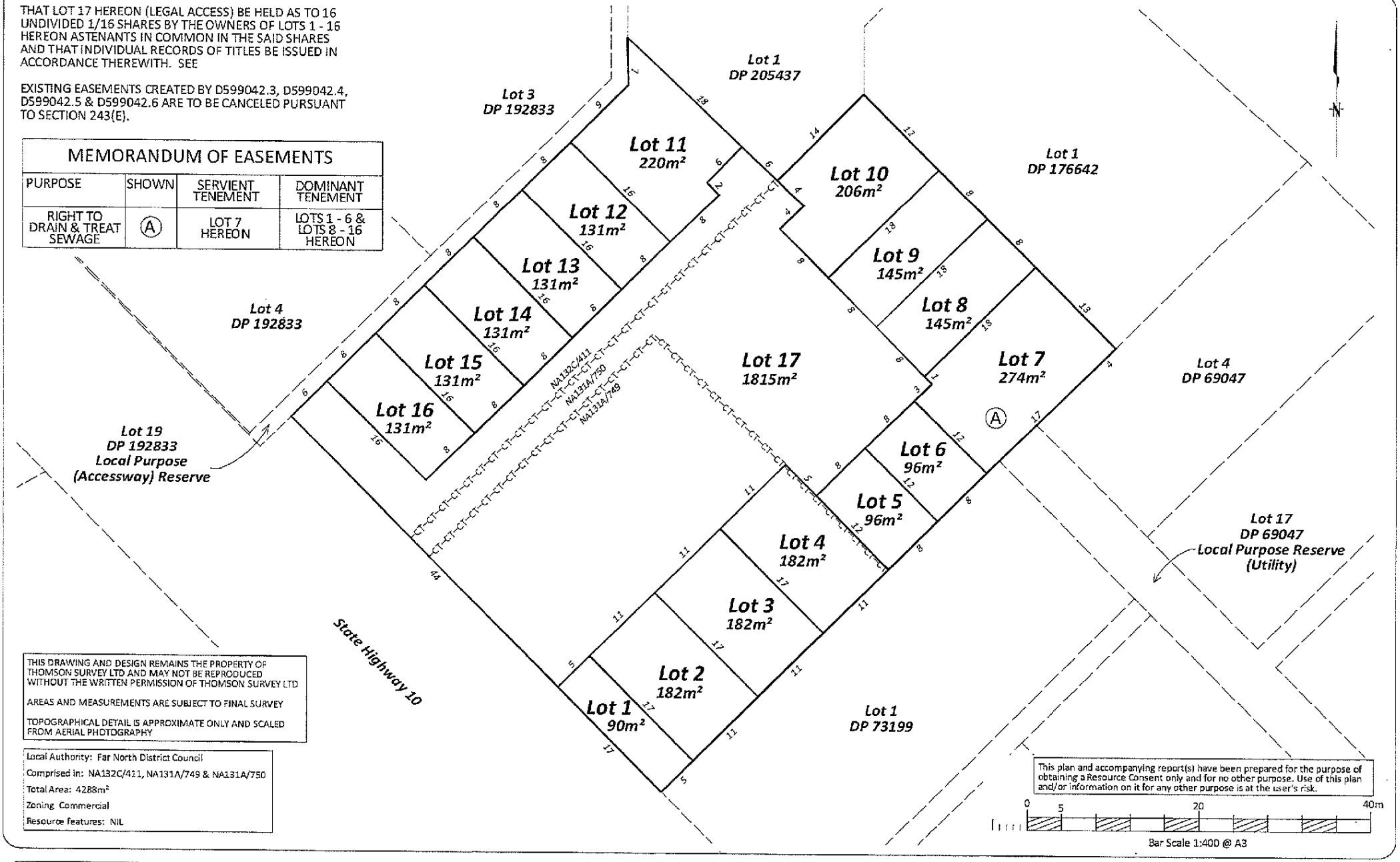

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THOMSON SURVEY LIMITED
315 Kerikeri Rd
P.O. Box 372 Kerikeri
Email: kerikeri@tsurvey.co.nz
Ph: (09) 4077360
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PROPOSED SUBDIVISION OF LOTS 1 & 2 DP 203824 & LOT 2 DP 205437

2052 STATE HIGHWAY 10, WAIPAPA

PREPARED FOR: P. VEGAR

	Name	Date
Survey		
Design		
Drawn	KY	22.05.26
Rev		
Rev	KY	04.06.26

10886 Scheme 20260604

ORIGINAL
SCALE 1:400
SHEET SIZE A3

Surveyors Ref. No: 10886

Sheet 1 of 1

Appendix 2

Architectural and Site Plans

PROPOSED NEW DEVELOPMENT

JOB #:
25233

PROJECT:
2052 SH10,
WAIPAPA 0230

FOR:
PAUL VEGAR

architecture | design | draughting

SHEET INDEX

LAYOUT ID	LAYOUT NAME	REV
A100	LOCATION MAP / AERIAL PHOTO	
A101	OVERALL PROPOSED SITE PLAN	
A102	PROPOSED SITE PLAN	
A103	EARTHWORKS PLAN	
A104	SILT FENCE DETAILS	
A109	PROPOSED SITE DRAINAGE PLAN - WASTEWATER	
A110	PROPOSED SITE DRAINAGE PLAN - STORMWATER	
A111	GROUND FLOOR PLAN - BLOCK 1 - EXISTING	
A112	FIRST FLOOR PLAN - BLOCK 1 - EXISTING	
A113	GROUND FLOOR PLAN - BLOCK 1 - PROPOSED	
A114	FIRST FLOOR PLAN - BLOCK 1 - PROPOSED	
A115	FLOOR PLANS - BLOCK 2	
A116	GROUND FLOOR PLAN - BLOCK 3	
A117	FIRST FLOOR PLAN - BLOCK 3	
A200	STREET ELEVATION - PROPOSED	
A201	NW & NE ELEVATION - BLOCK 1 - EXISTING	
A202	SE & SW ELEVATION - BLOCK 1 - EXISTING	
A203	NW & NE ELEVATION - BLOCK 1 - PROPOSED	
A204	SE & SW ELEVATION - BLOCK 1 - PROPOSED	
A205	NW & NE ELEVATION - BLOCK 2 - PROPOSED	
A206	SE & SW ELEVATION - BLOCK 2 - PROPOSED	
A207	NW & NE ELEVATION - BLOCK 3 - PROPOSED	
A208	SE & SW ELEVATION - BLOCK 3 - PROPOSED	
A300	CROSS SECTION A & B	
A301	CROSS SECTION C	
A302	CROSS SECTION D & E	
A400	PERSPECTIVES - 1	
A401	PERSPECTIVES - 2	

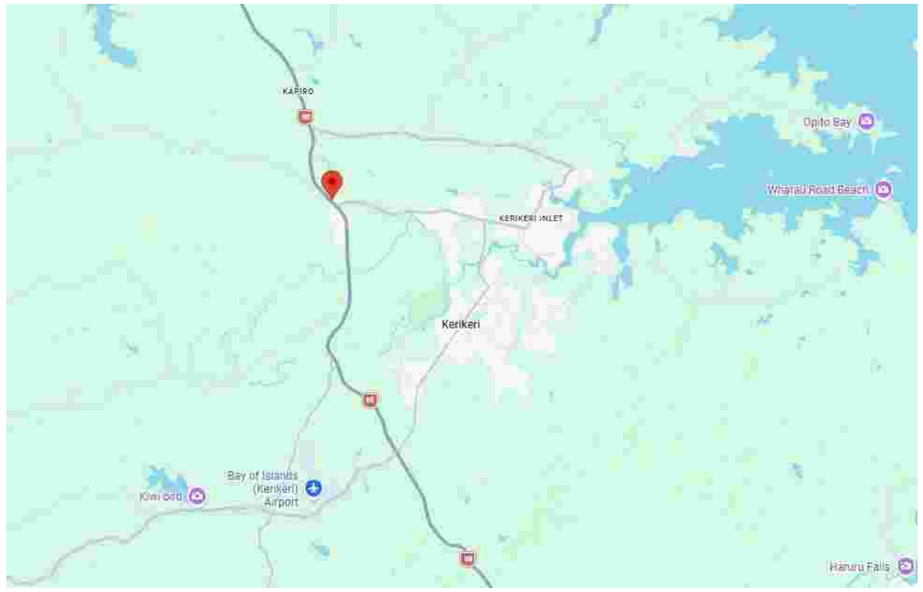
Archiology Limited

Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
P O Box 120, Kumeu
Auckland 0841, NZ

p: 0800 22 77 45
e: info@archiology.co.nz

archiology
ARCHITECTURE | DESIGN | DRAUGHTING

LEGAL DESCRIPTION:	
SITE ADDRESS	2052 SH10 WAIPAPA 0230
TERRITORIAL AUTHORITY	FAR NORTH COUNCIL
LEGAL DESC.	LOT 1 DP 203824, LOT 2 DP 203824 & LOT 2 DP 205437
CERT. OF TITLE	NA131A/749, NA131A/750 & NA132C/411
SITE AREA	4288 m²
ZONE	COMMERCIAL ZONE
OVERLAYS / CONTROLS	N/A
ROAD CLASSIFICATION	PRIMARY COLLECTOR
WIND ZONE	HIGH (BRANZ)
EQ ZONE	ZONE 1
SEASPRAY (WITHIN 500m)	NO
EXPOSURE ZONE	ZONE C



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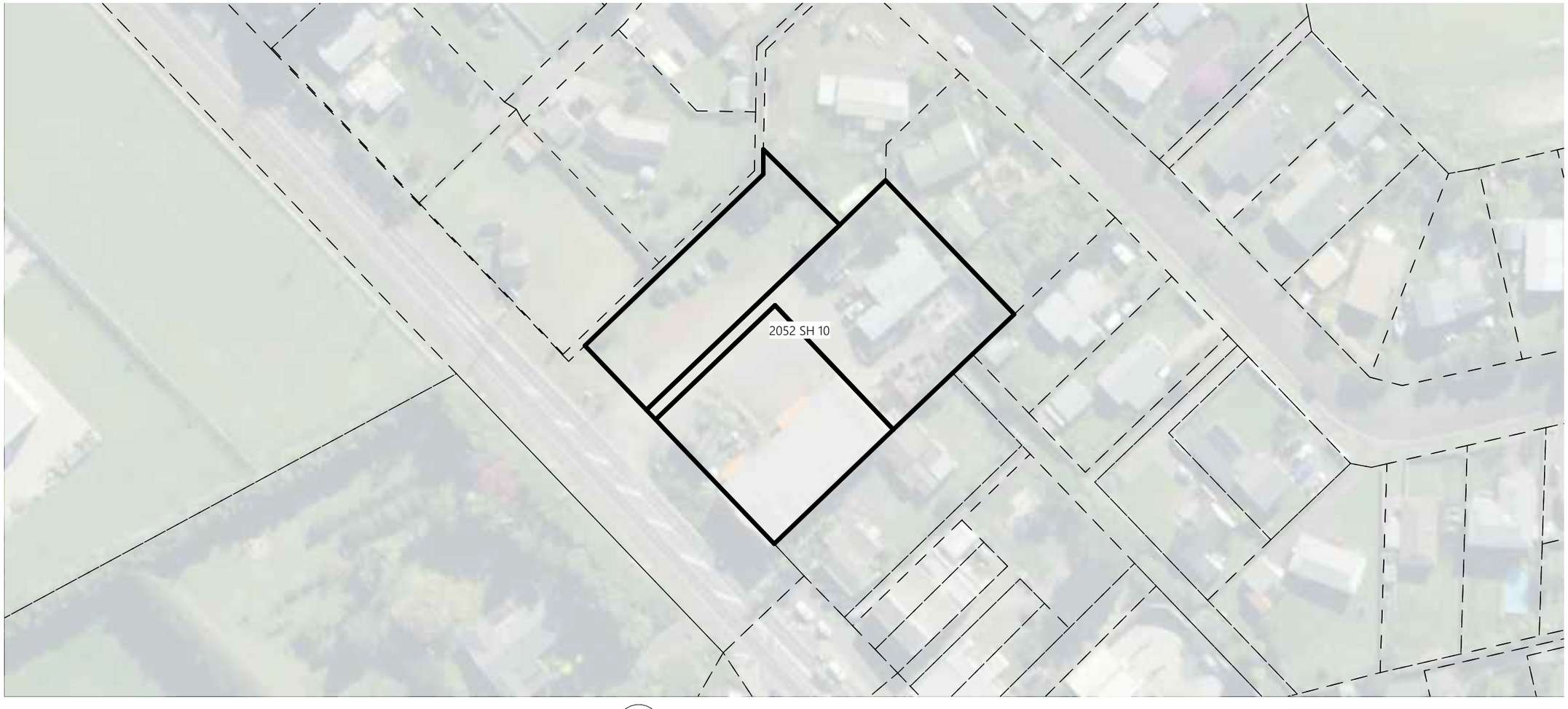

2 - EXISTING SITE PLAN / AERIAL PHOTO
1:1000 (A3)

Scale 1:1000
10 0 10 20 30 40 50m

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Archiology Limited

Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

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Professional Member

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- BLOCKING TO COMPLY WITH NZS3604:2011 - NOT SHOWN CLARITY.
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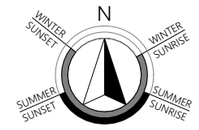
- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.

REV	ISSUE	BY	DATE



ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
LOCATION MAP / AERIAL PHOTO

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A100	REV.	

LEGAL DESCRIPTION:

SITE ADDRESS	2052 SH10 WAIPAPA 0230
TERRITORIAL AUTHORITY	FAR NORTH COUNCIL
LEGAL DESC.	LOT 1 DP 203824, LOT 2 DP 203824 & LOT 2 DP 205437
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SEASPRAY (WITHIN 500m)	NO
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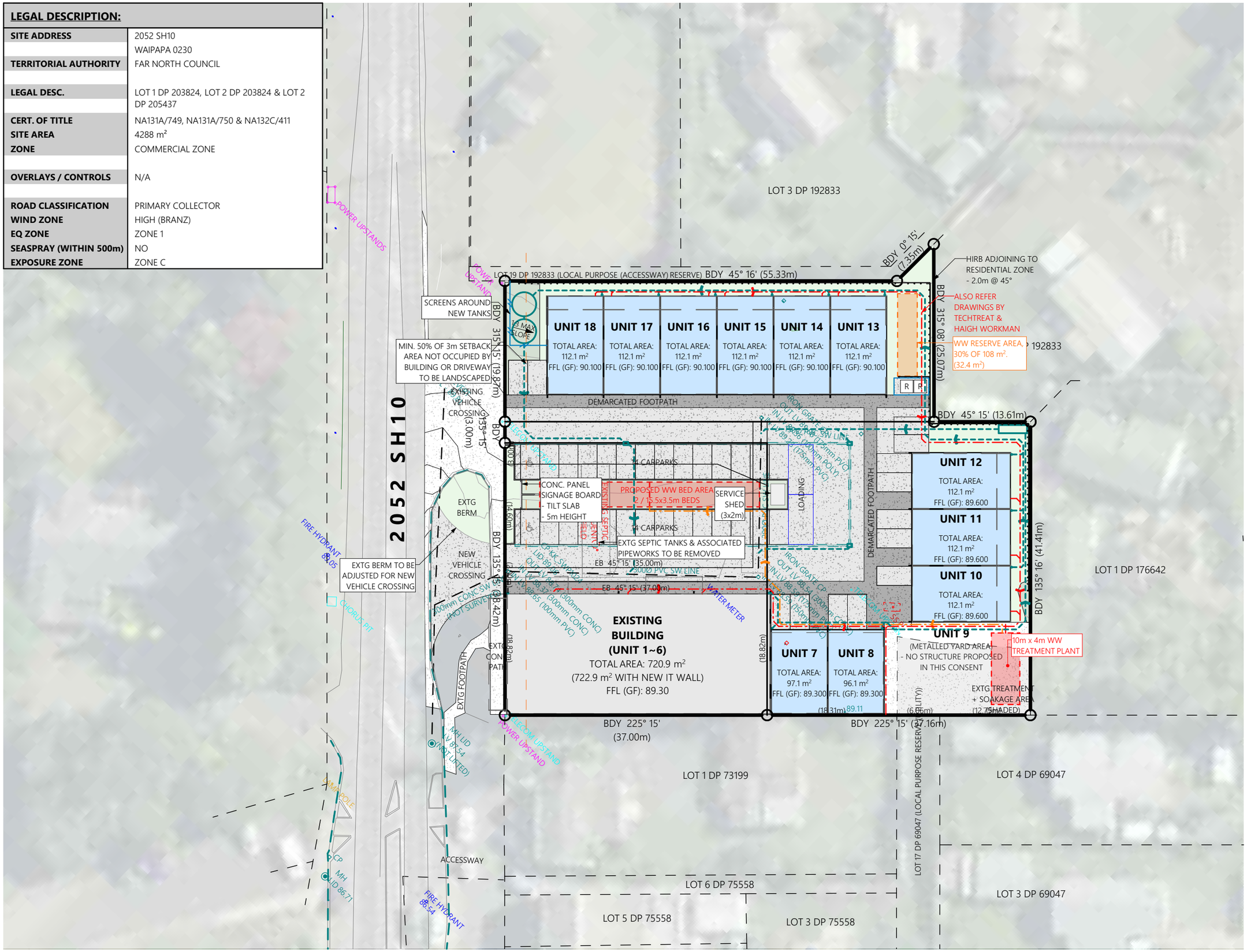

1 / - OVERALL PROPOSED SITE PLAN
1:500 (A3)

Scale 1:500
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Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

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REV	ISSUE	BY	DATE

WINTER SUNSET · SUMMER SUNSET · N · WINTER SUNRISE · SUMMER SUNRISE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

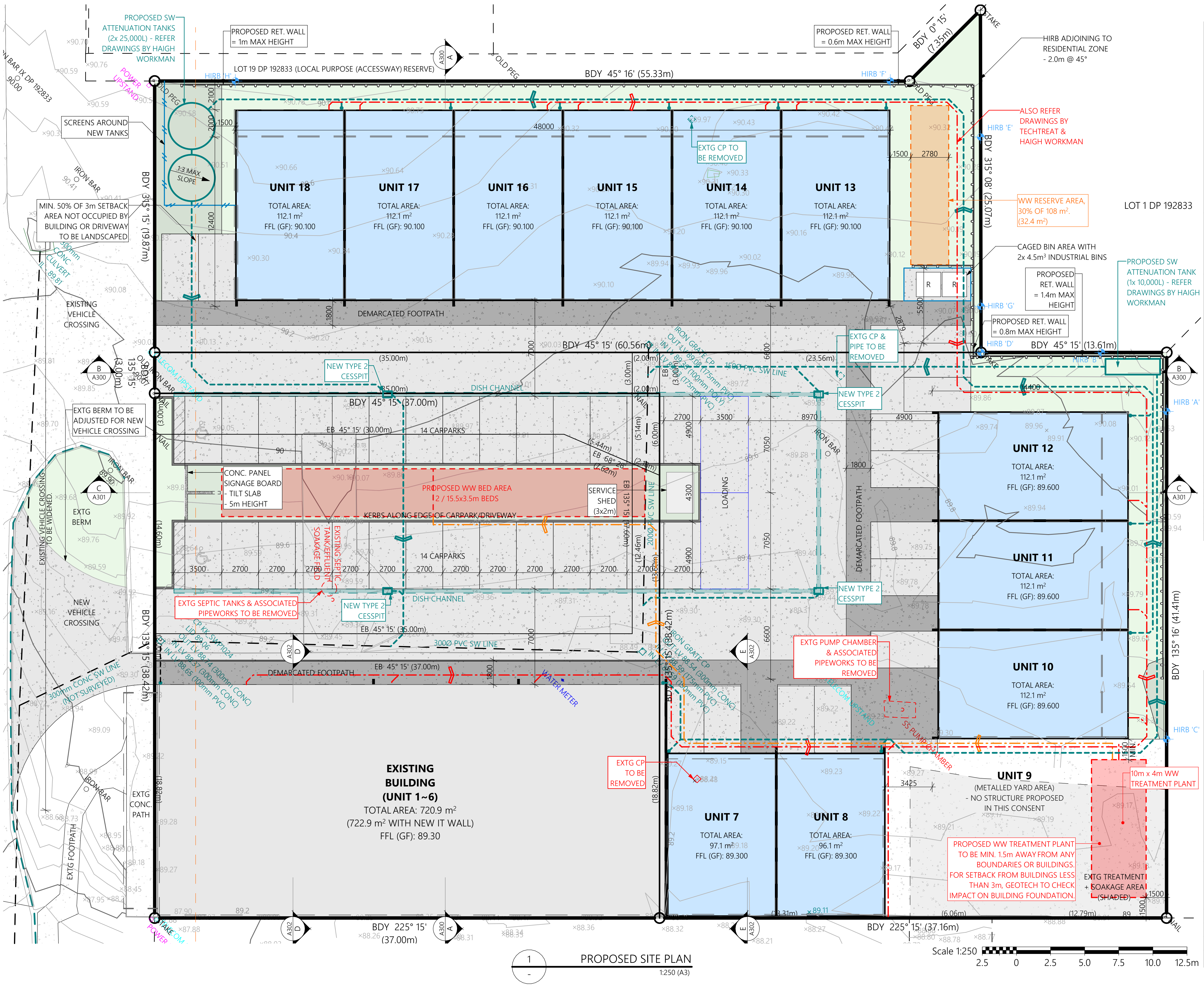
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
OVERALL PROPOSED SITE PLAN

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A101	REV.	



1 PROPOSED SITE PLAN
1:250 (A3)

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Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
PROPOSED SITE PLAN

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A102	REV.	

LEGEND - EARTHWORKS

CUT
AREA: 3325.3 m²
VOLUME: 1388.4 m³

DRIVEWAY
AREA: 1584.4 m²
VOLUME: 605.7 m³

TOTAL EARTHWORK AREA / VOLUME
AREA 3325.3 m² / VOLUME 1388.4 m³

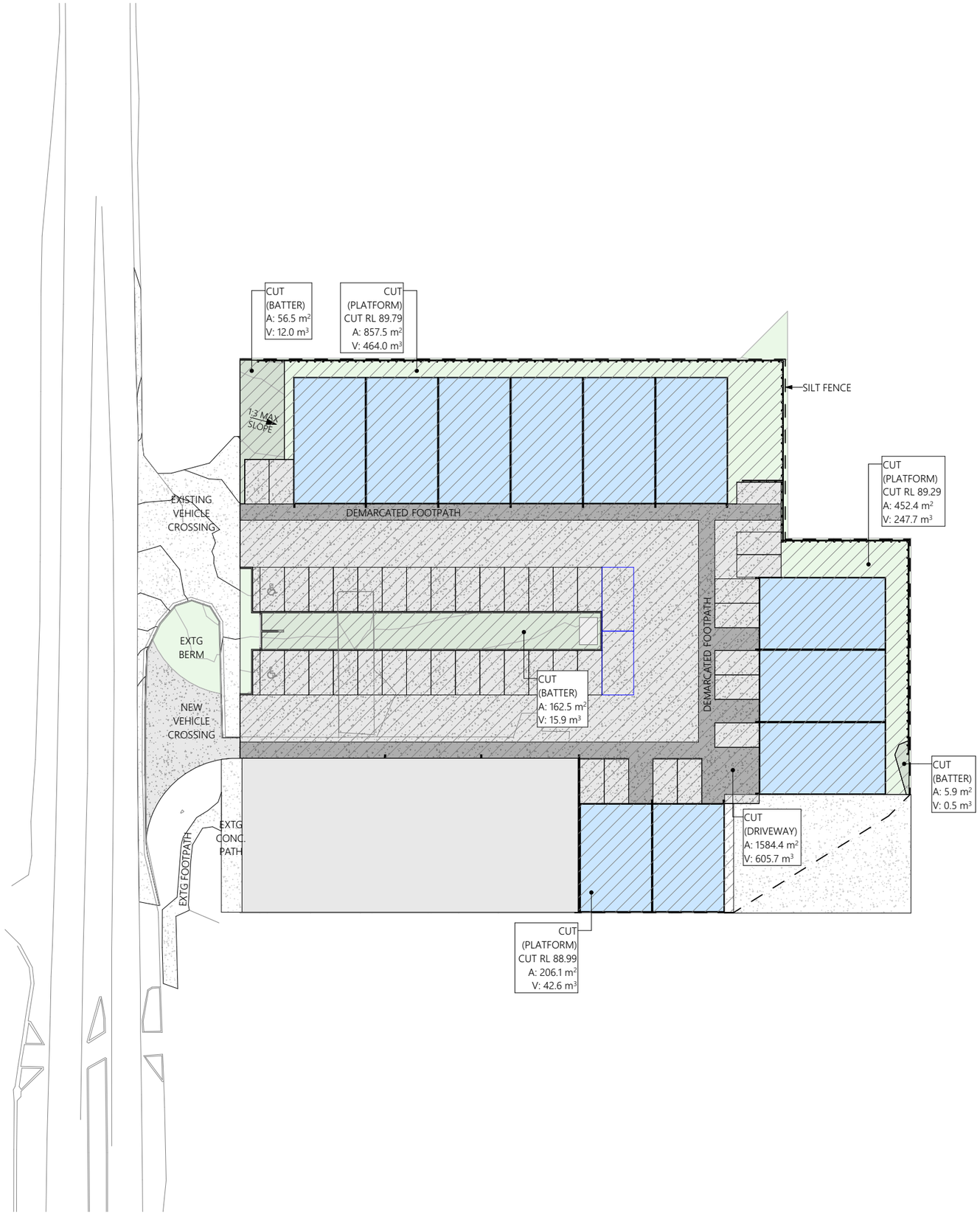
NOTE: THIS AREA / VOLUME ARE FOR PLANNING GUIDE NOT FOR CONSTRUCTION.

EROSION & SEDIMENT CONTROL

— — —

GEOTEXTILE & POST SILT FENCE

NOTES:
- THE SEDIMENT CONTROL PLAN IS SCHEMATIC ONLY AND IF DEEMED NECESSARY WILL BE CONFIRMED ON SITE.
- REFER SILT FENCE DETAILS ON SHEET **A104**.
- SILT FENCE TO COMPLY WITH FAR NORTH COUNCIL EROSION & SEDIMENT CONTROL CODE OF PRACTICE.
- ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND INSTALLED PRIOR TO BUILDING WORKS ON SITE COMMENCING.
- SILT FENCES ARE TO BE MONITORED FOR MAINTENANCE DURING CONSTRUCTION AT LEAST ONCE A WEEK AND AFTER ANY RAINFALL.
- THE IMPLEMENTATION AND MAINTENANCE OF SEDIMENT MANAGEMENT IS THE RESPONSIBILITY OF THE MAIN CONTRACTOR.
- CONTRACTORS SHALL UNLOAD AND LOAD ALL EXCAVATION MACHINERY ON THE SITE AND NOT FROM TRUCKS PARKED ON THE ROAD.
- THE CONTRACTOR IS TO MAKE AVAILABLE A HOSE FOR WASHING DOWN DELIVERY VEHICLES AND CONCRETE TRUCKS BEFORE THEY LEAVE THE SITE.
- DEMOLITION AND SITE CLEARANCE ACTIVITIES SHALL IDEALLY COMMENCE DURING A PERIOD OF FINE WEATHER TO REDUCE THE RISK OF SEDIMENT ESCAPING FROM THE SITE.
- EXISTING SUMPS SHALL BE PROTECTED WITH HAY BALES OR FILTER FABRIC.
- SOIL STOCKPILES SHALL BE COVERED WITH POLYTHENE SHEET AND HELD IN PLACE WITH LARGE ROCKS.
- ENSURE THAT ALL EXCAVATIONS FOR SERVICES ARE BACKFILLED AS SOON AS POSSIBLE.
- DOWNPIPES (TEMPORARY) IF NECESSARY ARE TO BE INSTALLED AND CONNECTED TO THE STORMWATER SYSTEM AS EARLY AS POSSIBLE ONCE THE ROOFING MATERIAL HAS BEEN INSTALLED.
- A HEALTHY VEGETATION BUFFER SHALL BE LEFT OVER AS MUCH OF THE SITE AS POSSIBLE.
- THE SITE IS TO BE KEPT CLEAN AND TIDY AT ALL TIMES.



1 / - EARTHWORKS PLAN
1:500 (A3)

Scale 1:500
5 0 5 10 15 20 25m

NOTES - EARTHWORKS

- EARTHWORKS CUT AREA / VOLUME SHOWN ON THIS PLAN ARE NOT TO BE USED FOR QUOTING PURPOSES. CONTRACTOR TO CALCULATE / QUOTE USING THEIR OWN METHODS / CALCULATIONS ON SITE & CONFIRM WITH OWNER PRIOR TO UNDERTAKING.
- ENSURE TO PUT 'EROSION & SEDIMENT CONTROL' DEVICES IN PLACE - REFER TO FAR NORTH COUNCIL STANDARDS & PROCEDURES.
- ANY PROPOSAL TO CREATE CUTS OR FILLS GREATER THAN 600mm IN HEIGHT SHOULD BE THE SUBJECT OF SPECIFIC DESIGN ADVICE. ALL FILLES, REGARDLESS OF DEPTH, MUST BE PLACED IN ACCORDANCE WITH NZS4431:2022 WITH RESPECT TO SUBGRADE PREPARATION AND STANDARD OF COMPACTION.
- EXCAVATION AND GROUND CONDITIONS MUST BE INSPECTED BY THE GEOTECH ENGINEER.

SITE MANAGEMENT

- ENSURE TO ERECT SILT CONTROL FENCES & WATER DIVERSION TRENCH AWAY FROM THE EXCAVATION PRIOR TO ANY EXCAVATION TAKING PLACE.
- ENSURE THAT THE SUPPRESSION OF DUST IS ATTENDED TO IF IT BECOMES AN ISSUE.
- SILT FENCE IN VICINITY OF EXCAVATION AS SHOWN.

NZBC - F5.2

CONSTRUCTION & DEMOLITION HAZARDS

a) WORKS UNDERTAKEN FOR THIS CONSENT DO NOT INCLUDE THOSE WHERE FALLING OBJECTS ARE A HAZARD. NO SCAFFOLDING TO BE ERECTED, NO ALTERATIONS TO EXISTING BUILDING ABOVE SUBFLOOR.
b) WORKS ARE CENTRALLY LOCATED TO THE SITE, ADJACENT PROPERTIES ARE OUTSIDE PROXY OF ANY POTENTIAL HAZARDOUS ACTIVITY.
c) ALL SUITABLY QUALIFIED CONTRACTORS ARE TO ENSURE OPERATION OF WORKS FALL INTO COMPLIANCE WITH NZBC F5.2.
d) WORKS UNDERTAKEN ARE TO BE DONE UNDER APPROPRIATELY QUALIFIED SUPERVISION. PROJECT MANAGER / FOREMAN OR CLIENT TO ENSURE HAZARDOUS WORKS CANNOT BE ACCESSED BETWEEN OPERATIONAL WORKING HOURS.

SITE SETOUT

- PROPOSED LOCATION OF THE BUILDING IS TO BE PEGGED BY A SURVEYOR IN THE CONFIRMED LOCATION.
- PEG FFL *DATUM BY SURVEYOR ON SITE - (PEG FFL AGAINST FENCE - OUT OF THE WAY).
- CONTRACTOR TO VERIFY ALL EXTERNAL MEASUREMENTS OF EXISTING DWELLING PRIOR TO SETOUT.

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p: 0800 22 77 45

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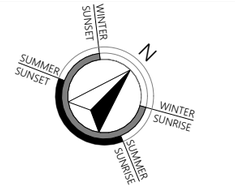
REV	ISSUE	BY	DATE



ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

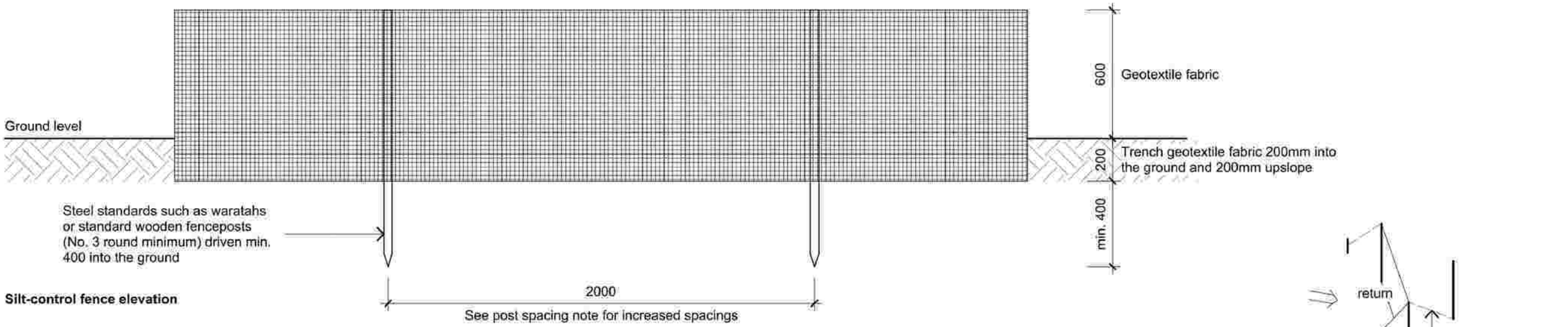
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

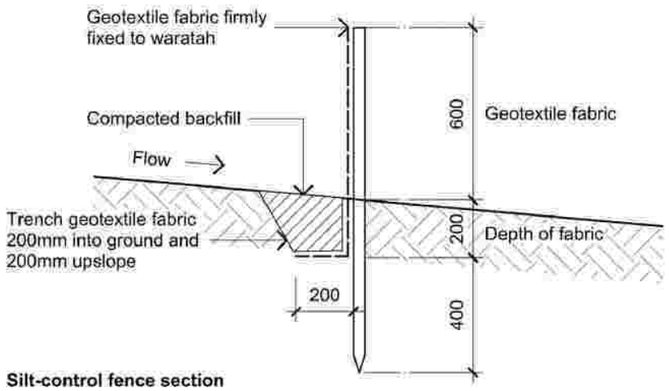
DRAWING TITLE:
EARTHWORKS PLAN

RESOURCE CONSENT

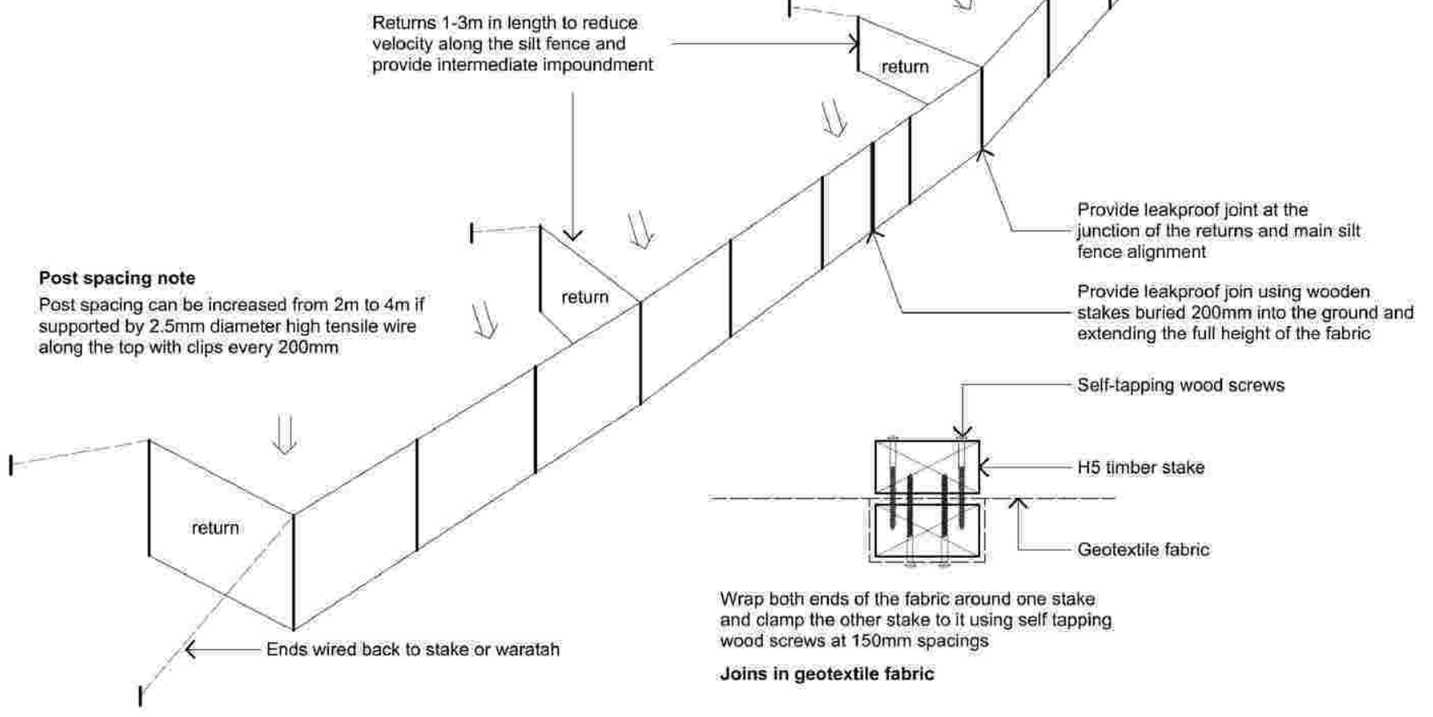
DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A103	REV.	



Silt-control fence elevation



Silt-control fence section



Silt-control fence layout

Wrap both ends of the fabric around one stake and clamp the other stake to it using self tapping wood screws at 150mm spacings

Joins in geotextile fabric

1 / - SILT FENCE DETAIL

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

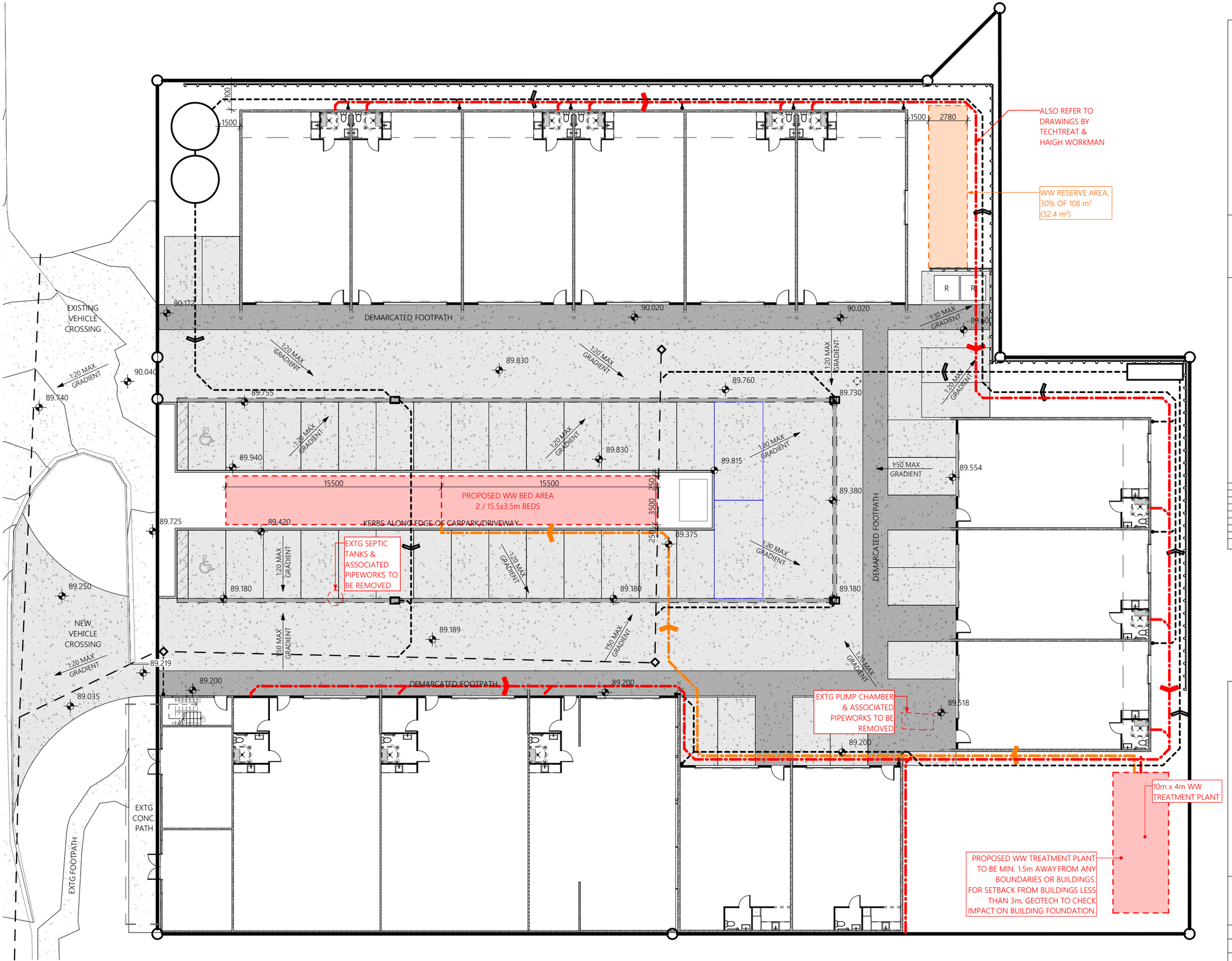
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
SILT FENCE DETAILS

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A104	REV.	



1 - PROPOSED SITE DRAINAGE PLAN - WASTEWATER
1:250 (A3)

Scale 1:250
2.5 0 2.5 5.0 7.5 10.0 12.5m

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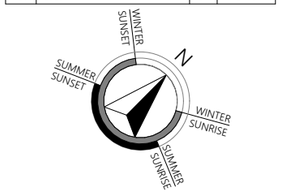
REV	ISSUE	BY	DATE



ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

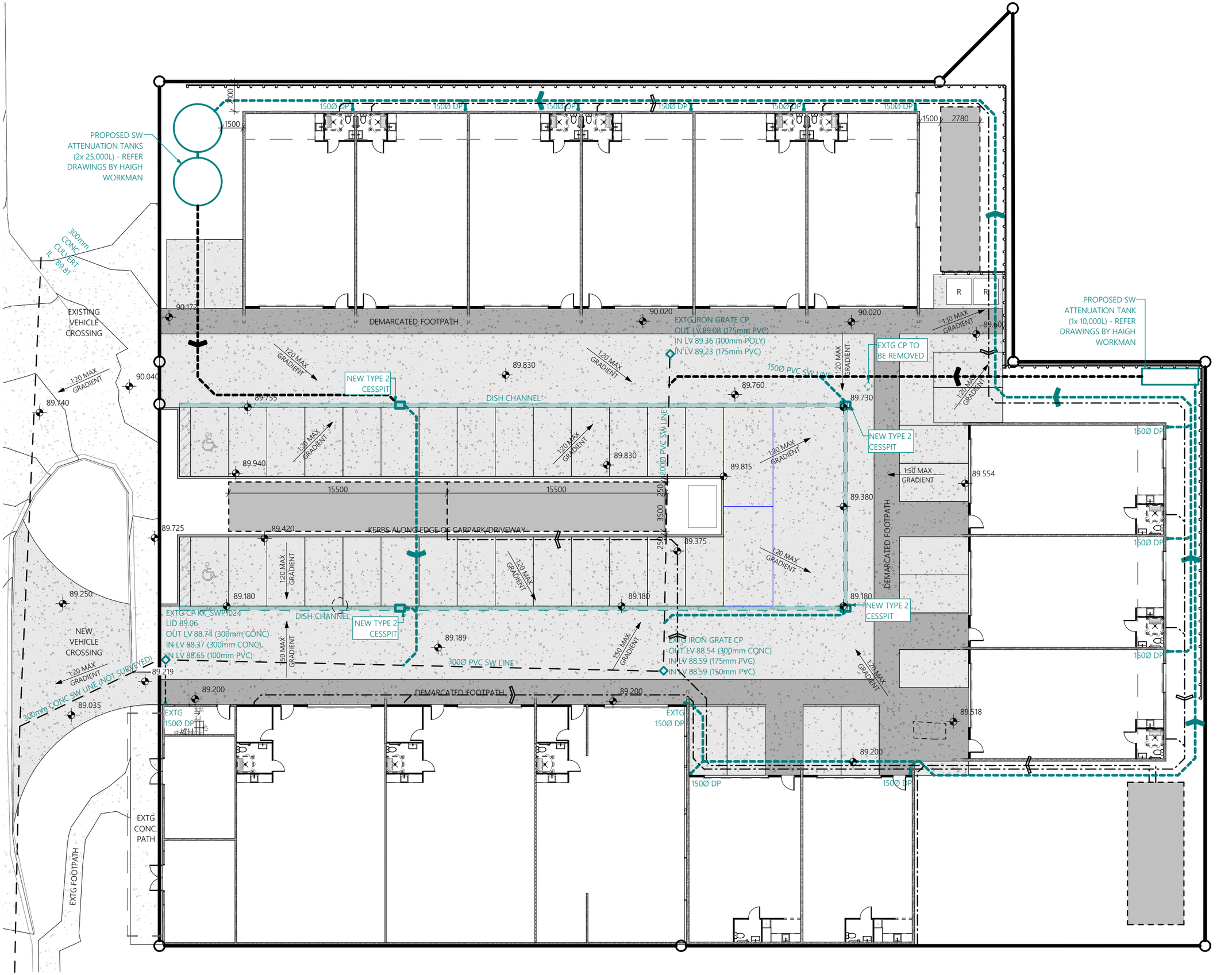
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
PROPOSED SITE DRAINAGE PLAN - WASTEWATER

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A109	REV.	



1 - PROPOSED SITE DRAINAGE PLAN - STORMWATER
1:250 (A3)

Scale 1:250
2.5 0 2.5 5.0 7.5 10.0 12.5m

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REV	ISSUE	BY	DATE

WINTER SUNSET
SUMMER SUNSET
N
WINTER SUNRISE
SUMMER SUNRISE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

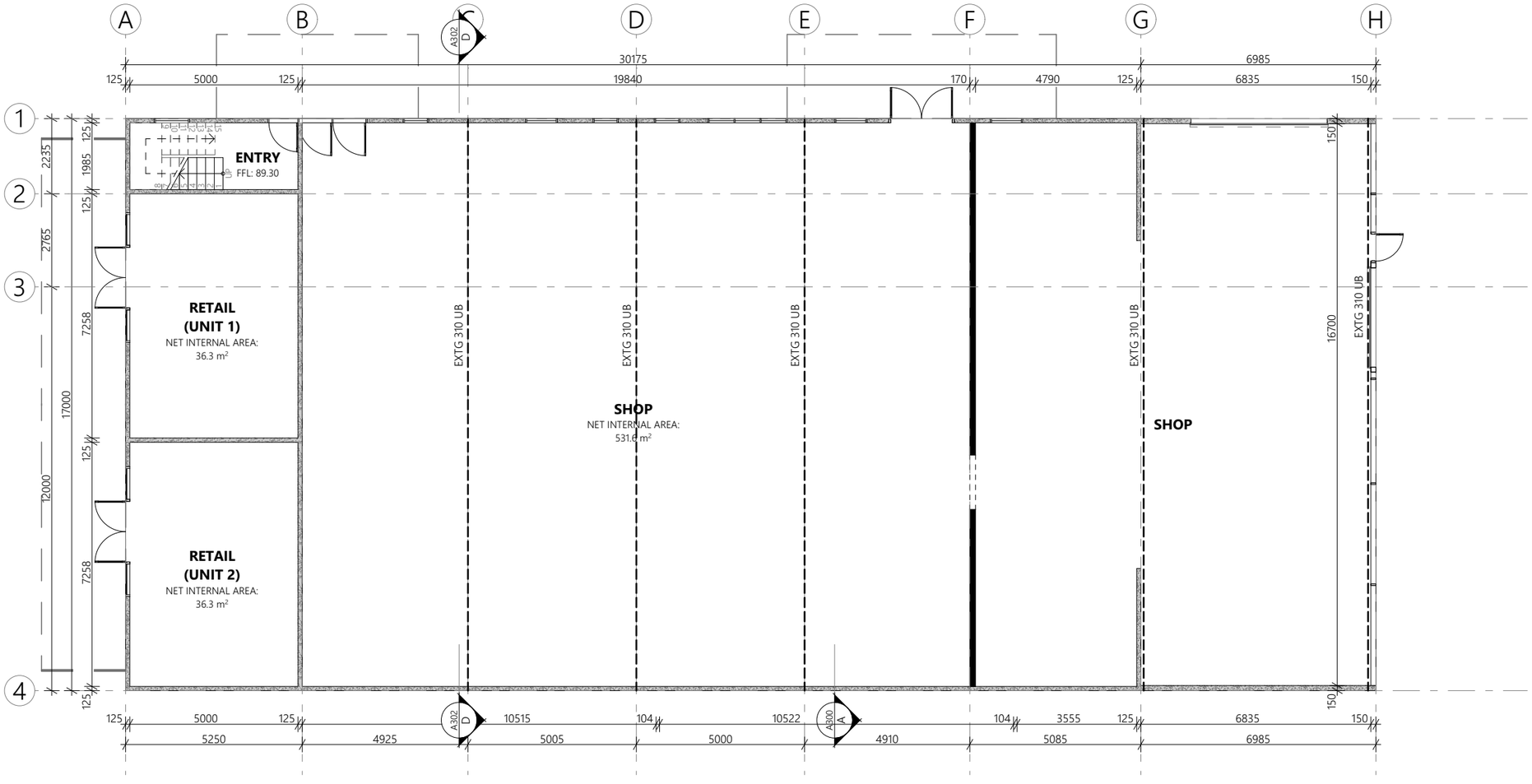
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
PROPOSED SITE DRAINAGE PLAN - STORMWATER

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A110	REV:	



1 / - GROUND FLOOR PLAN - BLOCK 1 - EXISTING

1:150 (A3)

Scale 1:150

1.5 0 1.5 3.0 4.5 6.0 7.5m

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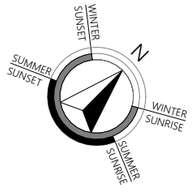


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

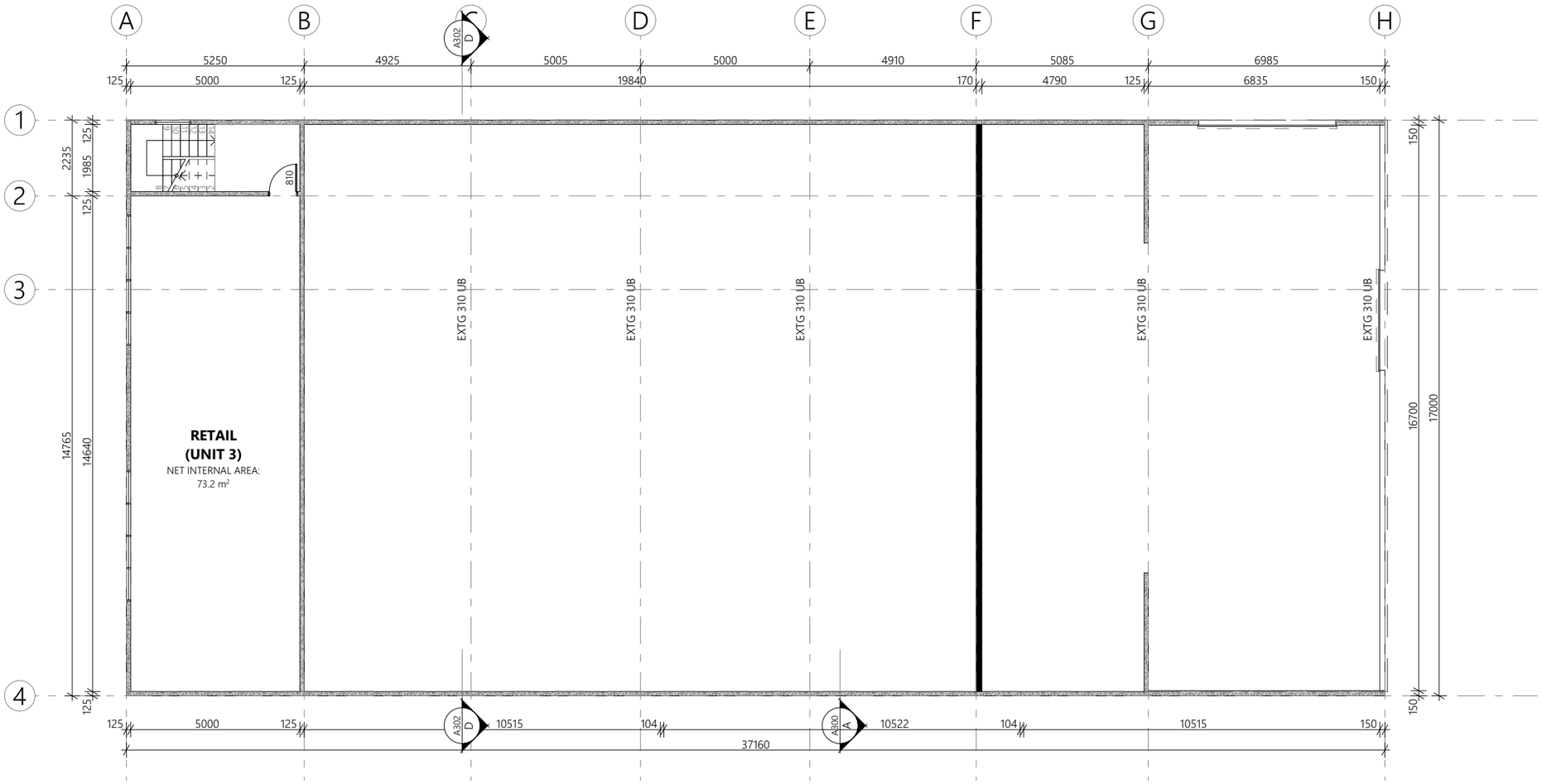
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: GROUND FLOOR PLAN - BLOCK 1 - EXISTING

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A111	REV.	



1 / - FIRST FLOOR PLAN - BLOCK 1 - EXISTING

1:150 (A3)

Scale 1:150

1.5 0 1.5 3.0 4.5 6.0 7.5m

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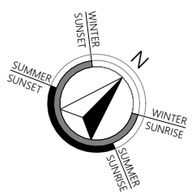


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

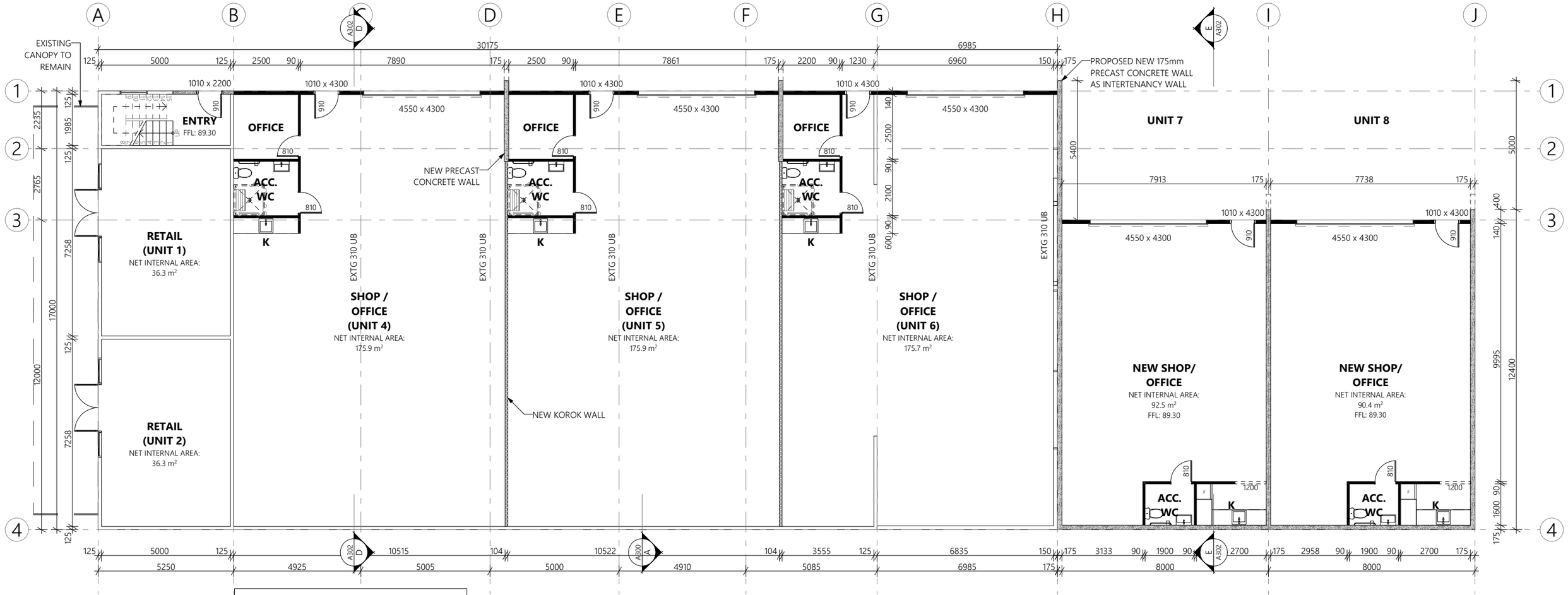
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: FIRST FLOOR PLAN - BLOCK 1 - EXISTING

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A112	REV.	



UNIT 7	
GROUND FLOOR (O/A SLAB):	97.1 m²
UNIT 8	
GROUND FLOOR (O/A SLAB):	96.1 m²
NEW INTERTENANCY WALL	
GROUND FLOOR (O/A SLAB):	2.2 m²
TOTAL AREA (ADDITION):	195.4 m²

* AREA SHOWN IS GROSS FLOOR AREA
* EXCLUDES COVERED DECK / PORCHES

AREAS

EXISTING (UNIT 1~6)	
GROUND FLOOR (O/A SLAB):	631.7 m²
FIRST FLOOR (O/A FRAME):	89.2 m²
TOTAL AREA:	720.9 m²

* AREA SHOWN IS GROSS FLOOR AREA
* EXCLUDES COVERED DECK / PORCHES

1 / - GROUND FLOOR PLAN - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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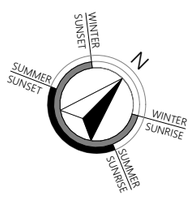


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

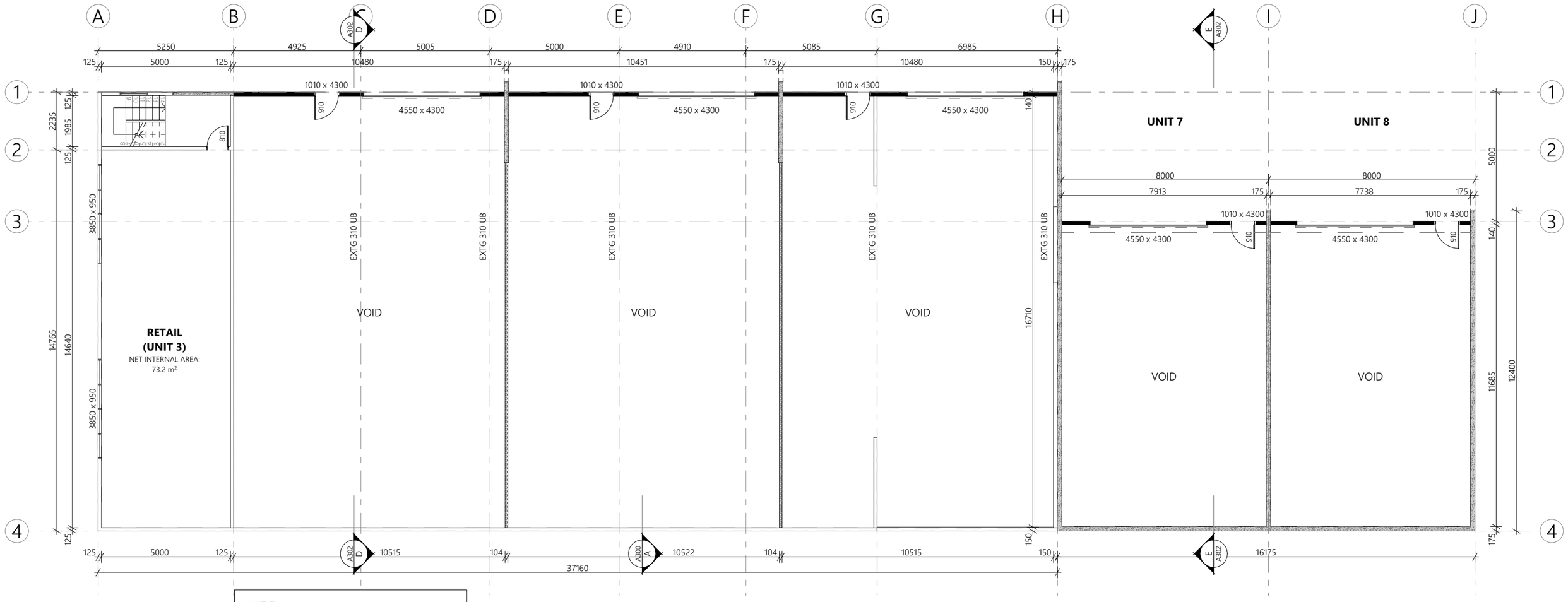
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: GROUND FLOOR PLAN - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A113	REV.	



AREAS

EXISTING (UNIT 1~6)

GROUND FLOOR (O/A SLAB):	631.7 m²
FIRST FLOOR (O/A FRAME):	89.2 m²
TOTAL AREA:	720.9 m²

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UNIT 7

GROUND FLOOR (O/A SLAB):	97.1 m²

UNIT 8

GROUND FLOOR (O/A SLAB):	96.1 m²

NEW INTERTENANCY WALL

GROUND FLOOR (O/A SLAB):	2.2 m²
TOTAL AREA (ADDITION):	195.4 m²

* AREA SHOWN IS GROSS FLOOR AREA
* EXCLUDES COVERED DECK / PORCHES

1 / - FIRST FLOOR PLAN - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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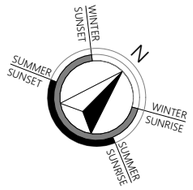
- ALL TIMBER TO BE GRADE SG8 UNLESS SPECIFIED OTHERWISE.
- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.



REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

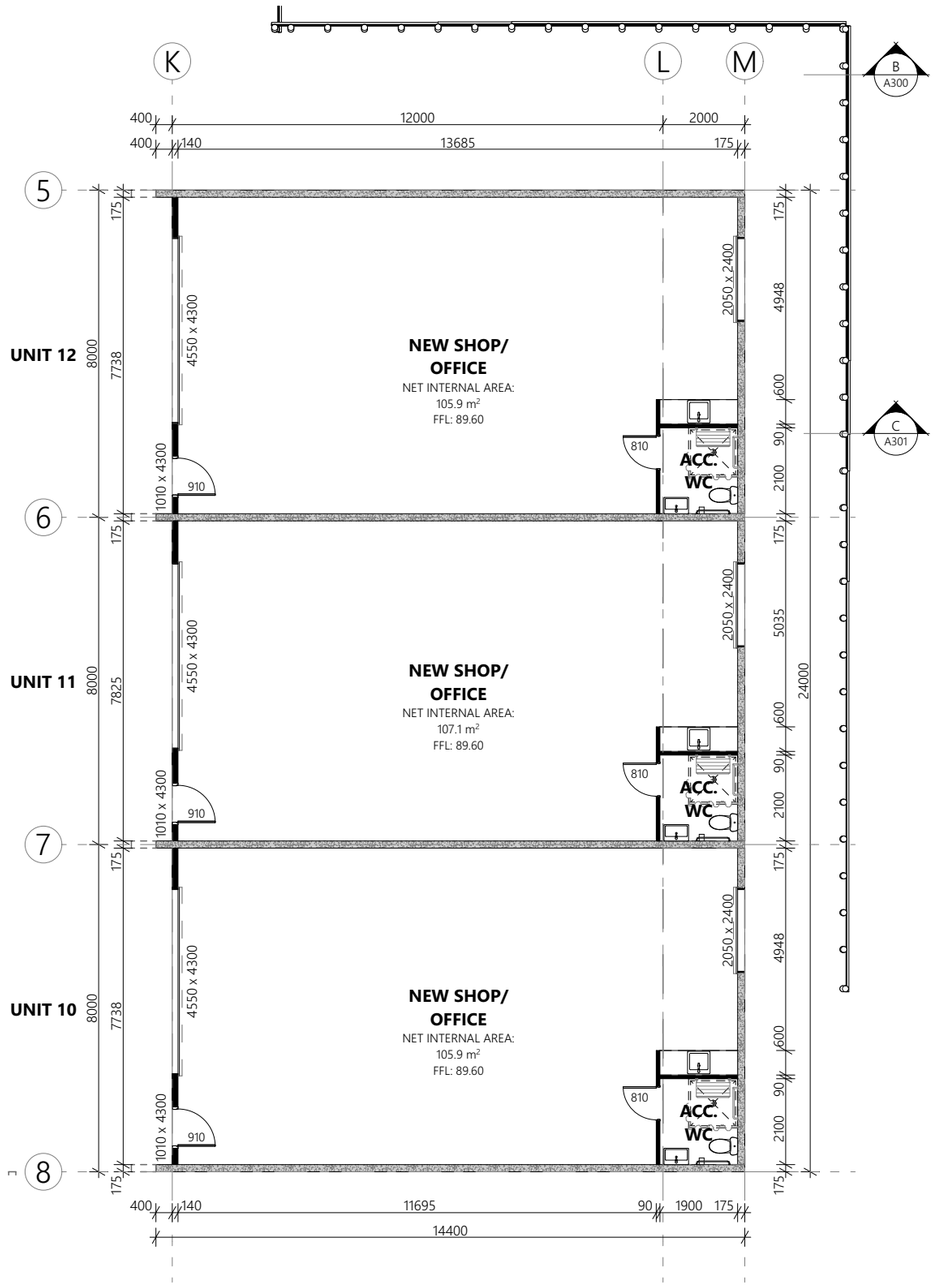
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: FIRST FLOOR PLAN - BLOCK 1 - PROPOSED

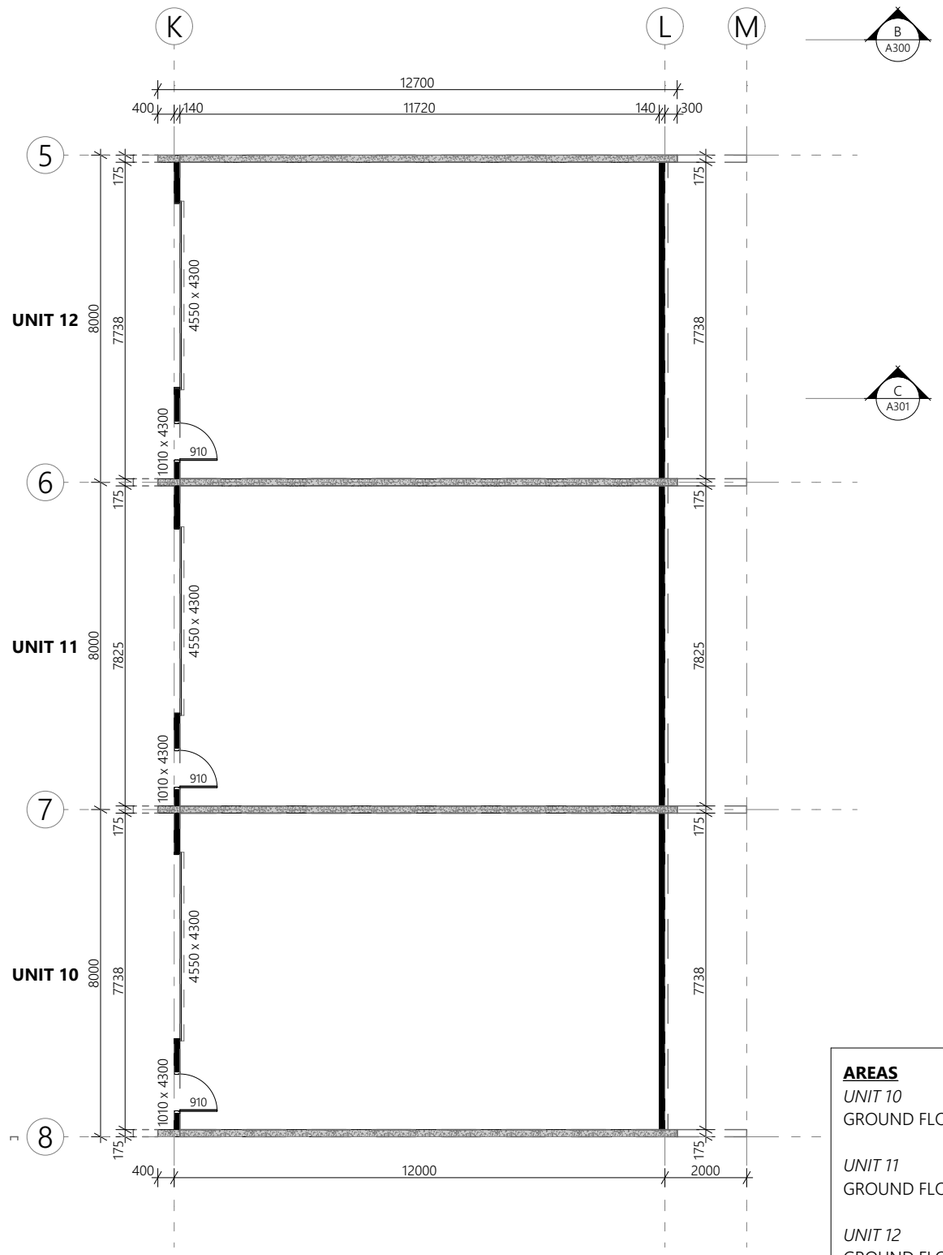
ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A114	REV.	



1 / - GROUND FLOOR PLAN - BLOCK 2 - PROPOSED
1:150 (A3)



2 / - UPPER FRAMING PLAN - BLOCK 2 - PROPOSED
1:150 (A3)

AREAS

UNIT 10
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 11
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 12
GROUND FLOOR (O/A SLAB): 112.1 m²

TOTAL AREA: 336.3 m²

* AREA SHOWN IS GROSS FLOOR AREA
* EXCLUDES COVERED DECK / PORCHES

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

ADNZ Professional Member

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- BLOCKING TO COMPLY WITH NZS3604:2011 - NOT SHOWN CLARITY.
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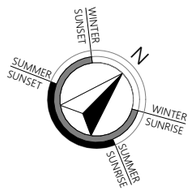
- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.



REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

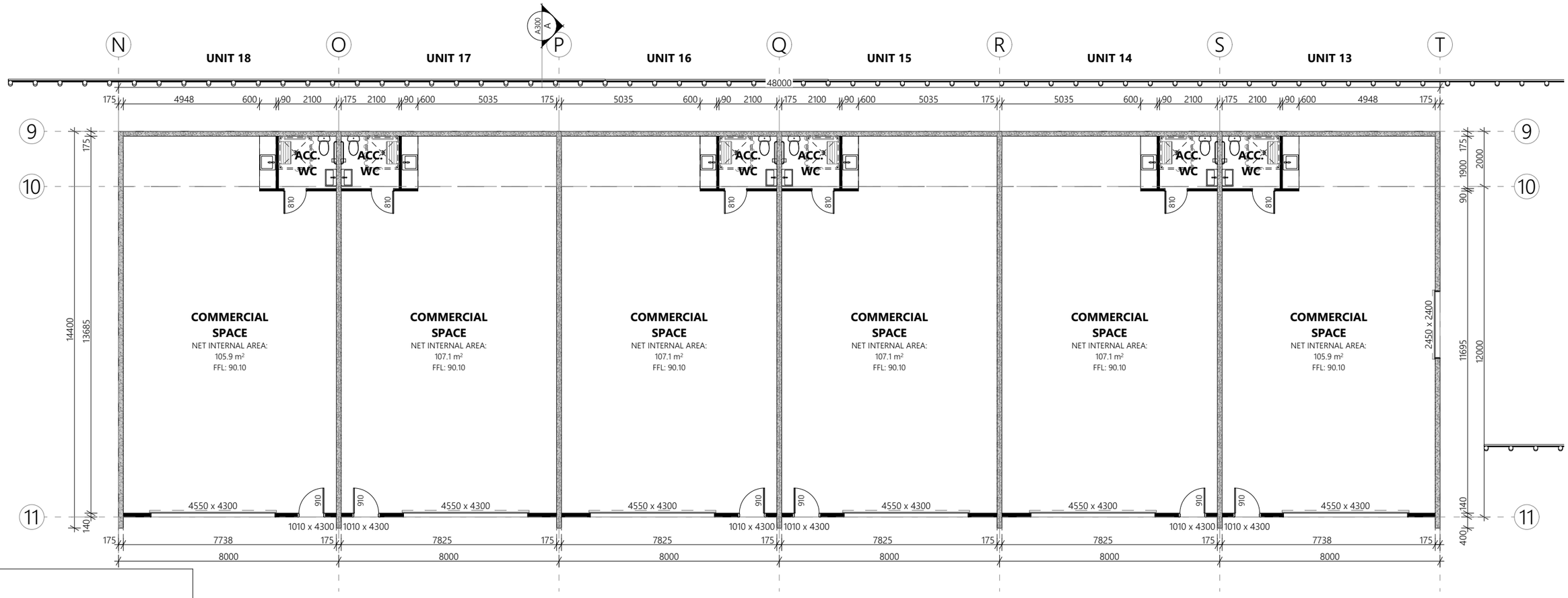
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: FLOOR PLANS - BLOCK 2

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A115	REV.	



AREAS

UNIT 13
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 14
GROUND FLOOR (O/A SLAB): 112.1 m2

UNIT 15
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 16
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 17
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 18
GROUND FLOOR (O/A SLAB): 112.1 m²

TOTAL AREA: 672.6 m²

* AREA SHOWN IS GROSS FLOOR AREA
* EXCLUDES COVERED DECK / PORCHES

1 - GROUND FLOOR PLAN - BLOCK 3 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

ADNZ Professional Member

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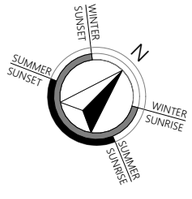


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

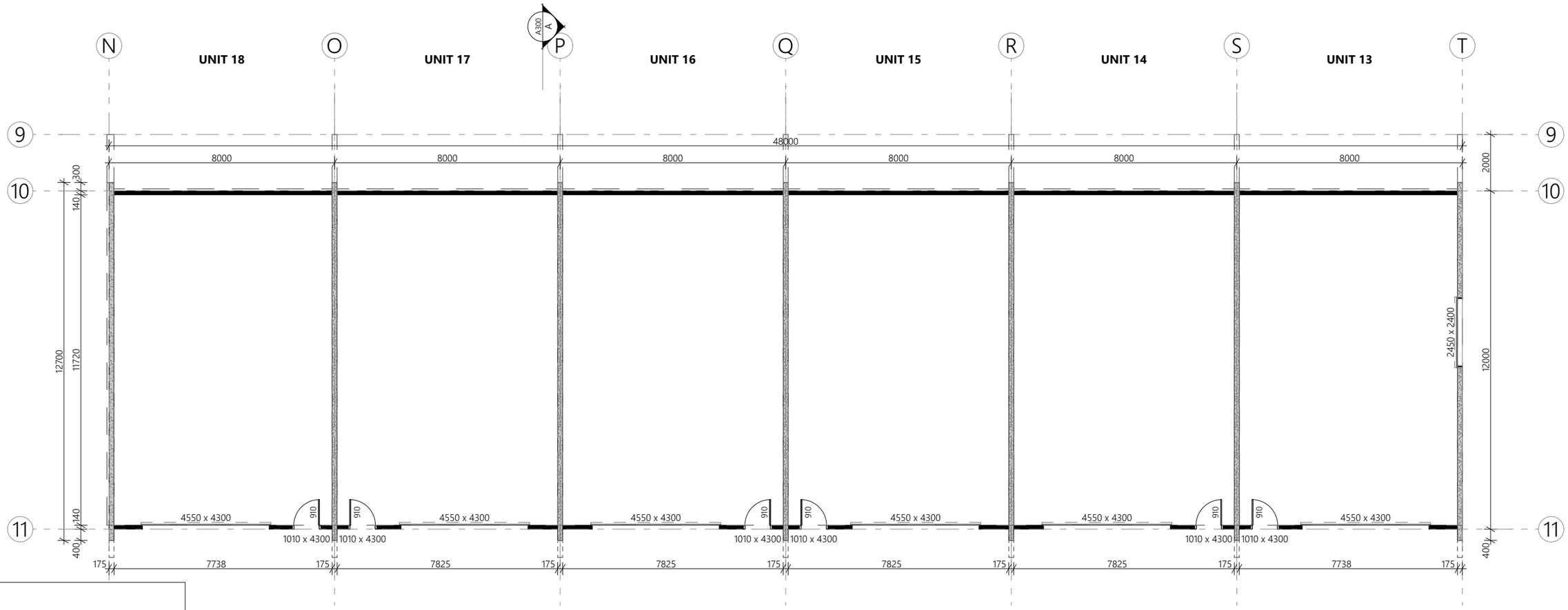
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: GROUND FLOOR PLAN - BLOCK 3

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A116	REV.	



AREAS

UNIT 13
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 14
GROUND FLOOR (O/A SLAB): 112.1 m2

UNIT 15
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 16
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 17
GROUND FLOOR (O/A SLAB): 112.1 m²

UNIT 18
GROUND FLOOR (O/A SLAB): 112.1 m²

TOTAL AREA: 672.6 m²

* AREA SHOWN IS GROSS FLOOR AREA
* EXCLUDES COVERED DECK / PORCHES

1 / - UPPER FRAMING PLAN - BLOCK 3 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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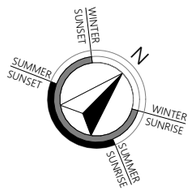


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

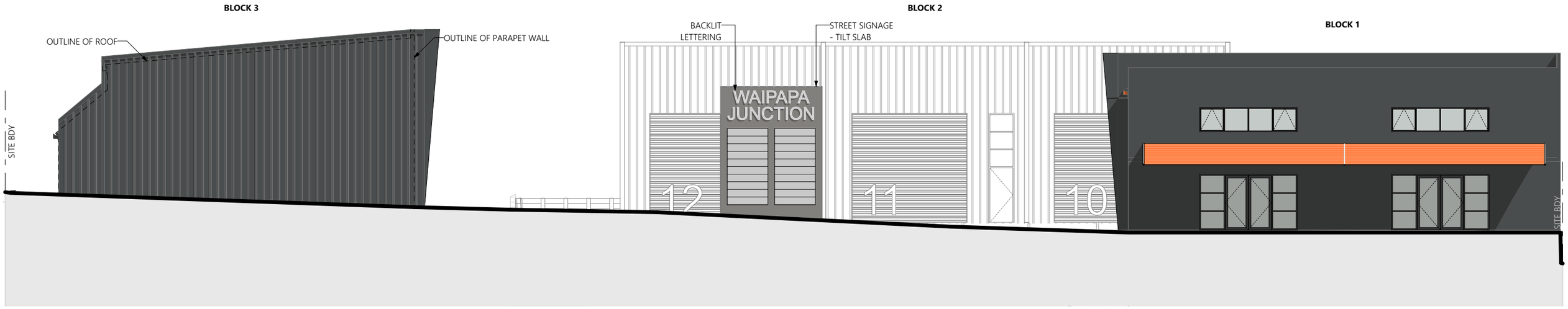
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: FIRST FLOOR PLAN - BLOCK 3

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A117	REV.	



1 - STREET ELEVATION - PROPOSED

1:150 (A3)

Scale 1:150

1.5 0 1.5 3.0 4.5 6.0 7.5m

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REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

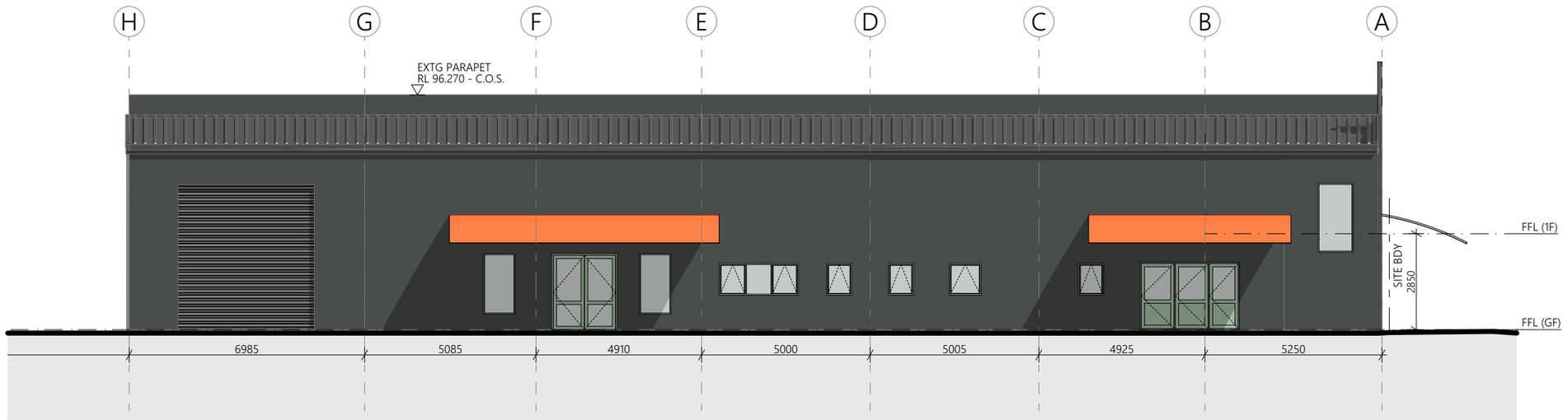
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: STREET ELEVATION - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

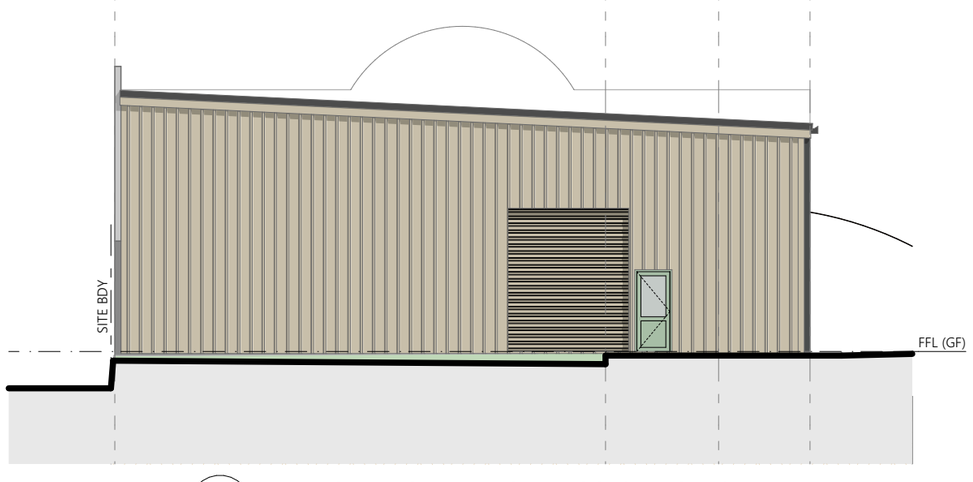
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A200	REV.	



1 / - NORTHWEST ELEVATION - BLOCK 1 - EXISTING

1:150 (A3)



2 / - NORTHEAST ELEVATION - BLOCK 1 - EXISTING

1:150 (A3)

Scale 1:150

1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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REV	ISSUE	BY	DATE

CLIENT:
PAUL VEGAR

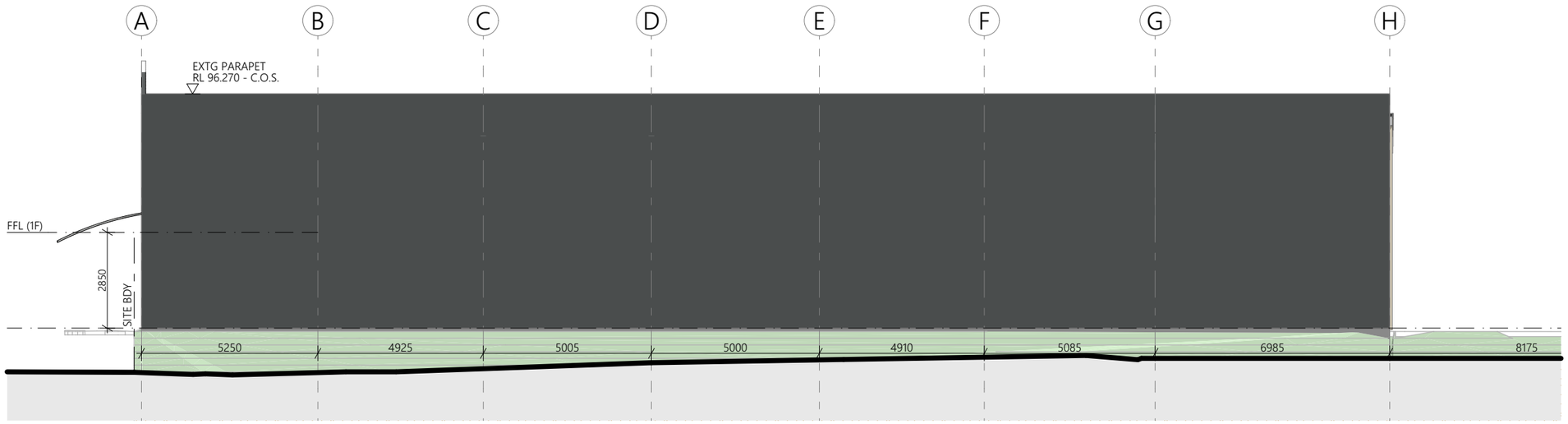
PROJECT:
PROPOSED
NEW DEVELOPMENT

DRAWING TITLE:
NW & NE ELEVATION - BLOCK 1 - EXISTING

ADDRESS:
2052 SH10, WAIPAPA

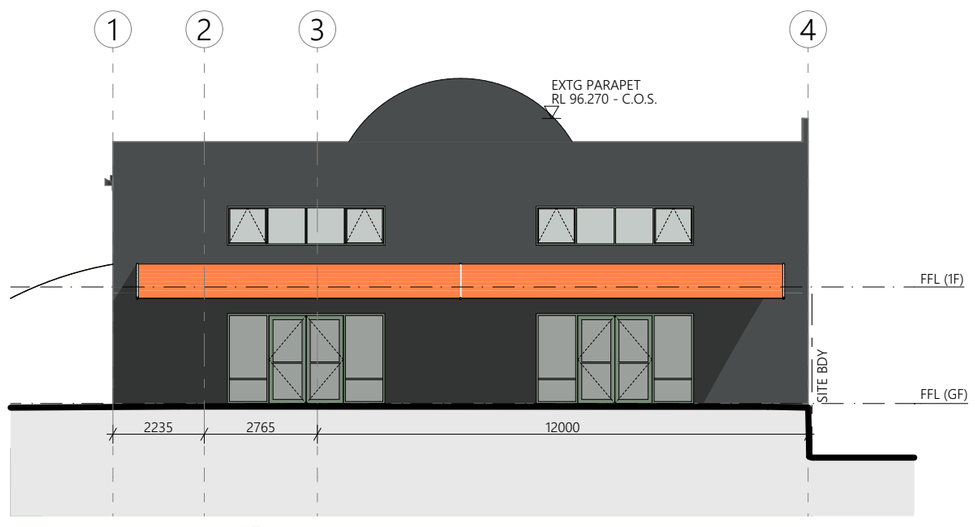
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A201	REV.	



1 / - SOUTHEAST ELEVATION - BLOCK 1 - EXISTING

1:150 (A3)



2 / - SOUTHWEST ELEVATION - BLOCK 1 - EXISTING

1:150 (A3)

Scale 1:150

1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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REV	ISSUE	BY	DATE

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

DRAWING TITLE:
SE & SW ELEVATION - BLOCK 1 - EXISTING

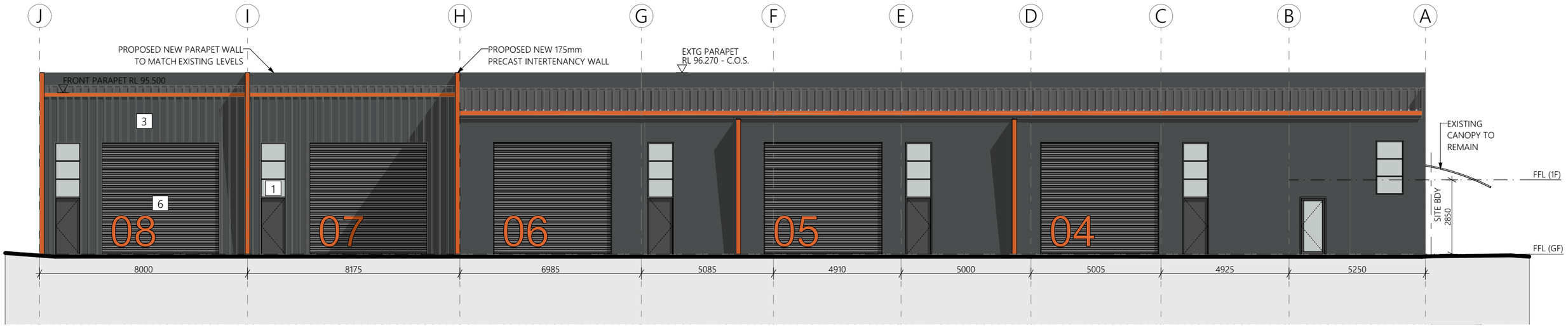
ADDRESS:
2052 SH10, WAIPAPA

RESOURCE CONSENT

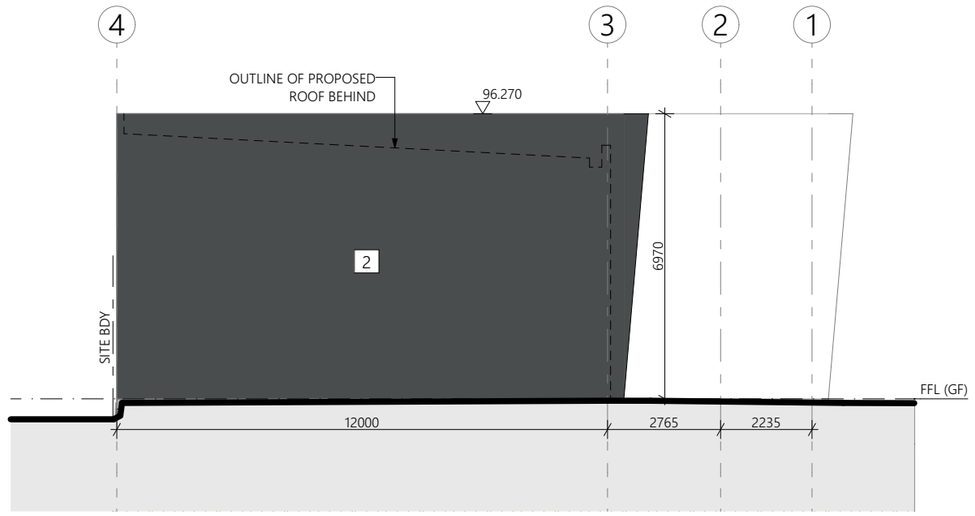
DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A202	REV.	

ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR



1 / - NORTHWEST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)



2 / - NORTHEAST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: NW & NE ELEVATION - BLOCK 1 - PROPOSED

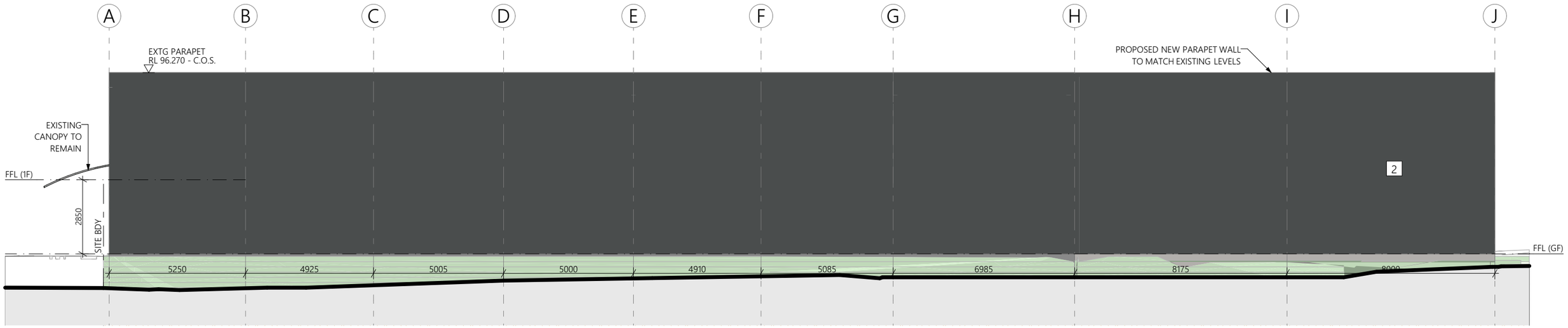
ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

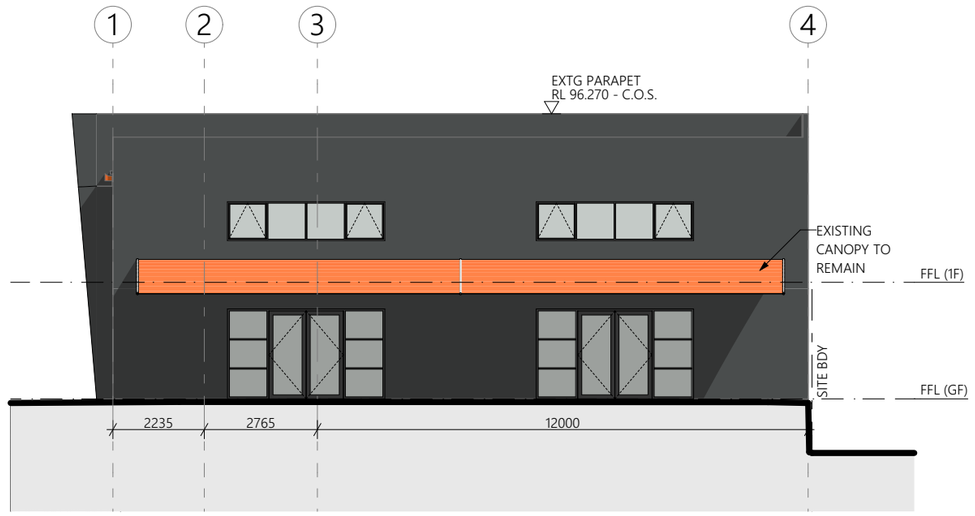
DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A203	REV.	

ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR



1 / - SOUTHEAST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)



2 / - SOUTHWEST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: SE & SW ELEVATION - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

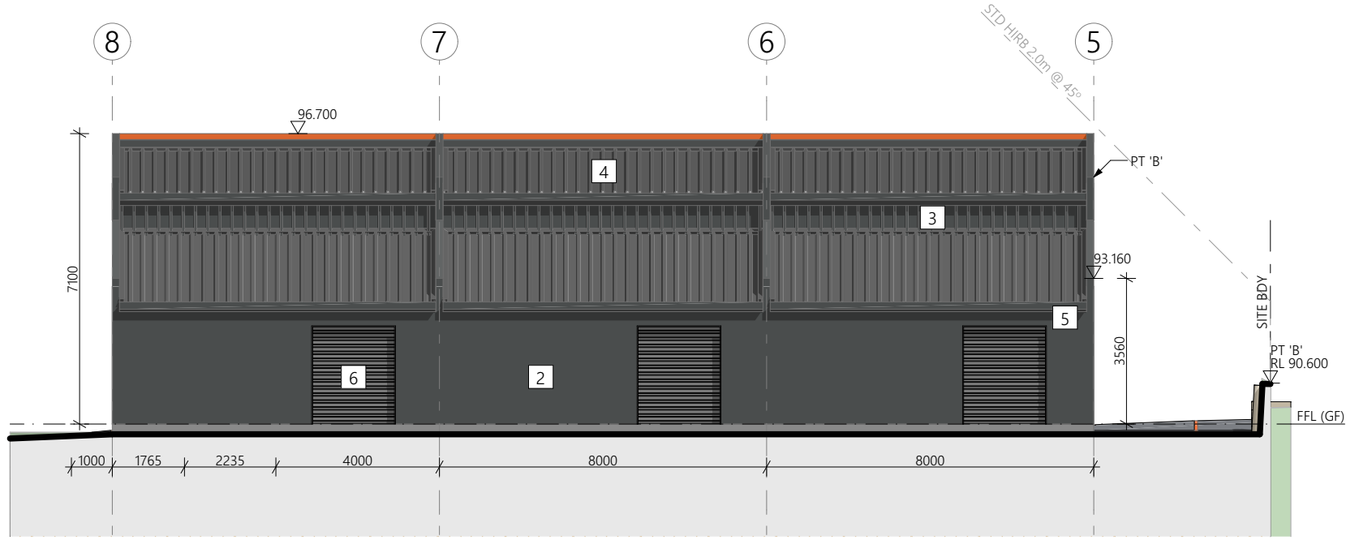
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A204	REV.	

ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR

1 / - NORTHWEST ELEVATION - BLOCK 2 - PROPOSED
1:150 (A3)



2 / - NORTHEAST ELEVATION - BLOCK 2 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.

REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: NW & NE ELEVATION - BLOCK 2 - PROPOSED

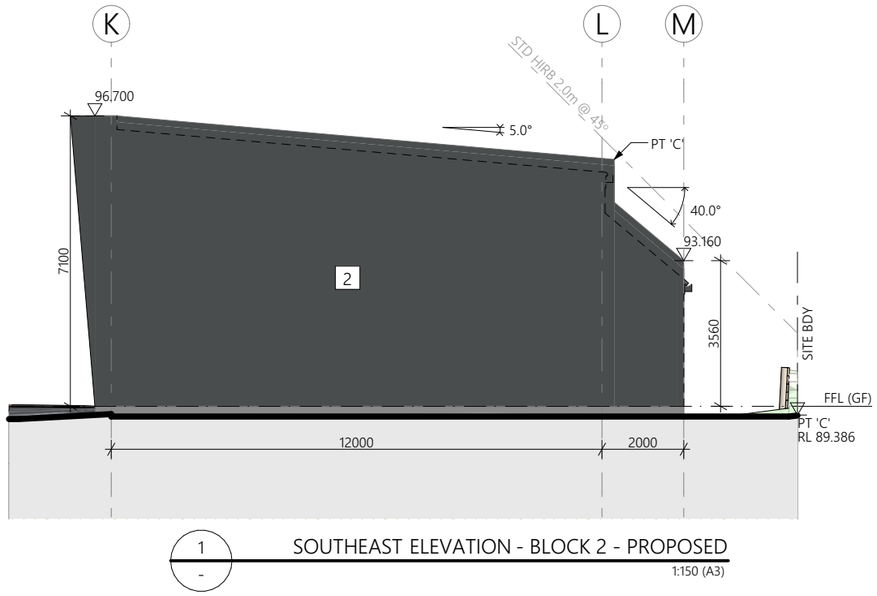
ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

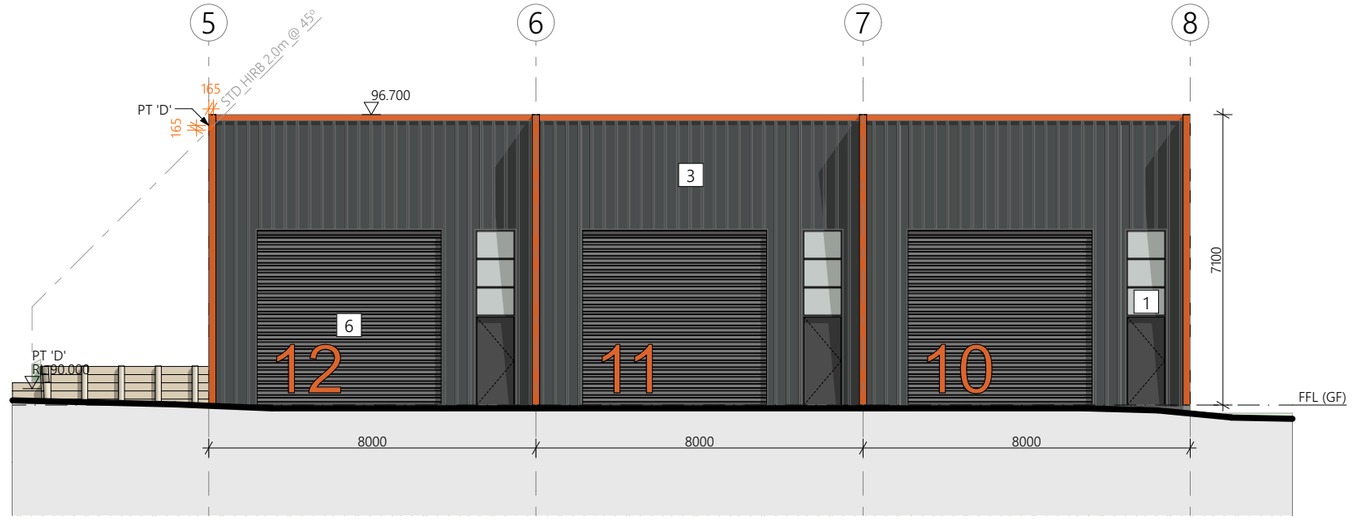
DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A205	REV.	

ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR



1 - SOUTHEAST ELEVATION - BLOCK 2 - PROPOSED
1:150 (A3)



2 - SOUTHWEST ELEVATION - BLOCK 2 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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Kumeu, Auckland 0810, NZ
p: 0800 22 77 45
P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

ORIGINAL PLAN IN COLOUR

ADNZ Professional Member

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REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: SE & SW ELEVATION - BLOCK 2 - PROPOSED

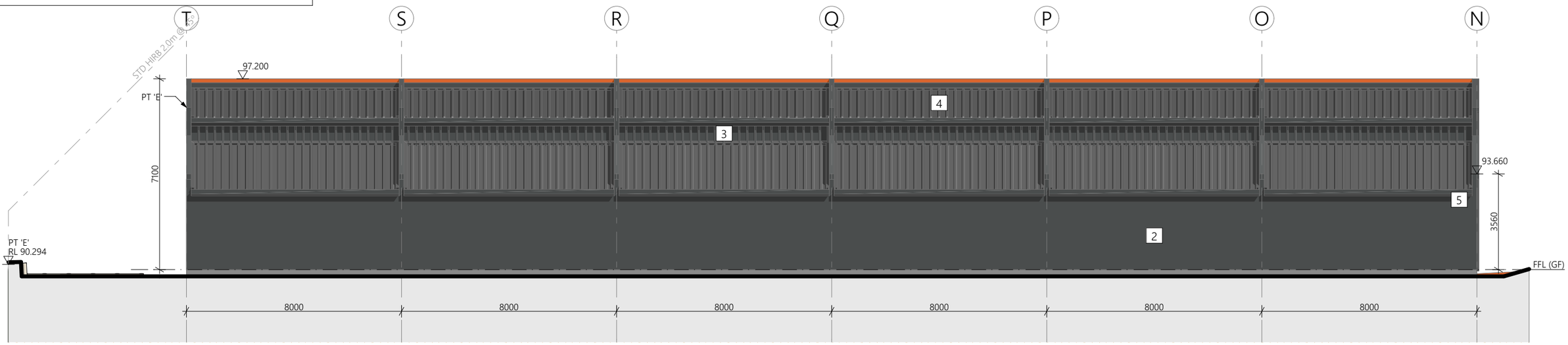
ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

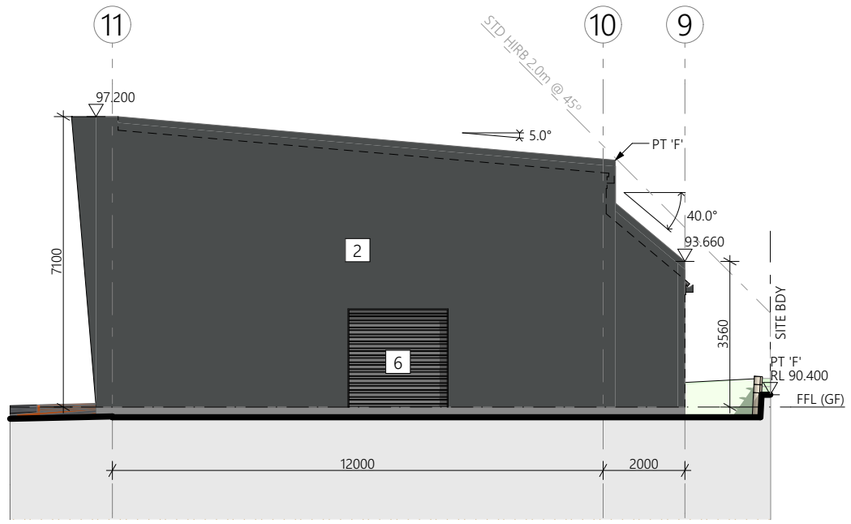
DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A206	REV.	

ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR



1 / - NORTHWEST ELEVATION - BLOCK 3 - PROPOSED
1:150 (A3)



2 / - NORTHEAST ELEVATION - BLOCK 3 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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Kumeu, Auckland 0810, NZ
p: 0800 22 77 45
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Auckland 0841, NZ
e: info@archiology.co.nz

ORIGINAL PLAN IN COLOUR

ADNZ Professional Member

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- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.

REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: NW & NE ELEVATION - BLOCK 3 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

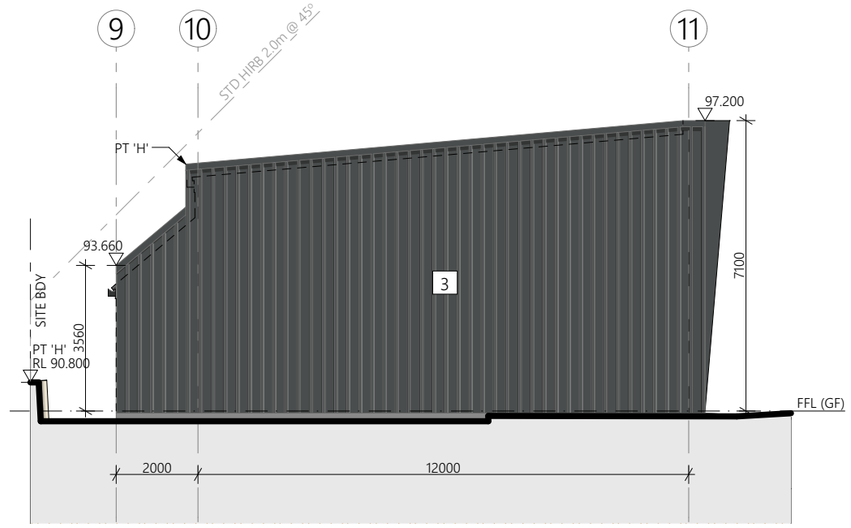
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A207	REV.	

ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR

1 / - SOUTHEAST ELEVATION - BLOCK 3 - PROPOSED
1:150 (A3)



2 / - SOUTHWEST ELEVATION - BLOCK 3 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

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ORIGINAL PLAN IN COLOUR

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REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

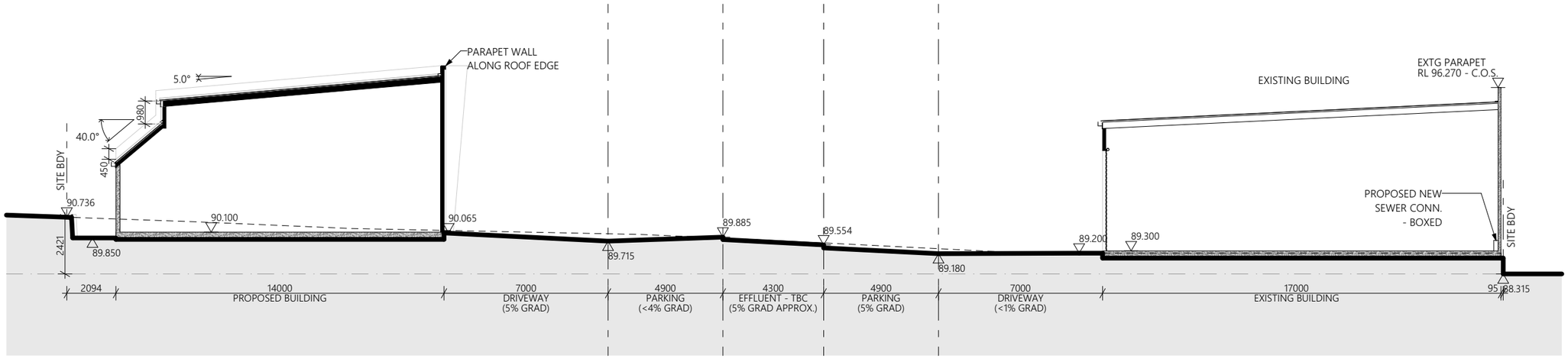
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: SE & SW ELEVATION - BLOCK 3 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

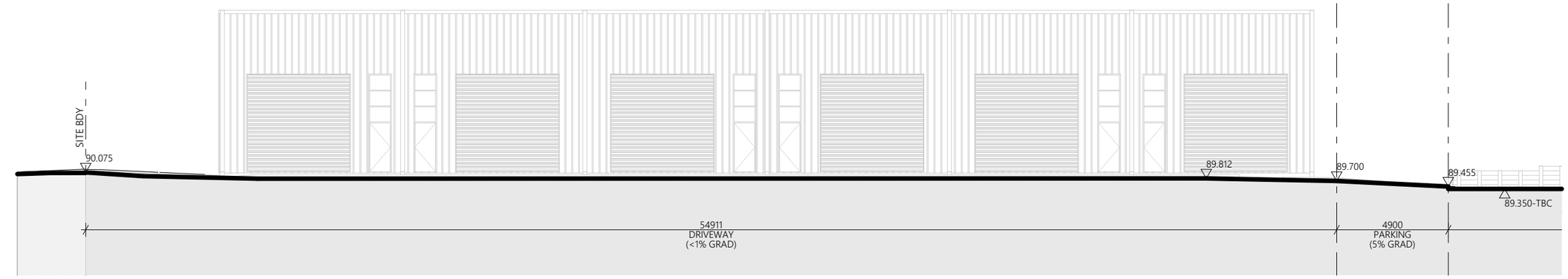
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A208	REV.	



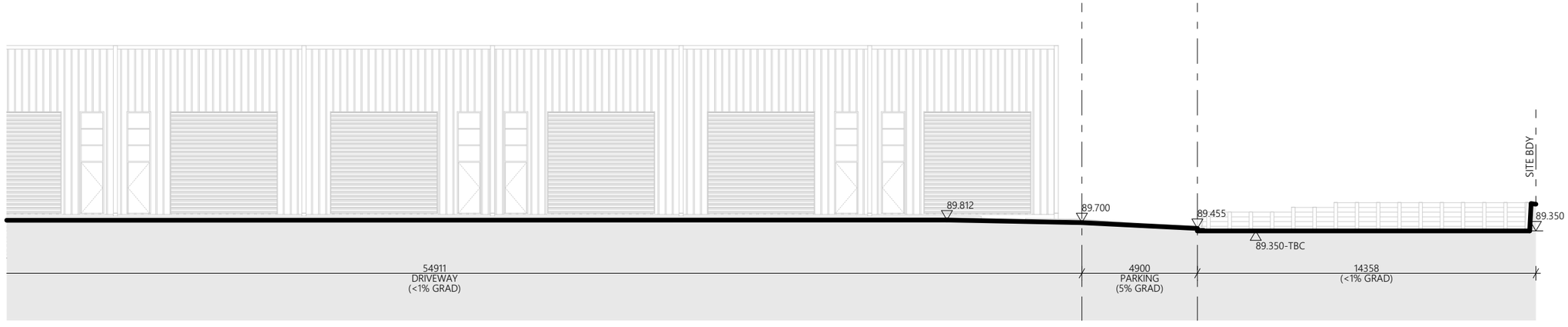
A
-

SECTION A
1:200 (A3)



B
-

SECTION B-1
1:200 (A3)



B
-

SECTION B-2
1:200 (A3)

Scale 1:100
1 0 1 2 3 4 5m

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

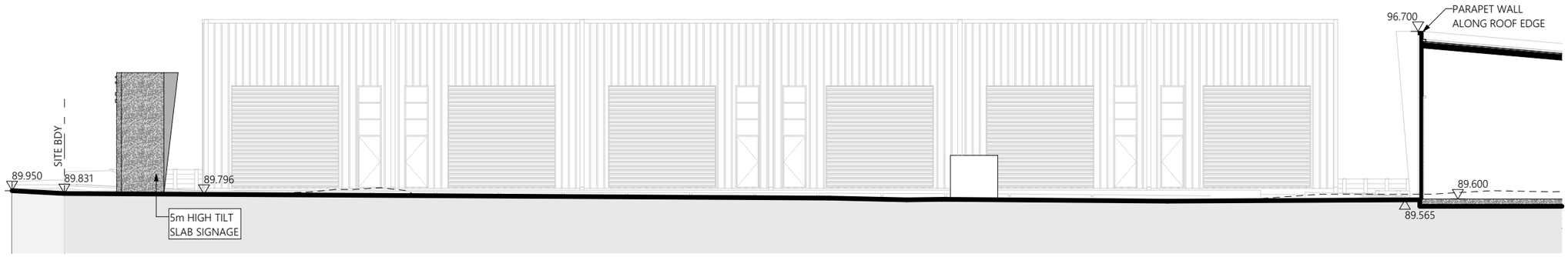
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
CROSS SECTION A & B

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A300	REV.	



C
-

SECTION C-1

1:200 (A3)

C
-

SECTION C-2

1:200 (A3)

Scale 1:100

1 0 1 2 3 4 5m

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

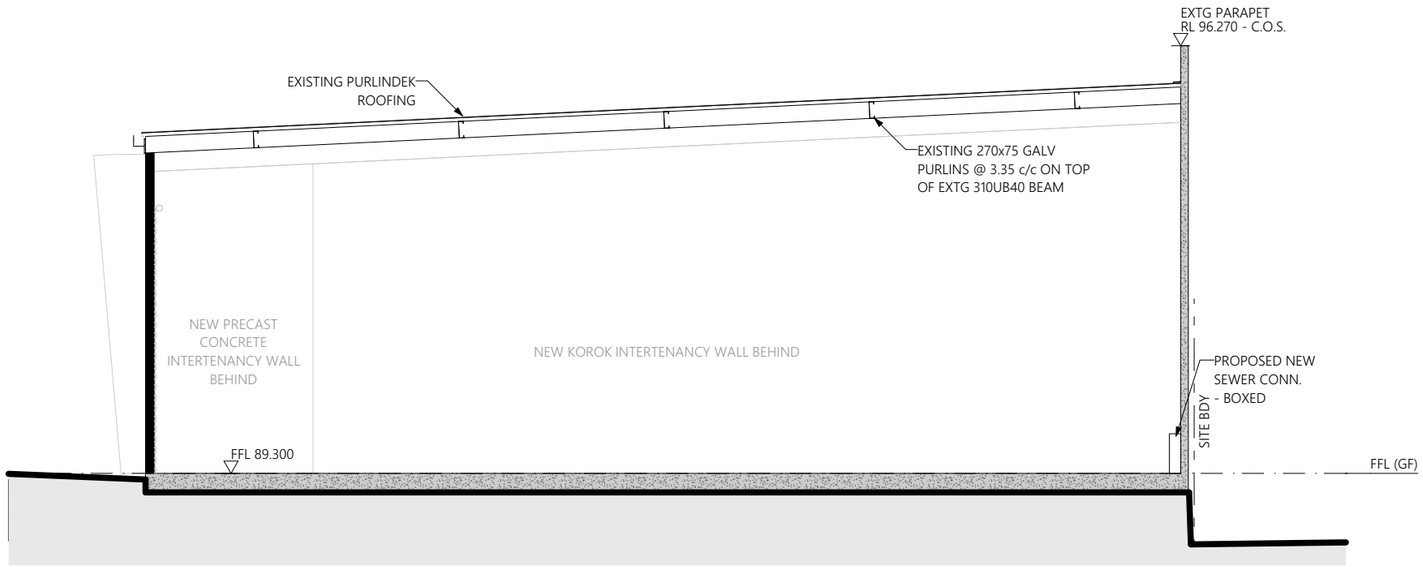
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

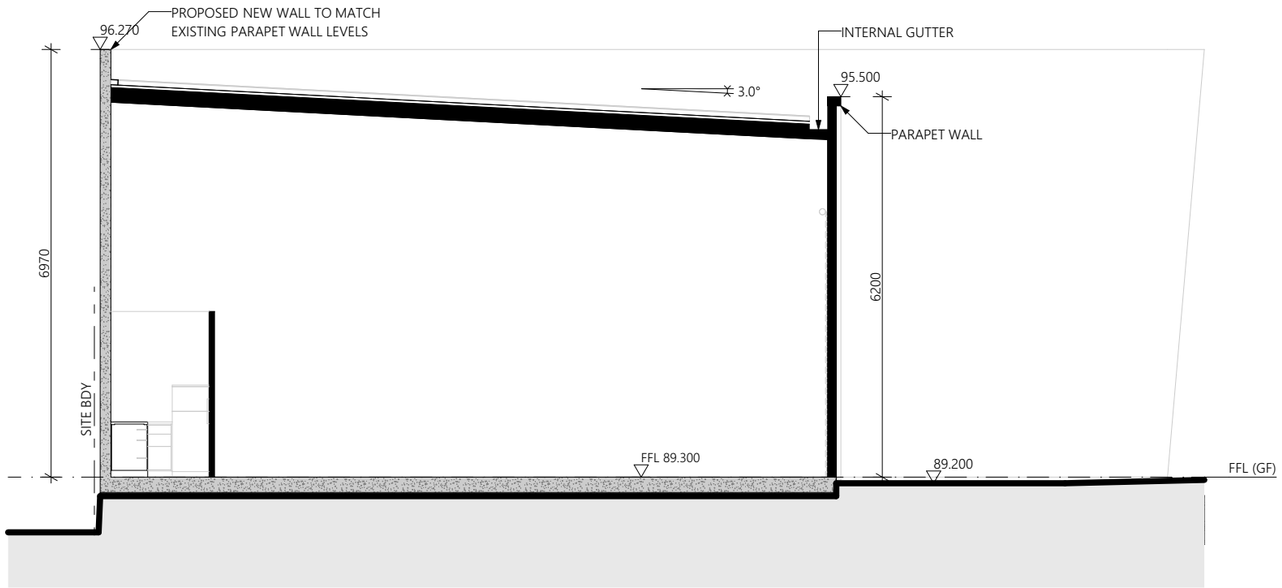
DRAWING TITLE:
CROSS SECTION C

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A301	REV:	



D
-
SECTION D
1:100 (A3)



E
-
SECTION E
1:100 (A3)

Scale 1:100
1 0 1 2 3 4 5m

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
CROSS SECTION D & E

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A302	REV.	

ARTIST IMPRESSION ONLY

ARTIST IMPRESSION ONLY

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Professional Member

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
PERSPECTIVES - 1

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A400	REV.	

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ADNZ Architectural Designers New Zealand
Professional Member

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

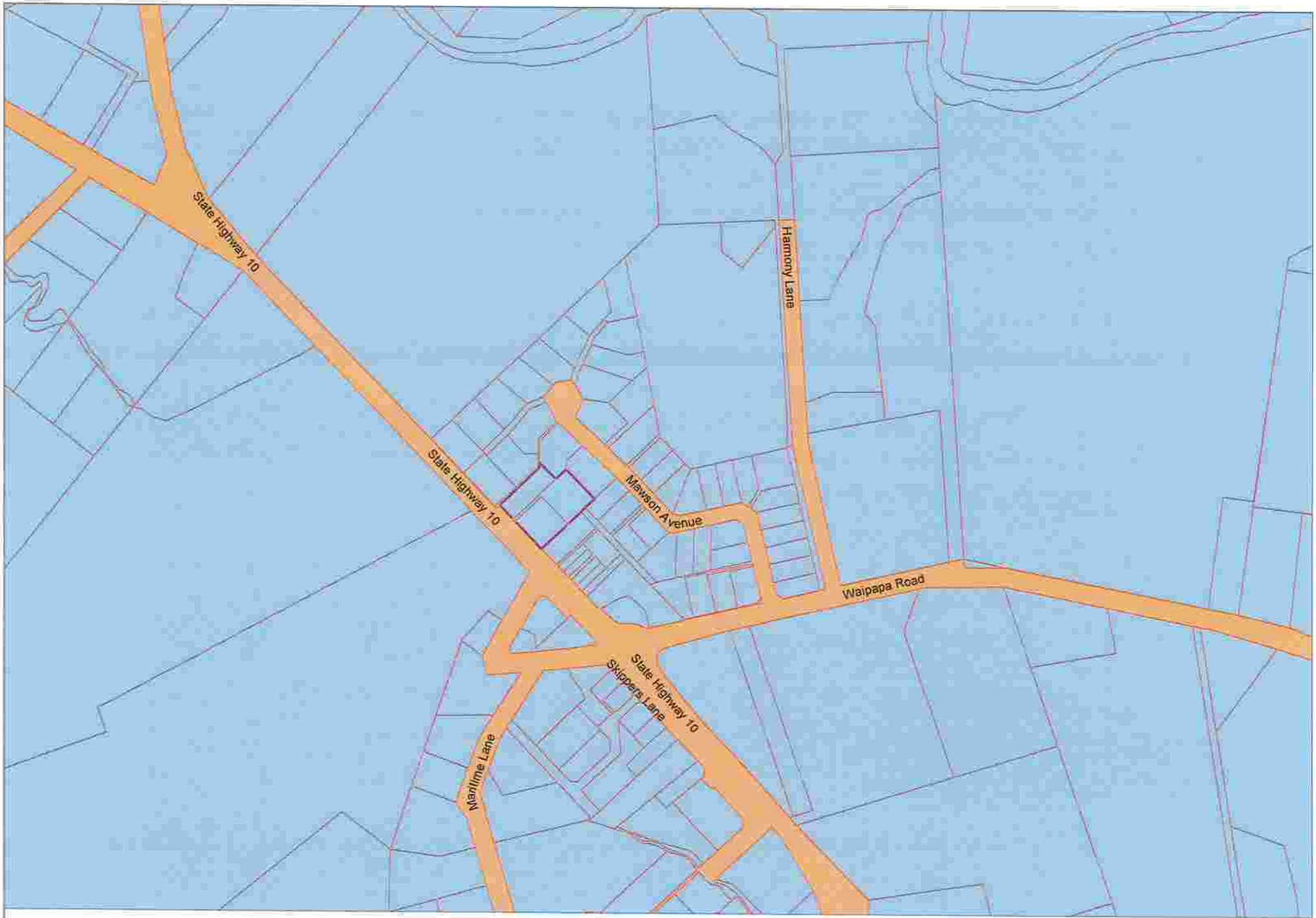
DRAWING TITLE:
PERSPECTIVES - 2

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A401	REV.	

Appendix 3

Location Plan



QuickMap
Custom Software Ltd

Any person wishing to rely on the information shown on this map must independently verify the information.

Scale 1:5000 Topographical and Cadastral map derived from LINZ data. Printed, 22-Jun-2026 10:36.

Appendix 4

Record of Title & Relevant Instruments

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA131A/749**
Land Registration District	**North Auckland**
Date Issued	27 April 2001

Prior References
NA1000/131 NA50A/733

Estate	Fee Simple
Area	1421 square metres more or less
Legal Description	Lot 1 Deposited Plan 203824
Registered Owners	

2052 SH10 Waipapa Limited

Interests

Fencing Agreement in Transfer 428979

B130373.1 Gazette Notice declaring the adjoining State Highway to be a limited access road - 26.11.1982 at 11.45 am

Appurtenant hereto is a right of way specified in Easement Certificate D599042.3 - 27.4.2001 at 1.59 pm

Subject to a right of way over parts marked A & B on DP 203824 specified in Easement Certificate D599042.3 - 27.4.2001 at 1.59 pm

The easements specified in Easement Certificate D599042.3 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right (in gross) to drain water over parts marked B & C on DP 203824 in favour of The Far North District Council created by Transfer D599042.4 - 27.4.2001 at 1.59 pm

The easements created by Transfer D599042.4 are subject to Section 243 (a) Resource Management Act 1991

Subject to a telecommunication purposes right (in gross) over parts marked A & B on DP 203824 in favour of Telecom New Zealand Limited created by Transfer D599042.5 - 27.4.2001 at 1.59 pm

The easements created by Transfer D599042.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to an electricity purposes right (in gross) over parts marked A & B on DP 203824 in favour of Top Energy Limited created by Transfer D599042.6 - 27.4.2001 at 1.59 pm

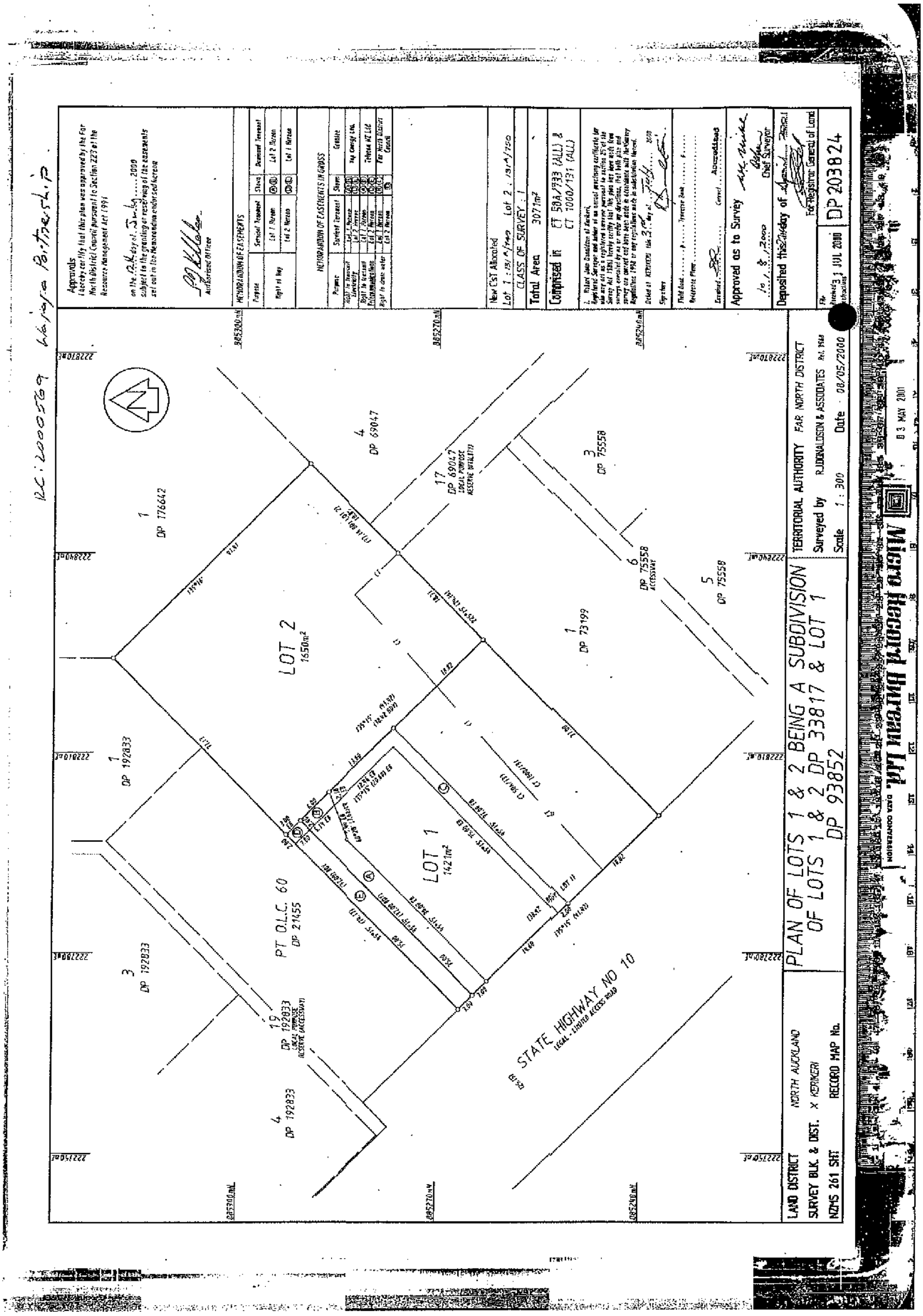
The easements created by Transfer D599042.6 are subject to Section 243 (a) Resource Management Act 1991

6990072.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS NA131A/750) - 31.7.2006 at 9:00 am

8336811.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS NA131A/750 and NA132C/411) - 9.11.2009 at 9:00 am

8749234.1 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 26.4.2011 at 7:00 am

13522534.1 Mortgage to PKP Trustee Limited - 11.2.2026 at 12:30 pm


PLAN OF LOTS 1 & 2 BEING A SUBDIVISION OF LOTS 1 & 2 DP 33817 & LOT 1 DP 93852
DP 203824
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
LOT 2 1650m²
LOT 1 1421m²
STATE HIGHWAY NO 10
PT O.L.C. 60 DP 21455
LAND DISTRICT NORTH AUCKLAND
RECORD MAP No.
Micro Record Bureau Ltd

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA131A/750**
Land Registration District	**North Auckland**
Date Issued	27 April 2001

Prior References
NA1000/131 NA50A/733

Estate	Fee Simple
Area	1650 square metres more or less
Legal Description	Lot 2 Deposited Plan 203824
Registered Owners	

2052 SH10 Waipapa Limited

Interests

Fencing Agreement in Transfer 428979

B130373.1 Gazette Notice declaring the adjoining State Highway to be a limited access road - 26.11.1982 at 11.45 am

Appurtenant hereto is a right of way specified in Easement Certificate D599042.3 - 27.4.2001 at 1.59 pm

Subject to a right of way over parts marked D & E on DP 203824 specified in Easement Certificate D599042.3 - 27.4.2001 at 1.59 pm

The easements specified in Easement Certificate D599042.3 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right (in gross) to drain water over part marked D on DP 203824 in favour of The Far North District Council created by Transfer D599042.4 - 27.4.2001 at 1.59 pm

The easements created by Transfer D599042.4 are subject to Section 243 (a) Resource Management Act 1991

Subject to a telecommunication purposes right (in gross) over parts marked D & E on DP 203824 in favour of Telecom New Zealand Limited created by Transfer D599042.5 - 27.4.2001 at 1.59 pm

The easements created by Transfer D599042.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to an electricity purposes right (in gross) over parts marked D & E on DP 203824 in favour of Top Energy Limited created by Transfer D599042.6 - 27.4.2001 at 1.59 pm

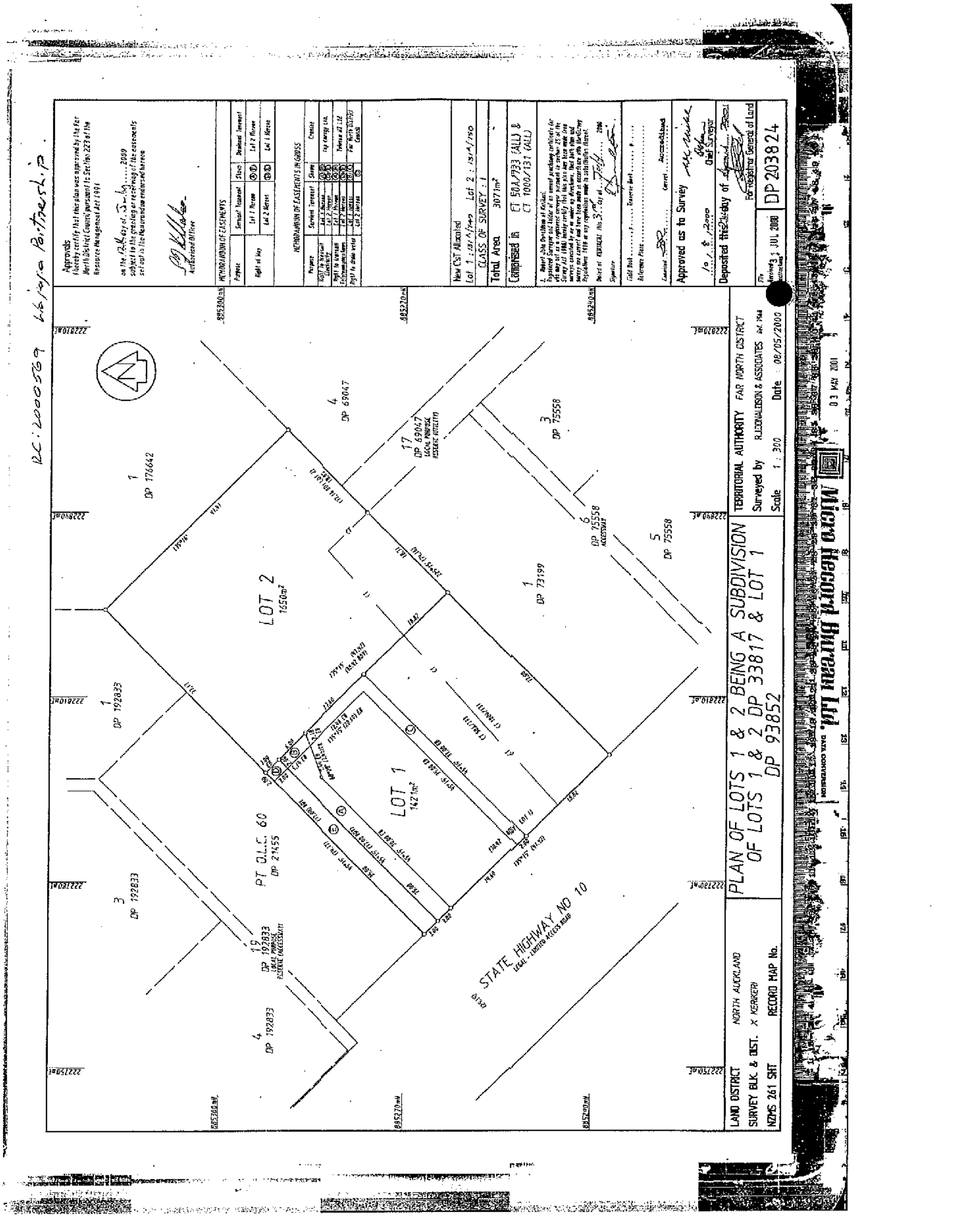
The easements created by Transfer D599042.6 are subject to Section 243 (a) Resource Management Act 1991

6990072.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS NA131A/749) - 31.7.2006 at 9:00 am

8336811.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS NA131A/749 and NA132C/411) - 9.11.2009 at 9:00 am

8749234.1 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 26.4.2011 at 7:00 am

13522534.1 Mortgage to PKP Trustee Limited - 11.2.2026 at 12:30 pm



PLAN OF LOTS 1 & 2 BEING A SUBDIVISION OF LOTS 1 & 2 DP 33817 & LOT 1 DP 93852
DP 203824
LOT 2 1650m²
LOT 1 1421m²
STATE HIGHWAY NO 10
PT O.L.C. 60 DP 21455
1 DP 176642
1 DP 192833
3 DP 192833
4 DP 192833
19 DP 192833
4 DP 69047
17 DP 69047
3 DP 75558
5 DP 75558
6 DP 75558
1 DP 73199
Approvals
MEMORANDUM OF EASEMENTS
MEMORANDUM OF EASEMENTS IN GROSS
New CST Allocated
CLASS OF SURVEY : 1
Total Area 3071m²
Comprised in CT 50A/933 (ALL) & CT 1000/131 (ALL)
Approved as to Survey
Chief Surveyor
For Registrar General of Land
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
Surveyed by R.J.DONALDSON & ASSOCIATES
Scale 1 : 300
Date 08/05/2000
LAND DISTRICT NORTH AUCKLAND
SURVEY BLK. & DIST. X KERIKERI
NZMS 261 SHT
RECORD MAP No.
Micro Record Bureau Ltd.

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA132C/411**
Land Registration District	**North Auckland**
Date Issued	07 September 2001

Prior References
NA122B/191 NA86D/755

Estate	Fee Simple
Area	1217 square metres more or less
Legal Description	Lot 2 Deposited Plan 205437
Registered Owners	

2052 SH10 Waipapa Limited

Interests

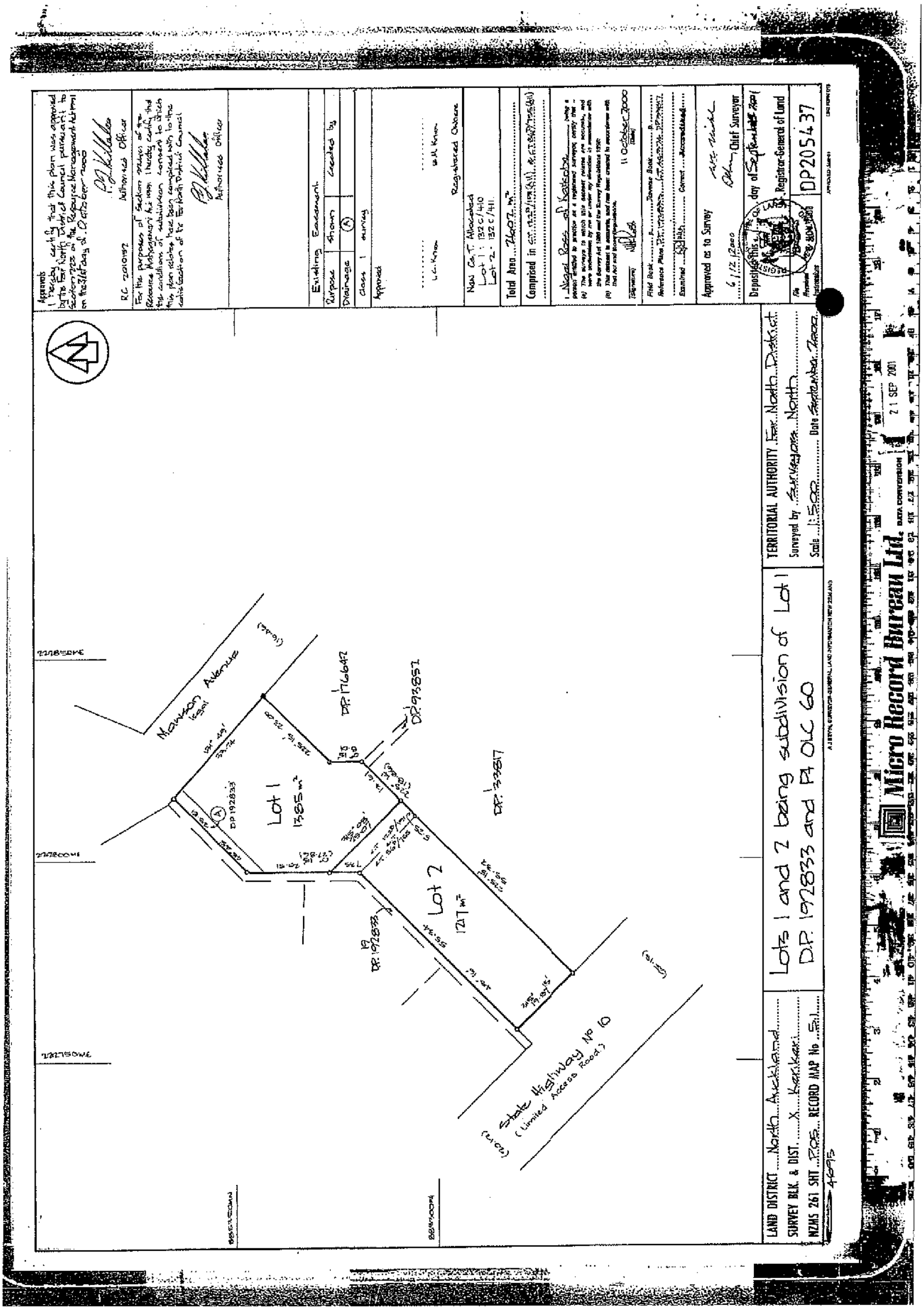
B130373.1 Gazette Notice declaring part State Highway No. 10 (Papakura to Awanui) from it's junction with Waipapa Road to the Whangaroa County Boundary to be a limited access road - 26.11.1982 at 11.45 am

D519485.2 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - Produced 30.6.2000 at 11.13 and entered 10.7.2000 at 9.00 am (affects part formerly CT NA122B/191)

8336811.1 CERTIFICATE PURSUANT TO SECTION 77 BUILDING ACT 2004 THAT THIS COMPUTER REGISTER IS SUBJECT TO THE CONDITION IMPOSED UNDER SECTION 75(2) (ALSO AFFECTS NA131A/749 and NA131A/750) - 9.11.2009 at 9:00 am

8749272.1 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 26.4.2011 at 7:00 am

13522534.1 Mortgage to PKP Trustee Limited - 11.2.2026 at 12:30 pm


Lots 1 and 2 being subdivision of Lot 1 DP 192833 and Pt OLC 60
Lot 1
1385 m²
Lot 2
1217 m²
Mawson Avenue
State Highway No 10
(Limited Access Road)
DP205437
Micro Record Bureau Ltd.
21 SEP 2001

NZ TRANSPORT AGENCY
WAKA KOTAHI

CP Number	56A

Notice by the NZ Transport Agency:
Authorising a crossing place to and from a limited access road under Section 91 of the Government Roading Powers Act 1989

Region	Northland
State Highway Number	State Highway 10
Declaration of Limited Access Road	Waipapa to Whangaroa
NZTA File Reference	LAR 974
Description of the parcel(s) of land to which this notice refers	Lot 1 DP 203824 (CT NA131A/749) and Lot 2 DP 203824 (CT NA131A/750)

Authorisation of crossing place

1 Pursuant to Section 91 of the Government Roading Powers Act 1989 and subject to such conditions (if any) that it may impose, the NZ Transport Agency (hereinafter the NZTA) authorises the crossing place numbered **56A** on Plan Number **LA 11/35/1** at which vehicles are permitted to proceed to and from (1) the limited access road and (2) the parcel of land described above

2 A copy of the plan is available for inspection at the NZTA Auckland regional office.

3 This notice to the owner of the parcel of land described above specifies the location of the crossing place on the state highway road frontage.

Conditions

4 The owner of the parcel of land described above shall advise the NZTA Planning & Investment Manager - HNO & Northland without delay if any of the following occur:

4.1 a change in the use of the parcel of land described above that requires consent from the territorial local authority (hereinafter the TLA); or

4.2 the owner has any concerns regarding the safety to users of the crossing place and/or of the state highway including an accident or incident that is attributed in full or in part to the use of the crossing place

5 If, as a result of a change in the use of the parcel of land described above that requires NZTA's consent, the NZTA is satisfied that works to the crossing place are necessary to address efficiency or safety concerns, then the NZTA will notify the owner of the works required. The owner shall carry out the works required at her/his cost to the satisfaction of the NZTA Planning & Investment Manager - HNO & Northland within the time specified in the notice of the required works

Advice notes

6 At the time of issue of this notice this crossing place is used for **Commercial Use**

7 If the crossing place was in existence at the time of the declaration of the state highway as a limited access road, this notice does not confirm that its location, design or construction complies with NZTA standards for its current or future use. An owner with concerns in this regard should contact the NZTA regional office indicated above for further advice.

8 NZTA has standards for the design and construction of crossing places to state highways and will require compliance with those standards if an owner requires consent from the TLA to subdivide the land or to change its use.

9 A separate written permission from the NZTA Regional Director in accordance with Section 51 of the Government Roading Powers Act 1989 is required before any work (other than routine maintenance) may be done on the state highway by the owner. This notice does not constitute that written permission

10 NZTA wishes to emphasise that Section 91 of the Government Roading Powers Act 1989 gives NZTA the power to:

10.1 cancel or vary conditions or to impose further conditions on a crossing place at any time; or

10.2 cancel the right to use a crossing place. This will be exercised only after the owner has been given the opportunity to discuss the matter with NZTA

NZ TRANSPORT AGENCY
WAKA KOTAHI

CP Number	56A

11 NZTA's cancellation powers will apply in the following situations

11.1 when the parcel of land described above entitled to use the crossing place has ceased to exist e.g. changed legal description; or

11.2 when there is a change in the location of the crossing place; or

11.3 when another crossing place is authorised to the parcel of land described above; or

11.4 where reasonable practicable legal access is available from another road

Special Conditions: (none if blank)

Dated this 15th day of April 2011

SIGNED for and on behalf of the
NZ TRANSPORT AGENCY

Brian McSwigan
Planning & Investment Manager
HNO & Northland

(acting pursuant to delegated authority)

NZ TRANSPORT AGENCY
WAKA KOTAHI

CP Number	57B

Notice by the NZ Transport Agency:
Authorising a crossing place to and from a limited access road under Section 91 of the Government Roading Powers Act 1989

Region	Northland
State Highway Number	State Highway 10
Declaration of Limited Access Road	Waipapa to Whangaroa
NZTA File Reference	LAR 1029
Description of the parcel(s) of land to which this notice refers	Lot 2 DP 205437 (CT NA132C/411)

Authorisation of crossing place

1 Pursuant to Section 91 of the Government Roading Powers Act 1989 and subject to such conditions (if any) that it may impose, the NZ Transport Agency (hereinafter the NZTA) authorises the crossing place numbered **57B** on Plan Number **LA 11/35/1** at which vehicles are permitted to proceed to and from (1) the limited access road and (2) the parcel of land described above

2 A copy of the plan is available for inspection at the NZTA Auckland regional office.

3 This notice to the owner of the parcel of land described above specifies the location of the crossing place on the state highway road frontage.

Conditions

4 The owner of the parcel of land described above shall advise the NZTA Planning & Investment Manager - HNO & Northland without delay if any of the following occur:

4.1 a change in the use of the parcel of land described above that requires consent from the territorial local authority (hereinafter the TLA); or

4.2 the owner has any concerns regarding the safety to users of the crossing place and/or of the state highway including an accident or incident that is attributed in full or in part to the use of the crossing place

5 If, as a result of a change in the use of the parcel of land described above that requires NZTA's consent, the NZTA is satisfied that works to the crossing place are necessary to address efficiency or safety concerns, then the NZTA will notify the owner of the works required. The owner shall carry out the works required at her/his cost to the satisfaction of the NZTA Planning & Investment Manager - HNO & Northland within the time specified in the notice of the required works

Advice notes

6 At the time of issue of this notice this crossing place is used for **Residential Use**

7 If the crossing place was in existence at the time of the declaration of the state highway as a limited access road, this notice does not confirm that its location, design or construction complies with NZTA standards for its current or future use. An owner with concerns in this regard should contact the NZTA regional office indicated above for further advice.

8 NZTA has standards for the design and construction of crossing places to state highways and will require compliance with those standards if an owner requires consent from the TLA to subdivide the land or to change its use.

9 A separate written permission from the NZTA Regional Director in accordance with Section 51 of the Government Roading Powers Act 1989 is required before any work (other than routine maintenance) may be done on the state highway by the owner. This notice does not constitute that written permission

10 NZTA wishes to emphasise that Section 91 of the Government Roading Powers Act 1989 gives NZTA the power to:

10.1 cancel or vary conditions or to impose further conditions on a crossing place at any time; or

10.2 cancel the right to use a crossing place. This will be exercised only after the owner has been given the opportunity to discuss the matter with NZTA

NZ TRANSPORT AGENCY
WAKA KOTAHI

CP Number	57B

11 NZTA's cancellation powers will apply in the following situations

11.1 when the parcel of land described above entitled to use the crossing place has ceased to exist e.g. changed legal description; or

11.2 when there is a change in the location of the crossing place; or

11.3 when another crossing place is authorised to the parcel of land described above; or

11.4 where reasonable practicable legal access is available from another road

Special Conditions: (none if blank)

Dated this 15th day of April 2011

SIGNED for and on behalf of the
NZ TRANSPORT AGENCY

Brian McSwigan
Planning & Investment Manager
HNO & Northland

(acting pursuant to delegated authority)

Appendix 5

Engineering Assessment

Engineering Assessment Report for Proposed Unit Title Subdivision

2052 State Highway 10, Waipapa

(Lot 1 & Lot 2 DP 203824 and Lot 2 DP 205437)

2052 SH10 Waipapa Limited

Supporting report for RC Applications to Far North District Council

Haigh Workman Reference: 26 067

Rev A

2 June 2026

Phone: 0800 424 447 • info@haighworkman.co.nz • www.haighworkman.co.nz

Kerikeri • Whangarei • Warkworth

Revision History

Revision Nº	Issued By	Description	Date
A	Aaron Thorburn	For Resource Consent	2 June 2026

Prepared by	Reviewed by	Approved by
Aaron Thorburn Senior Environmental Advisor BAppSc (Env), CEnvP	**Tom Adcock** Senior Civil Engineer BEng (Civil Engineering), MEngNZ	**John Papesch** Director / Senior Civil Engineer BE (Civil Engineering), CPEng, CMEngNZ

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Appendix B – HydroCad Data

Appendix C – Stormwater Detention Tank Details

Executive Summary

Haigh Workman Limited were engaged by 2052 SH10 Waipapa Limited to undertake an engineering assessment of land at 2052 State Highway 10 , Waipapa. It is proposed to develop Lot 1 & Lot 2 DP 203824, Lot 2 DP 205437 (4,288 m^2) into a 18 Lot commercial development with associated driveway, footpaths, carparking and landscaping.

This report assesses earthworks, access, stormwater, wastewater, water supply and firefighting, with specific regard to the local authority plans and subdivision rules. Proposed Site Plans prepared by Archiology Limited were made available at the time of writing this report.

The site is zoned *'Commercial'* under the Far North District Council District Plan.

Natural Hazards
A desktop assessment of natural hazards has been completed in accordance with the National Policy Statement for Natural Hazards 2025. All natural hazards have been assessed as low.

Access
The existing site has an existing crossing off State Highway 10. The crossing is sealed as far as the property boundary but in a worn but serviceable state with patch repairs.

A Transport Assessment Report has been carried out by Traffic Engineering & Management Limited.

Haigh Workman has since been engaged to provide a further Traffic Report confirming the type of crossing.

Earthworks
The proposed earthworks area is 3,300 m^2 and the volume is 1,946 m^3 comprising 1,346 m^3 of cut and 600 m^3 of fill. Excavation and / or filling in the Commercial Zone is a Permitted Activity, with an earthworks permit required in accordance with Council bylaws. Cut materials to be carted offsite, fill comprises imported granular hardfill.

Retaining walls are proposed to support vertical excavations along the northern and eastern boundaries. These retaining walls should be subject to engineering design to support surcharges. The maximum retained cut height proposed is 1.25 m.

Stormwater Management
Following development of the site, the expected impermeable surfaces for a 'Commercial' development will comply with the Far North District Council Operative District Plan Permitted Activity.

Stormwater has been designed to attenuate runoff back to the existing consented development for the 10% AEP, in accordance with Far North District Council Engineering Standards. This will ensure that there is no additional load on the Council reticulated stormwater system because of the proposed development. No changes to the existing stormwater connection are proposed.

Three stormwater detention tanks (2 x 25,000 L and 1 x 10,000 L) installed at the time of development will provide attenuation back to existing consented development.

Water Supply
The site is connected to the reticulated water supply network and approval is sought to connect the proposed development to that network. An application to connect, detailing the connection, backflow prevention and metering arrangements will be required.

Fire Fighting
There are two fire hydrants on the opposite side of State Highway 10. Hydrant location and performance should be reviewed for satisfaction of firefighting requirements.

Wastewater

Haigh Workman have carried out an Onsite Wastewater Design Report (Ref. 26 067, *Onsite Wastewater Design Report, 2052 State Highway 10, Waipapa*, April 2026) with site assessment, design and recommendations provided.

1 Introduction

1.1 Project Brief and Scope

Haigh Workman Limited (Haigh Workman) was commissioned by the 2052 SH10 Waipapa Limited (the client) to undertake an engineering assessment of land at 2052 State Highway 10, Waipapa (the site).

The scope of the report includes the following assessment items:

- Natural hazards,
- Vehicle access and parking,
- Earthworks to complete the subdivision,
- Stormwater and wastewater, and
- Water supply and firefighting.

1.2 Limitations

This report has been prepared by Haigh Workman for the sole benefit of 2052 SH10 Waipapa Limited (the client) with respect to the brief outlined to us. This report is to be used by our client and consultants and may be relied upon by the Far North District Council (FNDC) when considering the application for the proposed unit title subdivision and development. The information and opinions contained within this report shall not be used in any other context for any other purpose without prior review and agreement by Haigh Workman.

It has been assumed in the production of this report that the site is to be subdivided and subsequently redeveloped at the site identified. If any of these assumptions are incorrect, then amendments to the recommendations made in this report may be required.

The comments and opinions presented in this report are based on the findings of the desk study and ground conditions encountered during an intrusive site visit performed by Haigh Workman. There may be other conditions prevailing on the site which have not been revealed by this investigation and which have not been taken into account by this report. Responsibility cannot be accepted for any conditions not revealed by this investigation. Any diagram or opinion on the possible configuration of strata or other spatially variable features between or beyond investigation positions is conjectural and given for guidance only.

2 Site Description

2.1 Site Identification

Site Address:	2052 State Highway 10, Waipapa
Legal Description:	Lot 1 & Lot 2 DP 203824, Lot 2 DP 205437
Area:	4,288 m^2
FNDC Zoning:	Commercial

2.2 Site Description

The site is legally described as Lot 1 & Lot 2 DP 203824, Lot 2 DP 205437, it has an irregular shape, covering an area of 4,288 m^2. The site contains an existing two-level commercial structure (Gas & Tyre) and a single-level dwelling with associated garaging. Access is via an existing crossing directly off State Highway 10. The site is mostly developed with buildings, parking and yarding but with a grassed area adjacent to the northern boundary.

The site is located to the north of the Waipapa township with residential properties to the north, east and west and commercial businesses to the south and southeast.

The nearest surface water body is the Whiriwhiritoa Stream, which is approximately 330 m west of the site (at the closest point by plan measurement). The site generally slopes towards the south. The site is shown below in Figure 1 and provided in **Appendix A**.

Figure 1 – Site Location Plan (Source: Far North District Council GeoMaps)

2.3 Proposed Development

A Proposed Site Plan from Archiology Limited (drawing RC-A101 dated 23 April 2026) shows the proposed commercial development. Based on the proposed site plan, we understand that the client intends to repurpose the existing structure (Gas & Tyre) to create six units, remove the existing dwelling and associated structures to allow a further twelve units, providing a total 18 commercial units set around a central car parking area. The Proposed Site Plan drawing from Archiology Limited is provided in **Appendix A**.

Our understanding is that a total of 18 unit titles will be created. It is uncertain at this time if proposed Unit 9 will be developed. For assessment purposes we have assumed a build size of 120 m^2.

2.4 District Plan Zoning

The site is zoned as *'Commercial'* under the FNDC (Operative in Part) District Plan.

It is our understanding that the proposed unit title subdivision is a *'Discretionary'* Activity based on the earthworks volumes for the site.

3 Environmental Setting

3.1 Published Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences (GNS), 1:250,000 scale, Geological Map 2, 2009: '*Geology of the Whangarei Area'*,
- NZMS 290 Sheet P 04/05, 1: 100,000 scale, 1980: *'Soil map of Whangaroa-Kaikohe'.*

3.1.1 Weathered Geology (Soils)

New Zealand Land Inventory maps 290 Sheet P04/05 Soil Map of the Whangaroa – Kaikohe area indicates that the site is underlain by 'soils of the rolling and hill land; well to moderately well drained Okaihau gravelly friable clay (OK)'. The NZMS Sheet 'Whangaroa – Kaikohe' map of the site and surrounding area is provided below in Figure 2.

Figure 2 – NZMS 290 Sheet P04/05 Soil Map

3.1.2 Bedrock Geology

The geology underlying the site is mapped as late Miocene to Pliocene basalt lava, volcanic plugs and minor tuff (Pvb) comprising of the Kerikeri Volcanic Group. The GNS geologic map of the site and surrounding area is provided below in Figure 3 with geological units explained in Table 2.

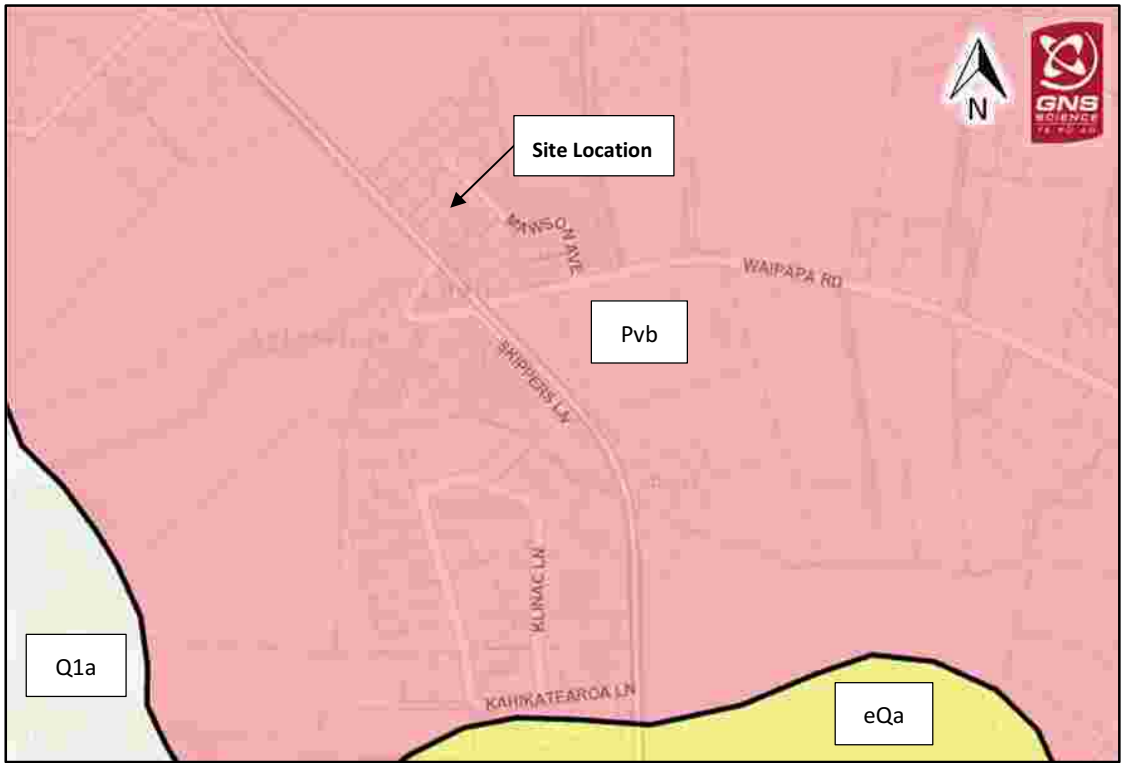


Figure 3 – Geological Map (Source: GNS Sciences Geology Website)

Table 2 – Geological Unit Table

Symbol	Unit Name	Description
Pvb	Kerikeri Volcanic Group	Basalt flows, volcanic plugs and minor tuff.
Q1a	Tauranga Group	Unconsolidated to poorly consolidated mud, sand, gravel and peat deposits of alluvial, colluvial and lacustrine origins.
eQa	Tauranga Group	Partly consolidated mud, sand, gravel and peat or lignite of alluvia, colluvial, lacustrine, swamp and estuarine origins.

4 Site Investigations

4.1 Site Walkover

A walkover of the site was undertaken on 16 April 2026 and included site mapping for stormwater and soakage testing for effluent disposal.

4.2 Subsurface Investigation

Subsurface investigations were carried out primarily to test the soakage, categorise the soils and check the groundwater level for effluent disposal purposes. Three testpits were excavated as part of the soakage testing in the central car parking area. These were dug to an approximate depth of 0.5m using an excavator. This was followed by 100 mm Ø hand augered bore holes extending from the bases to achieve a total depth below ground level ranging 1.1 to 1.4 m.

The underlying soils can be summarised as comprising moist a red / brown clayey silt and redder silt, the topsoil already having been removed for the existing car park construction. Groundwater was not encountered. A more

detailed description, including test pit and bore hole logs is given in the *On-site Wastewater Design Report, Ref. 26 067, 6 May 2026* by Haigh Workman.

5 Natural Hazards

The National Policy Statement for Natural Hazards 2025 (NPSNH 2025) became operative on 15 January 2026, establishing nationally consistent requirements for assessing and managing natural hazard risk under the Resource Management Act 1991 (RMA).

Natural hazards listed in Part 1: Preliminary provisions 71(3) of NPSNH 2025 include: flooding, landslips, coastal erosion, coastal inundation, active faults, liquefaction, and tsunami.

The NPSNH requires that natural hazard risk be assessed using the likelihood level against consequence level methodology defined in Appendix 1 (Risk Matrix).

- Hazard likelihood (rare, unlikely, possible, likely, almost certain),
- Consequences (insignificant to catastrophic), and
- Resulting risk classification (low, medium, high, very high).

The NPSNH requires management measures to be proportionate to the level of natural hazard risk:

- Low risk: Development may generally proceed with standard controls,
- Medium risk: Mitigation and design measures must reduce risk to acceptable levels, and
- High / very high risk: Avoidance is required unless effective mitigation demonstrably reduces risk.

This natural hazard assessment has been based on a desktop review of mapped information and is detailed below in Table 2.

Table 2 – Natural Hazard Assessment

Natural Hazard	Desktop Assessment	Likelihood	Consequence	Risk	Comments
Flooding	No mapped flood hazards on or adjacent to the site *(Source – NRC)*	Rare	Minor	Low	Surface water is able to drain off the site onto SH10
Landslips / Slope Instability	Geology and gradient indicates that the site is not likely to be susceptible to instability *(Source – GNS science, site investigation)*	Unlikely	Minor	Low	Mapping land susceptible to instability is based on Proposed District Plan criteria
Coastal Erosion	The site is not located near a coastline	Very Rare	Negligible	Low	-
Coastal Inundation	No mapped coastal hazards on or adjacent to the Site *(Source – NRC)*	Very Rare	Negligible	Low	-
Active Faults	There are no active faults mapped in Northland *(Source – GNS science)*	Very Rare	Negligible	Low	-
Liquefaction	Mapped liquefaction risk for the site is unlikely *(Source – FNDC)*	Rare	Minor	Low	-

Tsunami	No mapped Tsunami risk to the site *(Source – NRC)*	Very Rare	Negligible	Low	-

There is no significant risk from natural hazards that would cause Section 106 of the RMA to apply.

5.1 Flood Mapping

The site is not mapped by the FNDC or NRC as being subject to flooding. The site is near level with a gentle slope towards the south to southeast.

The site does not lie within any mapped river or coastal flood hazard areas, as shown below in Figure 4 with the river hazard zone displayed in blue.

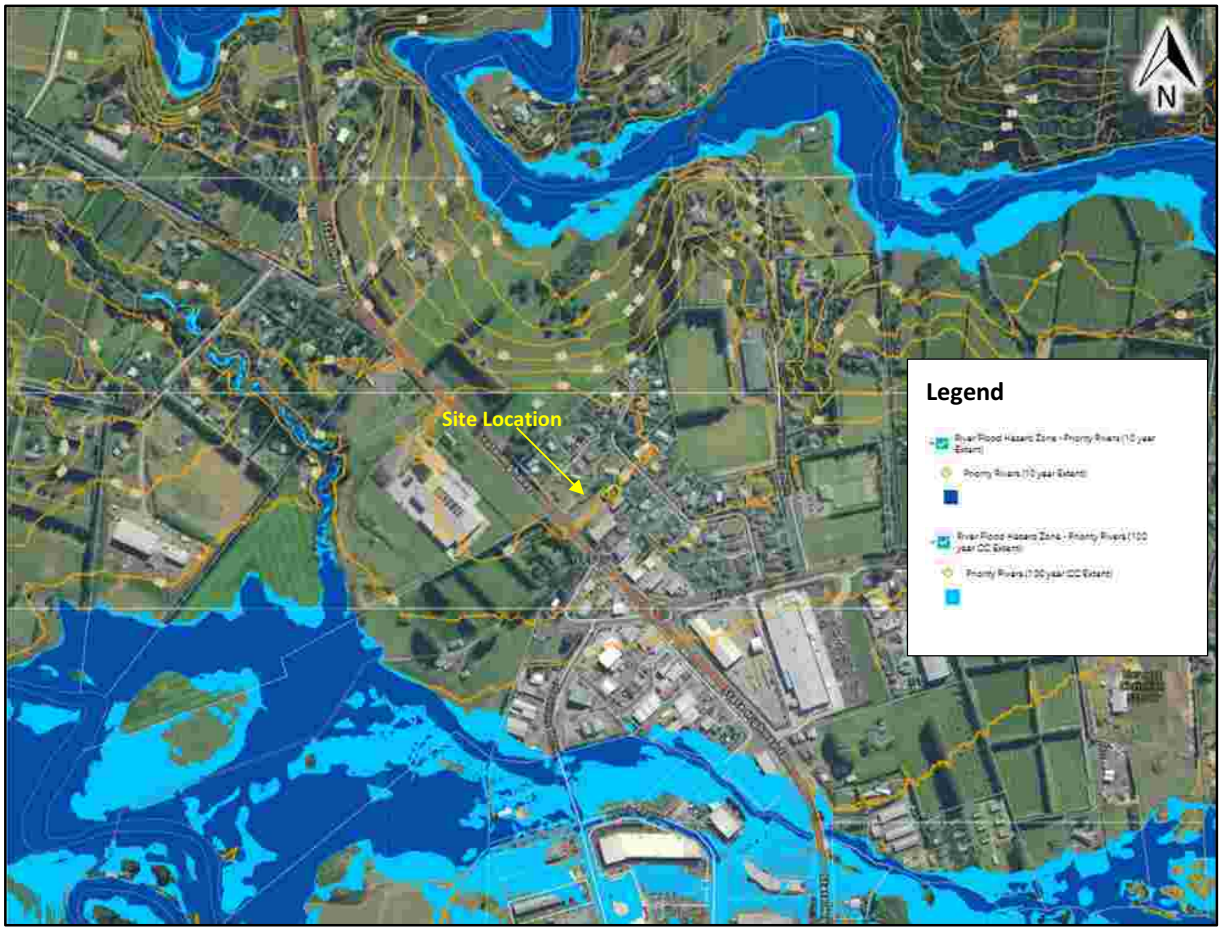


Figure 4 – Mapped 10yr and 100yr River Flood Hazard Zone (Source: Northland Regional Council GIS Website)

5.2 Landslips / Slope Instability

Near level to gently sloping Kerikeri Volcanic Group geology is unlikely to be susceptible to instability based on assessment criteria to identify land which may be subject to instability in the Far North District (LDE, 2019) adopted in the Proposed District Plan. Specifically, the land is underlain by a 'Low Hazard' geological unit (Kerikeri Volcanic Group (Rhyolite Domes, Basalt, Scoria) and is not sloping steeper than 1V:3H (18°).

5.3 Liquefaction

FNDC mapping (refer Figure 5 below) indicates that the site is located within an area assessed as being unlikely to be vulnerable to liquefaction. Based on this mapping, and the generally cohesive clayey silt soils and basalt derived geology described in Section 3, liquefaction is assessed as a low natural hazard risk for the developable area.

Figure 5 – Liquifaction Vulnerablility Assessment (Source: FNDC)

6 Traffic

6.1 Transport Assessment Report (TEAM)

A Transport Assessment Report Ref. 251322 dated 24 April 2026 has been carried out by Traffic Engineering & Management Limited (TEAM).

6.2 Access

The existing site has an existing 6.0 m wide crossing off State Highway 10 plus flares. The crossing is sealed as far as the property boundary but in a worn but serviceable state with patch repairs.

The TEAM report assesses two vehicle crossings that can operate as a separated entry and exit as being adequate. The existing (northern) crossing will be retained as the entry and a second new crossing 10 m to the south serves as the exit, connected by a circulatory manoeuvring aisle within the site.

The report says that safe access can be achieved and makes reference to New Zealand Transport Authority (NZTA) Access Type C and Type E but provides no firm recommendations including the need for carriageway widening and tapers.

Haigh Workman has since been engaged to provide a further Traffic Report confirming the type of crossing.

6.3 Parking & Loading

Under the National Policy Statement on Urban Development (NPS-UD) 2020, the Operative District Plan no longer has minimum on-site car parking requirements for commercial zones, in Tier 1, 2, and 3 urban environments.

However, having said this, 40 onsite car parking spaces are proposed which the TEAM report assesses as adequate.

Two loading spaces are proposed which the TEAM report assesses as suitably sized to accommodate two medium rigid trucks or one large rigid truck.

6.4 Pedestrian & Cyclist Access

A 1.8 m wide demarcated footpath is proposed within the site providing a connection to each commercial unit. This in turn connects to the existing footpath on State Highway 10 that leads into Waipapa.

Cyclists can use the proposed vehicle crossings for access.

7 Earthworks

7.1 Proposed Earthworks

Under the FNDC District Plan and FNDC Proposed District Plan, earthworks cut and fill are added together whilst drainage is not included. The proposed earthworks at the time of subdivision are associated with forming the building platforms for the new commercial units, driveways, parking and manoeuvring and drainage.

The proposed earthworks covers an area of 3,300 m^2 and includes a cut volume of 1,346 m^3 and gravel fill for the carpark / concrete area is estimated at 600 m^3 . The total cut / fill volume is estimated at 1,346 + 600 = 1,946 m^3. Cut materials are to be carted offsite, fill is to be imported granular hardfill. A retaining wall is located along the northern boundary with a maximum height of 1.25 m. Refer Earthworks Plan by Archiology Limited provided in **Appendix A**.

Excavation and / or filling in the Commercial Zone is a Permitted Activity under the FNDC District Plan, with an earthworks permit required in accordance with council bylaws.

Under the FNDC Proposed District Plan Standard EW-S1 excavation and / or filling in the Mixed Use Zone exceeds 200 m^3 in any 12-month period. Consent may be required under that rule, dependant on the timing of the application.

As earthworks are anticipated at the time of subdivision / development, the following rules and standards have legal effect and will be complied with:

- Earthworks Rule EW-R12 (Earthworks and the discovery of suspected sensitive material),
- Earthworks Rule EW-R13 (Earthworks and erosion and sediment control),
- Standard EW-S3 Accidental Discovery Protocol, and
- Standard EW-S5 Erosion and sediment control.

7.2 Earthworks Construction

Any earthworks should be carried out in accordance with NZS 4404 and Council's Engineering Standards and Guidelines.

Erosion and sediment control for earthworks will be carried out in accordance with Council's Engineering Standards and Guidelines and Auckland Council GD05.

The appended Earthworks Plan by Archiology Limited shows silt fencing. The site already contains a large yarding area in gravel and seal. Careful staging of the works will help to limit exposed earthworks areas, and the existing metal can be spread across the subgrade to stabilise the surface.

Specific controls will be required at the site entrance to prevent mud being tracked onto the road. As a minimum the entrances should be stabilised using clean gravel and a jet washer used to remove mud stuck on tyres. Stormwater outlets should also be protected using 'socks' formed from coir or of filter fabric fill with bark mulch. These should be placed at cesspit and culvert inlets.

8 Stormwater Management

8.1 Existing Site Drainage

The existing site drainage is shown on the topographical survey plan appended. The system comprises cesspits collecting yarding runoff and roof downpipes all connected to the Council 450 mm diameter stormwater pipe on SH10.

8.2 Regulatory Framework

8.2.1 FNDC District Plan

The site is zoned as *'Commercial'*. The relevant activity rules for stormwater management are as follows:

Permitted Activity

7.7.5.1.11 STORMWATER MANAGEMENT
The disposal of collected stormwater from the roof of all new buildings and new impervious surfaces provided that the activity is within an existing consented urban stormwater management plan or discharge consent.

Controlled Activity

7.7.5.2.3 STORMWATER MANAGEMENT
The disposal of collected stormwater from the roof of all new buildings and new impervious surfaces provided that:
(a) where the means of disposal of collected stormwater will be by way of piping to an approved outfall, each allotment shall be provided with a piped connection to the outfall laid at least 600mm into the net area of the allotment. This includes land allocated on a cross-lease; and
(b) the stormwater collection system shall be designed to avoid any contaminants stored or used on the site from being entrained in any stormwater discharge unless that stormwater is discharged through a stormwater interceptor system; and
(c) the site is managed such that the concentration of contaminants in stormwater leaving the site do not pose an immediate or long term hazard to human health or the environment.

Subdivision Rule relating to stormwater disposal is 13.7.3.4. The pertinent sections relating to this site are:

13.7.3.4 STORMWATER DISPOSAL
(a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP).

(d) All subdivision applications creating sites 2ha or less shall include a detailed report from a Chartered Professional Engineer or other suitably qualified person addressing stormwater disposal.

8.2.2 Regional Plan for Northland

The Operative Regional Plan for Northland (dated 27 March 2026) Rule C.6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network provided (amongst other conditions):

2) the diversion and discharge does not cause or increase flooding of land on another property in a storm event of up to and including a 10% Annual Exceedance Probability (AEP) or flooding of buildings on another property in a storm event of up to and including a 1% AEP.

7) the discharge does not contain more than 15 milligrams per litre of total petroleum hydrocarbons, and

8) the discharge does not cause any of the following effects in the receiving waters beyond the zone of reasonable mixing:

a) the production of conspicuous oil or grease films, scums or foams, of floatable or suspended materials, or

b) a conspicuous change in the colour or visual clarity, or

c) an emission of objectionable odour, or d) the rendering of freshwater unsuitable for consumption by farm animals, or

e) the rendering of freshwater taken from a mapped priority drinking water abstraction point (refer I Maps Ngā mahere matawhenua) unsuitable for human consumption after existing treatment.

The Regional Plan Permitted Activity rule does not specifically require attenuation to existing consented development levels, provided there is no increase in downstream flooding for the 10% AEP event.

8.2.3 FNDC Engineering Standards 2023

The pertinent sections relating to stormwater management in the FNDC Engineering Standards 2023 are as follows:

Chapter 4: Stormwater and Drainage
4.1.3 Performance Standards
e. The primary stormwater system shall be capable of conveying 10% AEP design storm events without surcharge (see Section 4.3.9 Hydrological Design Criteria).

4.1.6. Managing Effects of Land Use on Receiving Environments
Hydrological balance can be partly maintained by limiting the maximum rate of discharge and peak flood levels for post-development to that at pre-development levels and enabling infiltration to minimise impacts on base flow and ground water recharge.

Peak flow management can be achieved using detention storage, utilising extended duration, for the duration of a limited peak flow event. Therefore, in the absence of more detailed assessment of stream stability, the discharges from detention devices into a stormwater network shall be constrained to 80% of pre-development peak flow rate. These constraints may be relaxed, subject to detailed assessments and hydrological / hydraulic modelling of the catchment being provided.

4.3.8. System Design
Table 4-1: Minimum Design Summary
Current rainfall (i.e. not climate change adjusted) shall be used for the following:

• Determining pre-development stormwater runoff flows and volumes for use in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

Climate change adjusted rainfall shall be used for the following:
• Determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

Flood Control (1% AEP event). Detention required, limiting the post-development 1% AEP event flow rates to 80% of the pre-development 1% AEP event flow rates.

Flow attenuation (Attenuation of the 50% and 20% AEP events). Limit the post-development 50% and 20% AEP event flow rates to 80% of the pre-development flows through controlled attenuation and release. Typically, always required in the upper catchment and sometimes not required where development site is located in proximity to the catchment outlet, discharging to a watercourse with sufficient network capacity, and where flow attenuation may worsen flooding hazards due to relative timing of peak flows. This is subject to assessment demonstrating no negative impacts would occur. If the proposed stormwater discharge is into a tidal zone, then no attenuation is required.

Design rainfall – Current rainfall (i.e. not climate change adjusted) shall be used for determining pre-development stormwater runoff flows and volumes for us in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

Climate change adjusted rainfall shall be used for determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

8.3 Impermeable Surfaces

Pre and post development impermeable surfaces are shown below in Table 3. The most recent Building Consent stamped approved plans (2006) are appended. Post development impermeable surfaces are shown on the proposed development plans provided in **Appendix A**.

Table 3 – Pre (2006) and Post Development Impermeable Surfaces

Pre Development Surfaces	
Component	**Coverage (m^2)**
Roof – existing building	721
Roof – existing dwelling	210
Roof – existing garage	36
Hardstand - asphalt	1,030
Hardstand - concrete	285
Total Impermeable Surfaces (Existing)	**2,282**
Site Area	4,288
% Site Coverage	**53.2**
Post Development Surfaces	
Roof – existing and proposed new buildings	1,835
Driveway, carparking and footpaths (concrete)	2,008

Gravelled laydown area	189
Total Impermeable Surfaces (Proposed)	**4,032**
Site Area	4,288
% Site Coverage	**94.0**

** District Plan definition for impermeable surfaces does not include water tanks up to 20 m^2 area, slatted timber decks and pathways < 1 m wide.*

The proposed impermeable surfaces comply with 'Commercial' zone Permitted Activity.

We recommend that stormwater runoff be attenuated back to 80% of the existing consented development.

To comply with the FNDC District Plan and Regional Plan for Northland, the appropriate return event for stormwater attenuation design is the 10% AEP event.

8.4 Current Stormwater Management

Stormwater runoff for the existing development is via a piped network that connects directly to the Council 450 mm diameter stormwater pipeline located on State Highway 10.

Stormwater modelling by FNDC (flood modelling 2007 by GHD Consultants) displayed on the FNDC GIS provides pipeline flows for various scenarios.

The GHD model indicates no secondary overland flow, even for the Maximum Probable Development + Climate Change (MPD + CC) scenario. This demonstrates that the current stormwater network has capacity during a 10% AEP event. See Figure 5 below.

However, since NRC hazard mapping shows river flooding associated with the Whiriwhiritoa Stream downstream of the site, we recommend stormwater attenuation for the proposed additional impermeable surfaces.

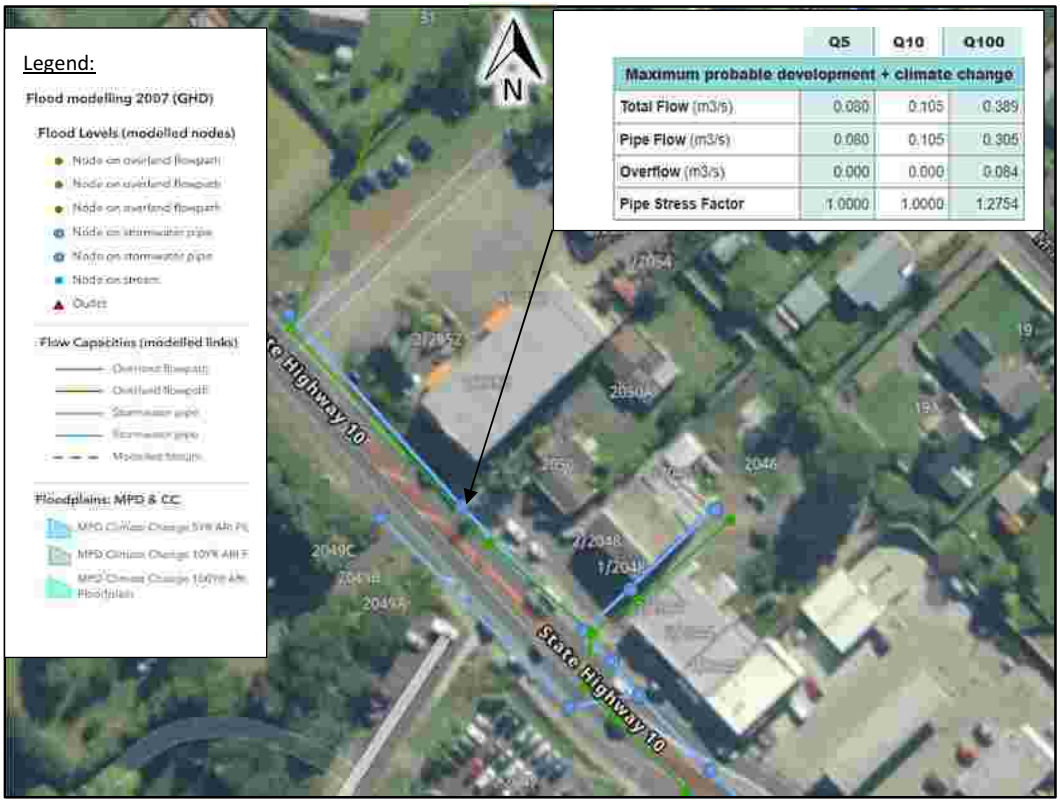


Figure 5 – GHD Flood Modelling Assessment Data for Existing Stormwater Pipe (Source: FNDC GIS Website)

8.5 Effects on Runoff

The peak stormwater runoff for the pre and post scenarios were modelled using HydroCAD using a SCS TR-20 Type 1A storm profile with rainfall from HIRDs V4 for the 10% AEP historical rainfall provided below in Table 4 and Table 5. Runoff coefficients (CN) have been taken from FNDC Engineering Standards 2023 Table 4.3 for Type C low permeability soils.

We only apply the '80% of pre-development' rule to the undeveloped grassed area, which becomes the proposed commercial units.

Table 4 – Post Development Run-off (historical rainfall using HydroCAD)

Component	Area (m^2)	CN	I (24hr rainfall) (mm)	Q (L/s)
Roof – existing and proposed buildings	1,835	98	7.1	20.5
Driveway, carparking and footpaths (concrete)	2,008	98	7.1	22.4
Gravelled laydown area	189	98	7.1	2.1
Grass	256	74	7.1	1.7
Total	**4,288**			**46.7**

Table 5 – Pre Development (BC Consented – 2006) Run-off (historical rainfall using HydroCAD)

Component	Area (m^2)	CN	I (24hr rainfall) (mm)	Q (L/s)
Roof – existing building	721	98	7.1	8.1
Roof – existing dwelling	210	98	7.1	2.3

Roof – existing garage	36	98	7.1	0.4
Hardstand - asphalt	1,030	98	7.1	11.5
Hardstand - concrete	285	98	7.1	3.2
Grass (80%)	2,006	74	7.1	10.3
Total	**4,288**			**35.7**
Additional Runoff				**11.0**

The proposed development will result in an increase in peak stormwater runoff of 11.0 L/s during the 10% AEP event.

8.6 Proposed Stormwater Management

8.6.1 Stormwater Quantity

Roof runoff from Units 10 – 18 will be managed using two 25,000 L cylindrical tanks (3.5 m diameter), each fitted with a 34 mm outlet orifice positioned 0.65 m above the tank base. Runoff from Units 4 – 8 will be attenuated using a single 10,000 L slimline tank (1.15 m diameter) with a 36 mm outlet orifice. Roof water from Units 1 – 3 will discharge directly to the existing stormwater outlet, which connects to the Council stormwater pipe on State Highway 10.

Concentrated flows from attenuation tanks, roof downpipes, concreted yarding and the like shall be piped to the Council stormwater network via the existing stormwater connection. See Drainage Plan provided in **Appendix A**.

8.6.2 Stormwater Quality

The Regional Plan Rule C.6.4.2 sets stormwater contamination limits for:

- Petroleum hydrocarbons and the production of conspicuous oil or grease films, scums or foams, of floatable or suspended materials
- Changes in the colour or visual clarity, objectionable odour, or the rendering of freshwater unsuitable for consumption by farm animals, or freshwater taken from mapped priority drinking water abstraction points

There are no mapped downstream drinking water abstraction points, refer Figure 6 below.

The development of the site for commercial use should not generate stormwater contamination higher than for standard car parking. Cesspit inlets are designed to capture sediments and larger contaminants, filters such as ‘enviropods’ can be introduced if it is considered necessary to capture finer sediment or floating rubbish.

Prevention of liquid / soluble pollutants entering the stormwater system is reliant on education and individual’s respect for the environment and following good practice such as using commercial vehicle washes and disposing of waste liquids in a controlled manner. Awareness can be improved by signage such as cesspit inlets embossed with ‘DUMP NO WASTE FLOWS TO SEA’, these are available from Hynds. Other forms of education are policy statements, tenancy agreement clauses or voluntary code of practices.

Figure 6 – Northland Drinking Water Takes (Source: NRC GIS Website)

8.7 FNDC Assessment Criteria

The proposed stormwater management has been assessed against the assessment criteria in Section 11.3 of the FNDC District Plan as follows:

Table 6 – Far North District Plan Section 11.3 Assessment Criteria Stormwater Management

Stormwater Disposal Assessment Criteria	Comment
(a) the extent to which building site coverage and Impermeable Surfaces contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment.	Additional runoff over and above the existing consented development will be attenuated back to pre-development levels for the 10% AEP.
(b) the extent to which Low Impact Design principles have been used to reduce site impermeability.	The use of SW attenuation tanks is a form of Low Impact Design.
(c) any cumulative effects on total catchment impermeability.	Additional runoff over and above the existing consented development will be attenuated back to pre-development levels, thereby cancelling any cumulative effects on total catchment.
(d) the extent to which building site coverage and Impermeable Surfaces will alter the natural contour or drainage patterns of the site or disturb the ground and alter its ability to absorb water.	Drainage patterns will not be altered by the proposed subdivision.
(e) the physical qualities of the soil type.	The soils present onsite are moderately well drained.
(f) any adverse effects on the life supporting capacity of soils.	None.

(g) the availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites.	There is sufficient suitable land available for the disposal of effluent plus reserve areas, in compliance with required setbacks from boundaries and flowpaths.
(h) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity.	Future commercial development on the site will result in impermeable surfaces which will be attenuated.
(i) the extent to which landscaping and vegetation may reduce adverse effects of run-off.	Undeveloped areas will be grassed and in the central car park area – planted with evapotranspiration species.
(j) any recognised standards promulgated by industry groups.	Stormwater attenuation is a recognised means for mitigating the effects of increased impermeable surfaces.
(k) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold.	Stormwater attenuation limiting runoff to previously consented levels has been designed for the site.
(l) the extent to which the proposal has considered and provided for climate change.	Stormwater attenuation design for the site is in accordance with FNDC Engineering Standards 2023.
(m) The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.	Attenuation tank(s) have been detailed for the site. Detention ponds are not required.

9 Potable Water

9.1 Potable Water Supply

The Site is currently connected to the reticulated water supply network and approval is sought to connect the proposed development to that network.

There is a 63 mm diameter rider main on the road frontage, and a 200 mm diameter water main on the opposite side of the road.

An application to connect, detailing the connection, backflow prevention and metering arrangements will be required. Supply flows and pressures should be reviewed for suitability as part of the design.

9.2 Fire Fighting

Council Engineering Standards and Fire and Emergency NZ require a water supply that is adequate for firefighting purposes. There is a 200 mm diameter water main with two fire hydrants located on State Highway 10, one opposite the site entrance and a second to the south within 135 m of the site.

The hydrant positioning and performance should be reviewed for satisfaction of firefighting requirements.

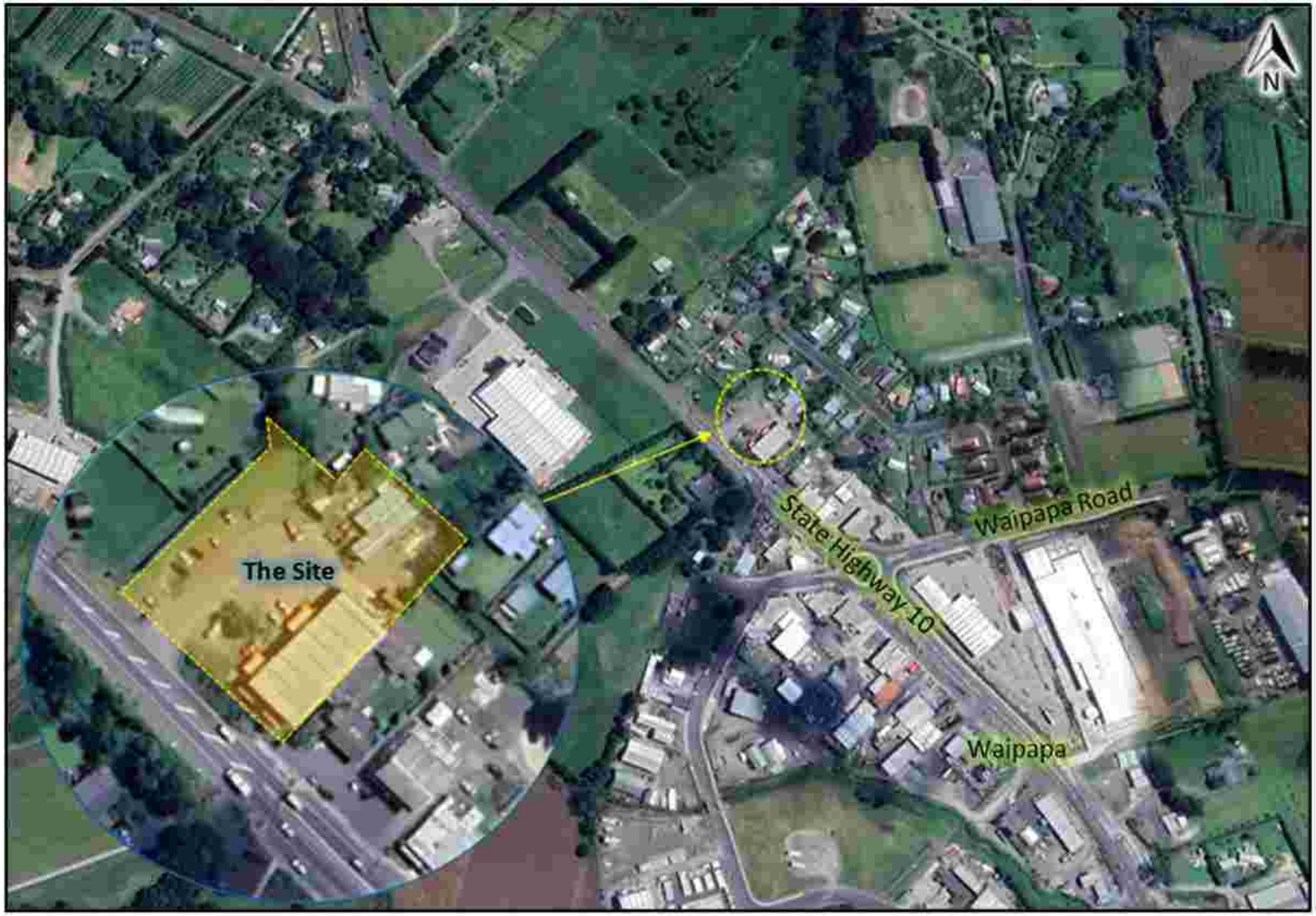
10 Wastewater

The site is not able to connect to the Council sewer system. Haigh Workman has carried out an Onsite Wastewater Design Report for a proposed communal system. Refer report Ref. 26 067, *Onsite Wastewater Design Report, 2052 State Highway 10, Waipapa*, May 2026).

End of Report – Appendices to follow.

Appendix A – Site Drawings

Drawing No.	Title
26 067 / 1	Site Location Plan
RC-A102	Proposed Site Plan *(Archiology Limited, dated 21 May 2026)*
RC-A103	Proposed Earthworks Plan *(Archiology Limited, dated 21 May 2026)*
RC-A110	Drainage Plan *(Archiology Limited, dated 21 May 2026)*
A101	Building Consent 2006 (pre-development surfaces) *(IES Construction Limited, dated 5 April 2006)*
SWD01	Attenuation Tank Detail *(Haigh Workman, dated 18 May 2026)*
10886	Topographical Survey *(Thomson Survey, dated 25 February 2026)*



26 067 / 1 – Site Location Plan

PROPOSED SW ATTENUATION TANKS (2x 25,000L) - REFER DRAWINGS BY HAIGH WORKMAN

PROPOSED RET. WALL = 1m MAX HEIGHT

PROPOSED RET. WALL = 0.6m MAX HEIGHT

LOT 19 DP 192833 (LOCAL PURPOSE (ACCESSWAY) RESERVE)

BDY 45° 16' (55.33m)

BDY 0° 15' (7.35m)

HIRB ADJOINING TO RESIDENTIAL ZONE - 2.0m @ 45°

ALSO REFER DRAWINGS BY TECHTREAT & HAIGH WORKMAN

SCREENS AROUND NEW TANKS

MIN. 50% OF 3m SETBACK AREA NOT OCCUPIED BY BUILDING OR DRIVEWAY TO BE LANDSCAPED

EXISTING VEHICLE CROSSING

EXTG BERM TO BE ADJUSTED FOR NEW VEHICLE CROSSING

EXISTING VEHICLE CROSSING TO BE WIDENED

NEW VEHICLE CROSSING

EXTG BERM

EXTG CONC. PATH

EXTG FOOTPATH

UNIT 18
TOTAL AREA:
112.2 m²
FFL (GF): 90.100

UNIT 17
TOTAL AREA:
112.1 m²
FFL (GF): 90.100

UNIT 16
TOTAL AREA:
112.1 m²
FFL (GF): 90.100

UNIT 15
TOTAL AREA:
112.1 m²
FFL (GF): 90.100

UNIT 14
TOTAL AREA:
112.1 m²
FFL (GF): 90.100

UNIT 13
TOTAL AREA:
112.2 m²
FFL (GF): 90.100

EXTG CP TO BE REMOVED

DEMARCATED FOOTPATH

BDY 315° 15' (19.87m)

BDY 315° 08' (25.07m)

LOT 1 DP 192833

WW RESERVE AREA, 30% OF 108 m². (32.4 m²)

CAGED BIN AREA WITH 2x 4.5m³ INDUSTRIAL BINS

PROPOSED RET. WALL = 1.4m MAX HEIGHT

PROPOSED RET. WALL = 0.8m MAX HEIGHT

PROPOSED SW ATTENUATION TANK (1x 10,000L) - REFER DRAWINGS BY HAIGH WORKMAN

BDY 45° 15' (60.56m)

BDY 45° 15' (13.61m)

EXTG CP & PIPE TO BE REMOVED

NEW TYPE 2 CESSPIT

DISH CHANNEL

BDY 45° 15' (37.00m)

EB 45° 15' (30.00m)

14 CARPARKS

CONC. PANEL SIGNAGE BOARD - TILT SLAB - 5m HEIGHT

PROPOSED WW BED AREA
2 / 15.5x3.5m BEDS

KERBS ALONG EDGE OF CARPARK/DRIVEWAY

SERVICE SHED (3x2m)

LOADING

UNIT 12
TOTAL AREA:
112.2 m²
FFL (GF): 89.600

UNIT 11
TOTAL AREA:
112.1 m²
FFL (GF): 89.600

UNIT 10
TOTAL AREA:
112.2 m²
FFL (GF): 89.600

EXTG SEPTIC TANKS & ASSOCIATED PIPEWORKS TO BE REMOVED

NEW TYPE 2 CESSPIT

EB 45° 15' (35.00m)

BDY 135° 15' (38.42m)

BDY 135° 16' (41.41m)

DEMARCATED FOOTPATH

EXTG PUMP CHAMBER & ASSOCIATED PIPEWORKS TO BE REMOVED

SS PUMP CHAMBER

EXISTING BUILDING (UNIT 1~6)
TOTAL AREA: 720.9 m²
(722.9 m² WITH NEW IT WALL)
FFL (GF): 89.30

EXTG CP TO BE REMOVED

UNIT 7
TOTAL AREA:
97.1 m²
FFL (GF): 89.300

UNIT 8
TOTAL AREA:
96.1 m²
FFL (GF): 89.300

UNIT 9
(METALLED YARD AREA)
- NO STRUCTURE PROPOSED IN THIS CONSENT

10m x 4m WW TREATMENT PLANT

PROPOSED WW TREATMENT PLANT TO BE MIN. 1.5m AWAY FROM ANY BOUNDARIES OR BUILDINGS. FOR SETBACK FROM BUILDINGS LESS THAN 3m, GEOTECH TO CHECK IMPACT ON BUILDING FOUNDATION.

EXTG TREATMENT + SOAKAGE AREA (SHADED)

BDY 225° 15' (37.00m)

BDY 225° 15' (37.16m)

HIRB 'A' HIRB 'B' HIRB 'C' HIRB 'D' HIRB 'E' HIRB 'F' HIRB 'G' HIRB 'H'

Scale 1:250
2.5 0 2.5 5.0 7.5 10.0 12.5m

1 / - PROPOSED SITE PLAN
1:250 (A3)

archiology
ARCHITECTURE | DESIGN | DRAUGHTING

Archiology Limited

Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

ADNZ Architectural Designers New Zealand
Professional Member

REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
PROPOSED SITE PLAN

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	2/06/2026
DWG NUMBER:	RC-A102	REV.	

LEGEND - EARTHWORKS

CUT
AREA: 3325.3 m²
VOLUME: 1388.4 m³

DRIVEWAY
AREA: 1584.4 m²
VOLUME: 605.7 m³

TOTAL EARTHWORK AREA / VOLUME
AREA 3325.3 m² / VOLUME 1388.4 m³

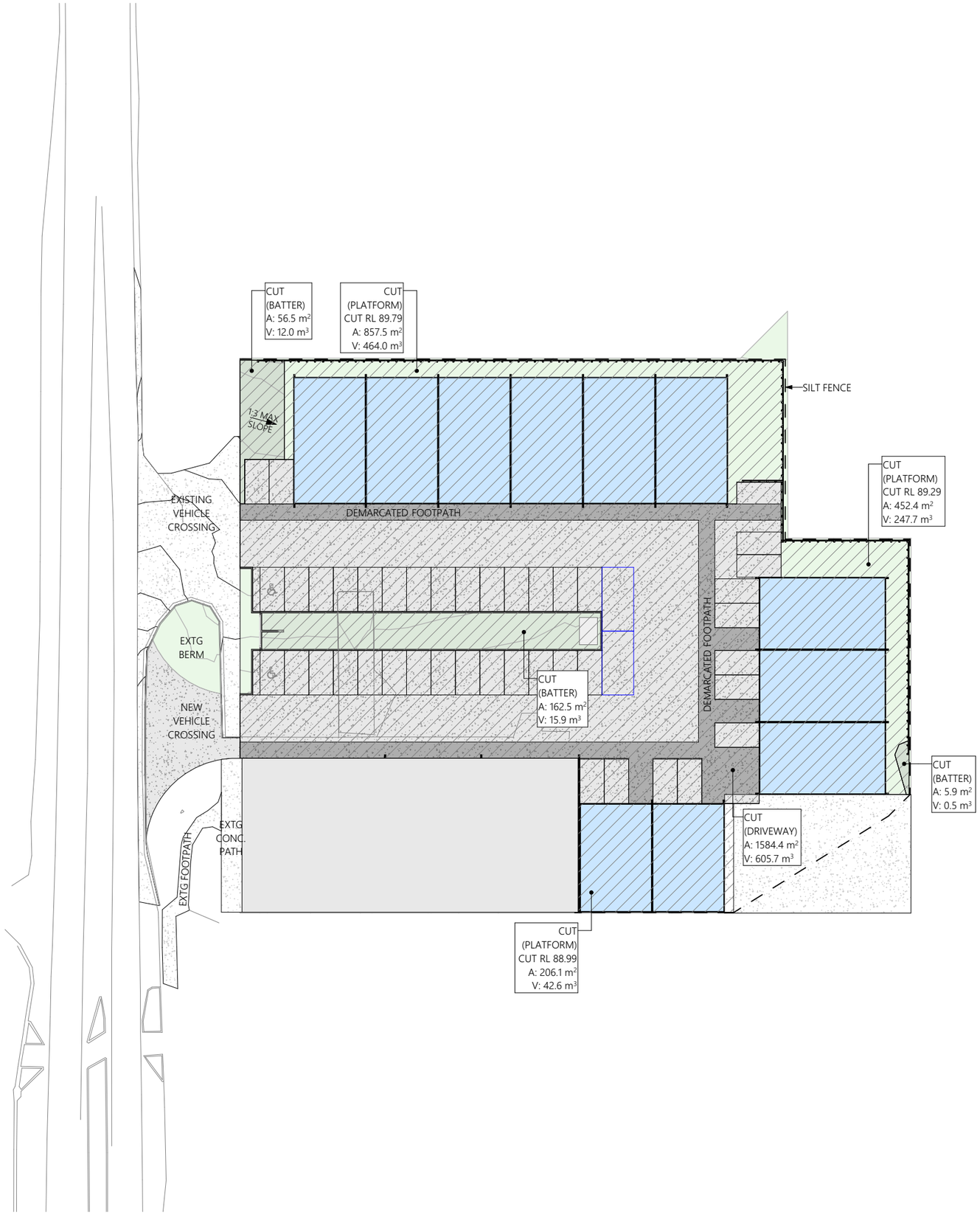
NOTE: THIS AREA / VOLUME ARE FOR PLANNING GUIDE NOT FOR CONSTRUCTION.

EROSION & SEDIMENT CONTROL

— — —

GEOTEXTILE & POST SILT FENCE

NOTES:
- THE SEDIMENT CONTROL PLAN IS SCHEMATIC ONLY AND IF DEEMED NECESSARY WILL BE CONFIRMED ON SITE.
- REFER SILT FENCE DETAILS ON SHEET **A104**.
- SILT FENCE TO COMPLY WITH FAR NORTH COUNCIL EROSION & SEDIMENT CONTROL CODE OF PRACTICE.
- ALL EROSION & SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND INSTALLED PRIOR TO BUILDING WORKS ON SITE COMMENCING.
- SILT FENCES ARE TO BE MONITORED FOR MAINTENANCE DURING CONSTRUCTION AT LEAST ONCE A WEEK AND AFTER ANY RAINFALL.
- THE IMPLEMENTATION AND MAINTENANCE OF SEDIMENT MANAGEMENT IS THE RESPONSIBILITY OF THE MAIN CONTRACTOR.
- CONTRACTORS SHALL UNLOAD AND LOAD ALL EXCAVATION MACHINERY ON THE SITE AND NOT FROM TRUCKS PARKED ON THE ROAD.
- THE CONTRACTOR IS TO MAKE AVAILABLE A HOSE FOR WASHING DOWN DELIVERY VEHICLES AND CONCRETE TRUCKS BEFORE THEY LEAVE THE SITE.
- DEMOLITION AND SITE CLEARANCE ACTIVITIES SHALL IDEALLY COMMENCE DURING A PERIOD OF FINE WEATHER TO REDUCE THE RISK OF SEDIMENT ESCAPING FROM THE SITE.
- EXISTING SUMPS SHALL BE PROTECTED WITH HAY BALES OR FILTER FABRIC.
- SOIL STOCKPILES SHALL BE COVERED WITH POLYTHENE SHEET AND HELD IN PLACE WITH LARGE ROCKS.
- ENSURE THAT ALL EXCAVATIONS FOR SERVICES ARE BACKFILLED AS SOON AS POSSIBLE.
- DOWNPIPES (TEMPORARY) IF NECESSARY ARE TO BE INSTALLED AND CONNECTED TO THE STORMWATER SYSTEM AS EARLY AS POSSIBLE ONCE THE ROOFING MATERIAL HAS BEEN INSTALLED.
- A HEALTHY VEGETATION BUFFER SHALL BE LEFT OVER AS MUCH OF THE SITE AS POSSIBLE.
- THE SITE IS TO BE KEPT CLEAN AND TIDY AT ALL TIMES.



1 / - EARTHWORKS PLAN
1:500 (A3)

Scale 1:500
5 0 5 10 15 20 25m

NOTES - EARTHWORKS

- EARTHWORKS CUT AREA / VOLUME SHOWN ON THIS PLAN ARE NOT TO BE USED FOR QUOTING PURPOSES. CONTRACTOR TO CALCULATE / QUOTE USING THEIR OWN METHODS / CALCULATIONS ON SITE & CONFIRM WITH OWNER PRIOR TO UNDERTAKING.
- ENSURE TO PUT 'EROSION & SEDIMENT CONTROL' DEVICES IN PLACE - REFER TO FAR NORTH COUNCIL STANDARDS & PROCEDURES.
- ANY PROPOSAL TO CREATE CUTS OR FILLS GREATER THAN 600mm IN HEIGHT SHOULD BE THE SUBJECT OF SPECIFIC DESIGN ADVICE. ALL FILLES, REGARDLESS OF DEPTH, MUST BE PLACED IN ACCORDANCE WITH NZS4431:2022 WITH RESPECT TO SUBGRADE PREPARATION AND STANDARD OF COMPACTION.
- EXCAVATION AND GROUND CONDITIONS MUST BE INSPECTED BY THE GEOTECH ENGINEER.

SITE MANAGEMENT

- ENSURE TO ERECT SILT CONTROL FENCES & WATER DIVERSION TRENCH AWAY FROM THE EXCAVATION PRIOR TO ANY EXCAVATION TAKING PLACE.
- ENSURE THAT THE SUPPRESSION OF DUST IS ATTENDED TO IF IT BECOMES AN ISSUE.
- SILT FENCE IN VICINITY OF EXCAVATION AS SHOWN.

NZBC - F5.2

CONSTRUCTION & DEMOLITION HAZARDS

a) WORKS UNDERTAKEN FOR THIS CONSENT DO NOT INCLUDE THOSE WHERE FALLING OBJECTS ARE A HAZARD. NO SCAFFOLDING TO BE ERECTED, NO ALTERATIONS TO EXISTING BUILDING ABOVE SUBFLOOR.
b) WORKS ARE CENTRALLY LOCATED TO THE SITE, ADJACENT PROPERTIES ARE OUTSIDE PROXY OF ANY POTENTIAL HAZARDOUS ACTIVITY.
c) ALL SUITABLY QUALIFIED CONTRACTORS ARE TO ENSURE OPERATION OF WORKS FALL INTO COMPLIANCE WITH NZBC F5.2.
d) WORKS UNDERTAKEN ARE TO BE DONE UNDER APPROPRIATELY QUALIFIED SUPERVISION. PROJECT MANAGER / FOREMAN OR CLIENT TO ENSURE HAZARDOUS WORKS CANNOT BE ACCESSED BETWEEN OPERATIONAL WORKING HOURS.

SITE SETOUT

- PROPOSED LOCATION OF THE BUILDING IS TO BE PEGGED BY A SURVEYOR IN THE CONFIRMED LOCATION.
- PEG FFL *DATUM BY SURVEYOR ON SITE - (PEG FFL AGAINST FENCE - OUT OF THE WAY).
- CONTRACTOR TO VERIFY ALL EXTERNAL MEASUREMENTS OF EXISTING DWELLING PRIOR TO SETOUT.

archiology
ARCHITECTURE | DESIGN | DRAUGHTING

Archiology Limited

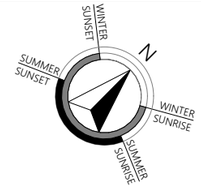
Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

APNZ Architectural Designers New Zealand
Professional Member

- THIS DRAWING SHALL NOT BE SCALED.
- CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION OR FABRICATION IF IN DOUBT - ASK.
- ARCHIOLOGY LTD IS TO BE NOTIFIED OF ANY VARIATION BETWEEN SITE DIMENSIONS AND THOSE ON PLANS.
- THESE DRAWINGS REMAIN THE PROPERTY OF ARCHIOLOGY LTD AND SHOULD NOT BE COPIED IN ANY FORM OR PASSED ON TO A THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT.
- ALL CONSTRUCTION TO COMPLY WITH NZS3604:2011 AND NZBC:1992 + AMENDMENTS.
- BLOCKING TO COMPLY WITH NZS3604:2011 - NOT SHOWN CLARITY.
- ALL TIMBER TO BE GRADE SG8 UNLESS SPECIFIED OTHERWISE.
- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.

REV	ISSUE	BY	DATE



ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

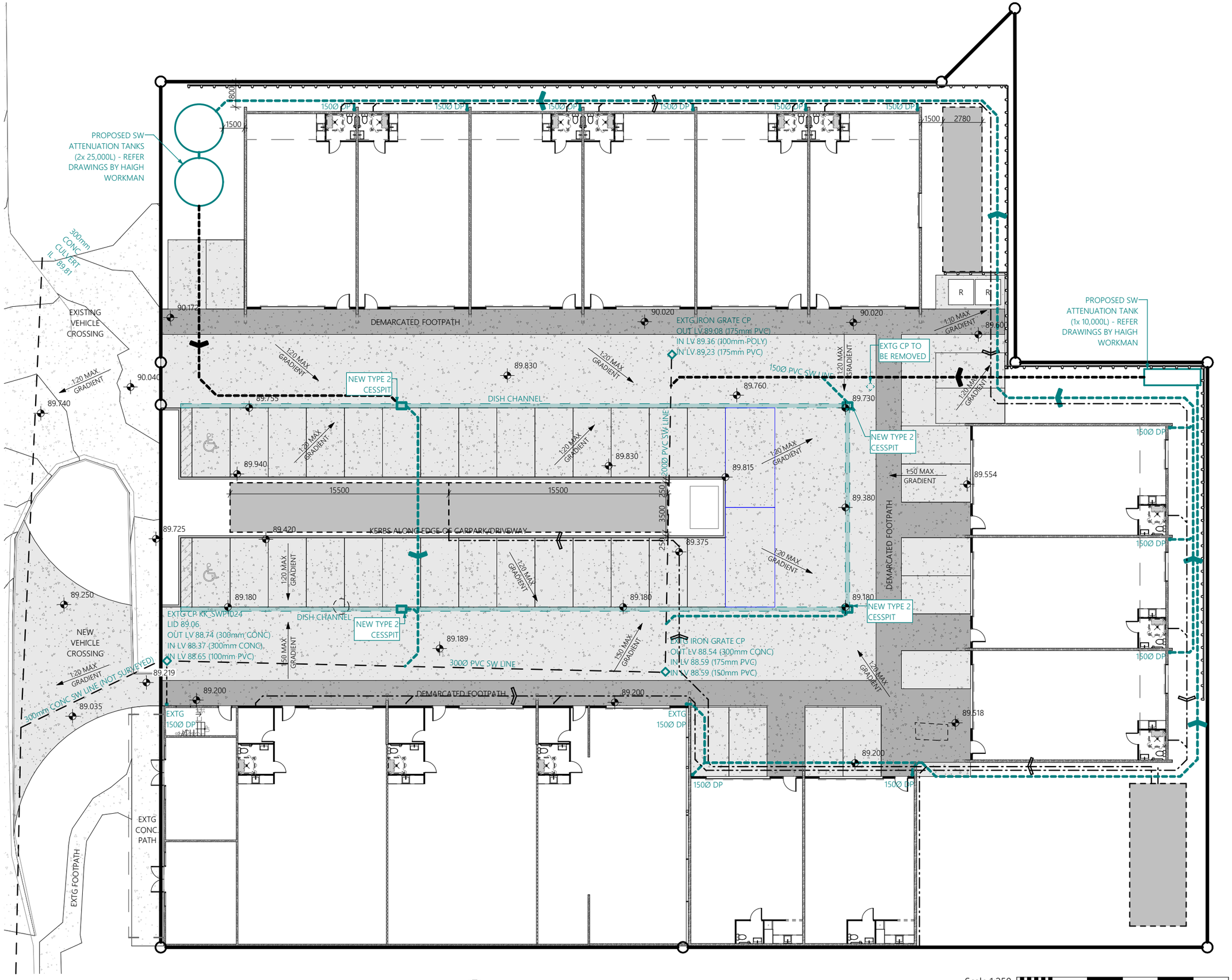
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
EARTHWORKS PLAN

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	2/06/2026
DWG NUMBER:	RC-A103	REV.	



1 PROPOSED SITE DRAINAGE PLAN - STORMWATER
1:250 (A3)

Scale 1:250
2.5 0 2.5 5.0 7.5 10.0 12.5m

archiology
ARCHITECTURE | DESIGN | DRAUGHTING

Archiology Limited

Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

ADNZ Architectural Designers New Zealand
Professional Member

- THIS DRAWING SHALL NOT BE SCALED.
- CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION OR FABRICATION IF IN DOUBT - ASK
- ARCHIOLOGY LTD IS TO BE NOTIFIED OF ANY VARIATION BETWEEN SITE DIMENSIONS AND THOSE ON PLANS.
- THESE DRAWINGS REMAIN THE PROPERTY OF ARCHIOLOGY LTD AND SHOULD NOT BE COPIED IN ANY FORM OR PASSED ON TO A THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT.
- ALL CONSTRUCTION TO COMPLY WITH NZS3604:2011 AND NZBC:1992 + AMENDMENTS.
- BLOCKING TO COMPLY WITH NZS3604:2011 - NOT SHOWN CLARITY.
- ALL TIMBER TO BE GRADE SG8 UNLESS SPECIFIED OTHERWISE.
- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.

REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
PROPOSED SITE DRAINAGE PLAN - STORMWATER

RESOURCE CONSENT

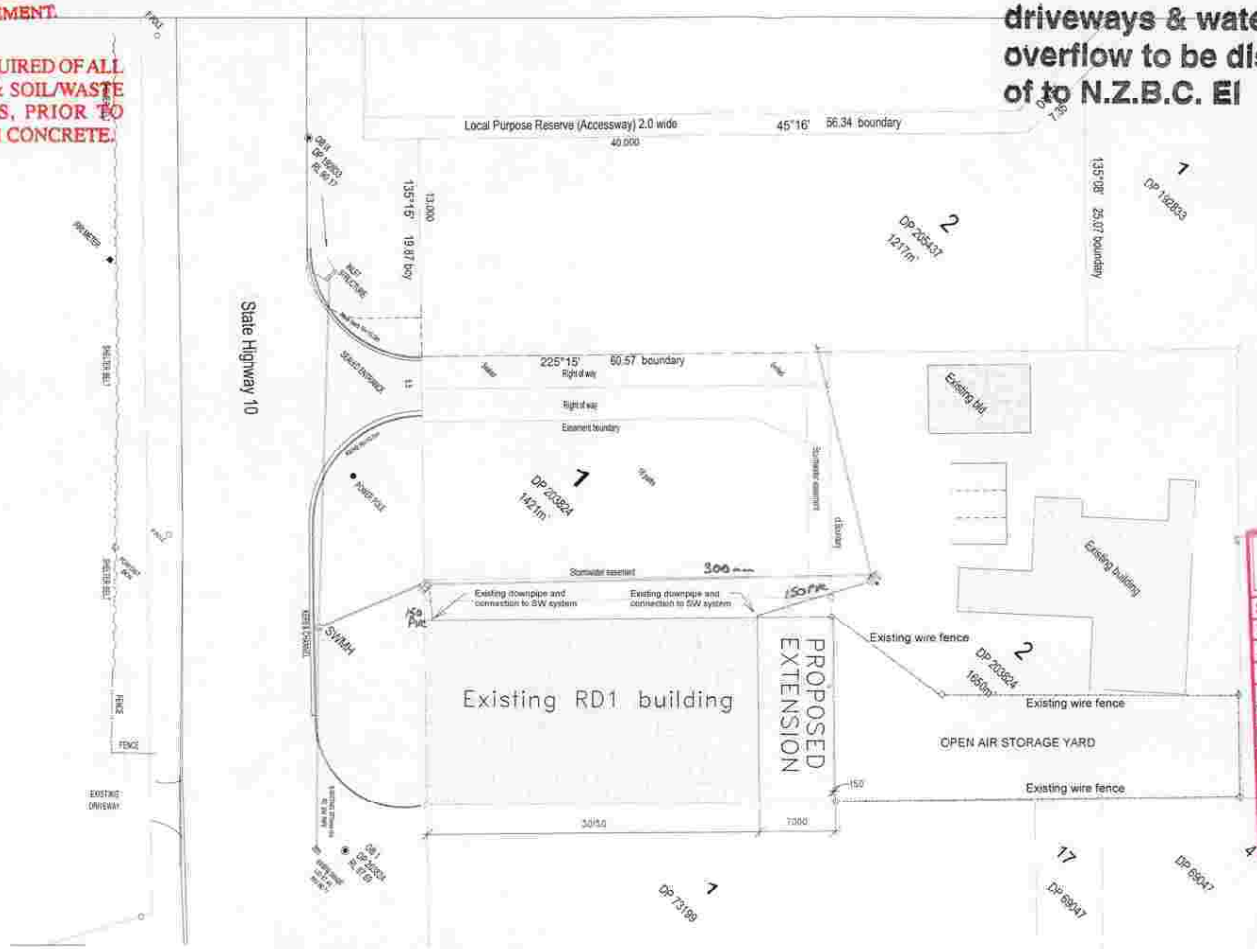
DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	2/06/2026
DWG NUMBER:	RC-A110	REV:	

BUILDER TO CHECK LOCATIONS, LEVELS, DEPTHS ETC. OF ALL INGROUND SERVICES PRIOR TO COMMENCEMENT.

INSPECTION REQUIRED OF ALL WATER SUPPLY & SOIL/WASTE DISPOSAL PIPES, PRIOR TO COVERAGE WITH CONCRETE.

All stormwater from roof, driveways & watertank overflow to be disposed of to N.Z.B.C. E1

THESE PLANS AND SPECIFICATIONS MUST BE KEPT 'ON SITE' DURING CONSTRUCTION. ALL BOUNDARY PEGS MUST BE LOCATED AND FLAGGED BEFORE WORK IS COMMENCED.



1 SITE PLAN
1 : 400

Far North District Council
NOTIFIABLE INSPECTIONS
Plumbing & Drainage

Pre-pour under slab P & D		
Pre-Line Plumbing in walls		
Sewer & Stormwater drainage prior to back-filling trench	X	
Septic Tank effluent disposal Trench		
Other		

Far North District Council
NOTIFIABLE INSPECTIONS

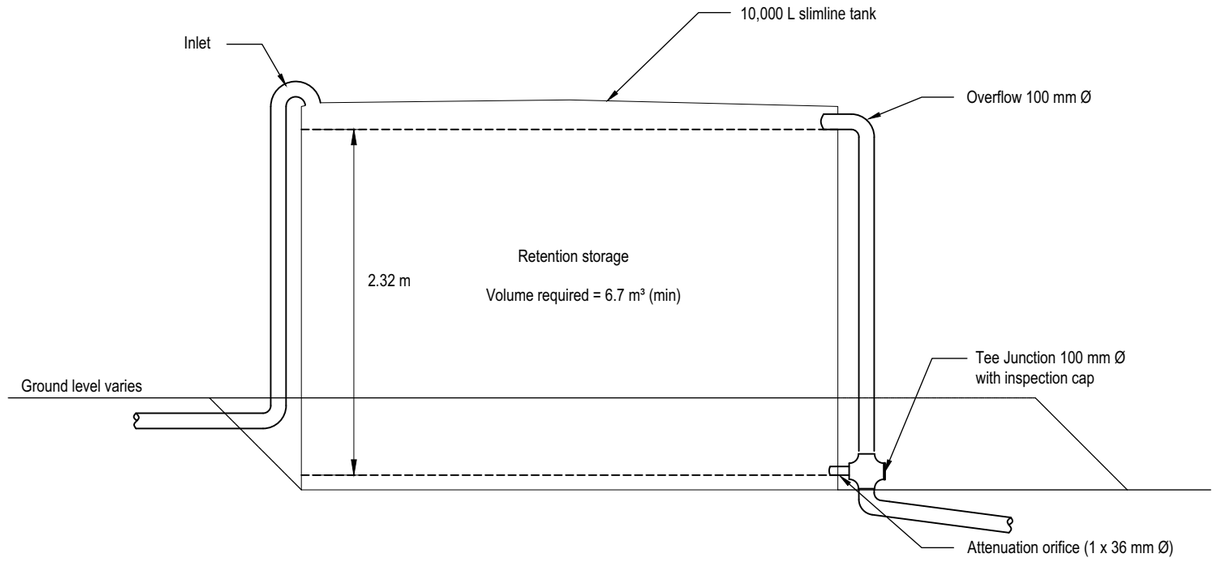
Site Inspection	✓	
Footing / Foundation	✓	
Slab		
Bond Beam		
Sub-floor		
Framing		
Exposed Rafter Strapping		
Pre-line		
Sheet Bracing		
Other (specify) LIC PLANS	✓	
Final Inspection		

APPROVED PIM/BC 20061415
Date 24/4/06
Signed
FAR NORTH DISTRICT COUNCIL

IES Construction Ltd.
PO BOX 448 Kerikeri
Ph: 09 4078784 Fax: 09 4078770

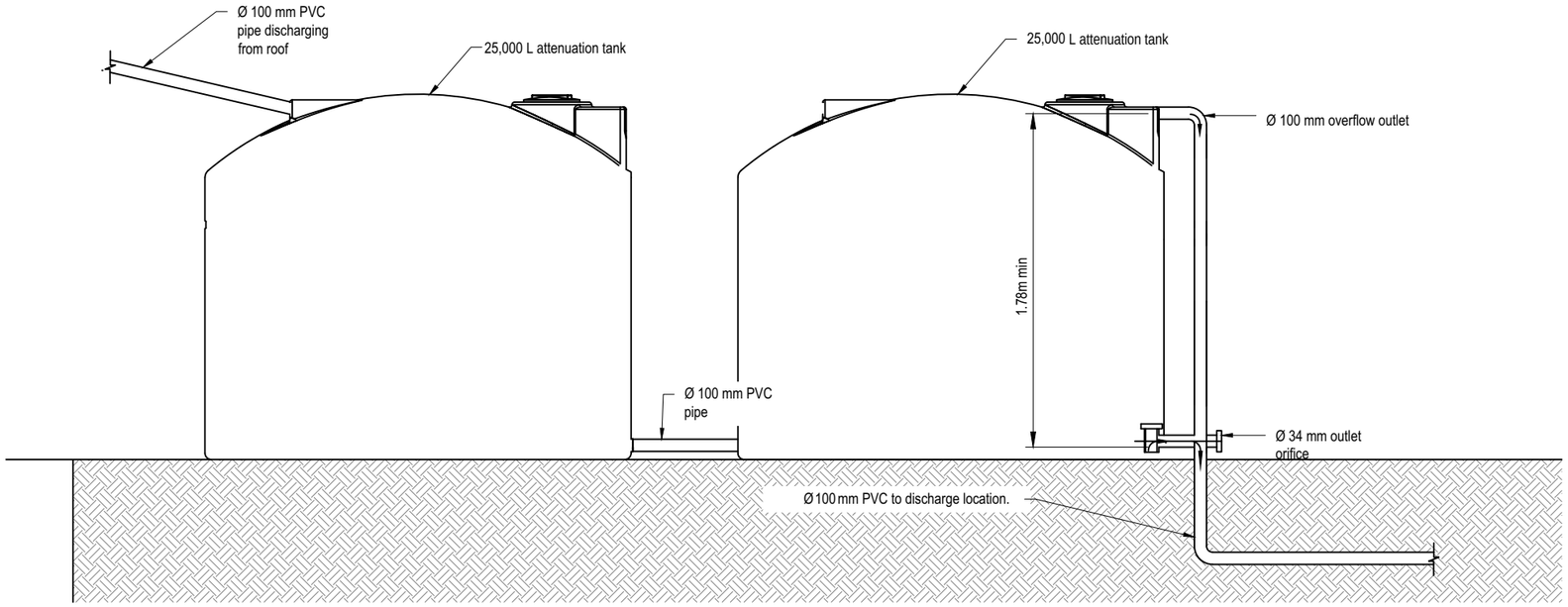
RD1 Extension

SITE PLAN			Sheet A101
DRAWN: Author	Checked	Scales	Series of
DATE: 5/04/2006 3:01:11 p.m.	Checker	1 : 400	Ref



NOTE

- Maximum orifice pipe length is 150mm. Allow 75mm clearance from end of pipe to outside tank wall
- Fix orifice pipe to tee junction using reducer fittings



Elevation of Potable and Attenuation Rain Tanks

FOR CONSENT

Rev	Date	Description	By	Checked
A	18/05/2026	FOR CONSENT	LP	AT

DWG ATTENUATION TANK DETAIL

A3 SCALE NTS | Date 18/05/2026

Drawn LP | Checked AT | Approved TA

File T:\CLIENTS\2052 STATE HIGHWAY 10 (PAUL VEGAR)\26 067 - 2052 STATE HIGHWAY 10, WAIPAPA\ENGINEERING\03_DRAWINGS\26 067_ATTENUATION TANK DETAILS.DWG

HAIGH WORKMAN LTD
Civil & Structural Engineers
6 Fairway Drive
Kerikeri, BOI
T: 09 407 8327
F: 09 407 8378
E: info@haighworkman.co.nz

Project PROPOSED NEW DEVELOPMENT
2052 STATE HIGHWAY 10, WAIPAPA

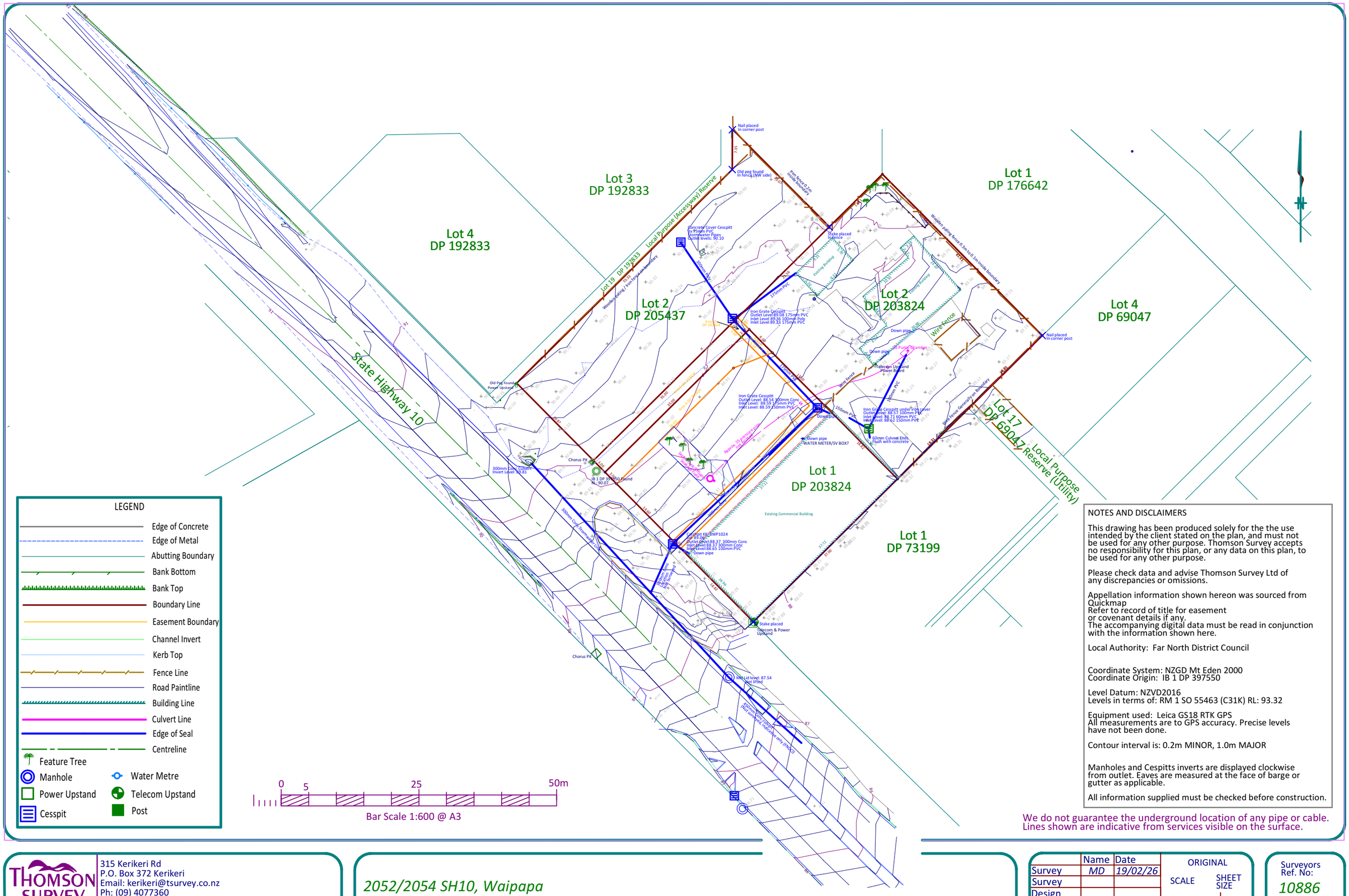
Client 2052 SH10 WAIPAPA LIMITED

Project No. 26 067 | RC no.

Stage

Dwg No. SWD01

Sheet No. 1 of 1



LEGEND

- Edge of Concrete
- Edge of Metal
- Abutting Boundary
- Bank Bottom
- Bank Top
- Boundary Line
- Easement Boundary
- Channel Invert
- Kerb Top
- Fence Line
- Road Paintline
- Building Line
- Culvert Line
- Edge of Seal
- Centreline
- Feature Tree
- Manhole
- Water Metre
- Power Upstand
- Telecom Upstand
- Cesspit
- Post

NOTES AND DISCLAIMERS

This drawing has been produced solely for the the use intended by the client stated on the plan, and must not be used for any other purpose. Thomson Survey accepts no responsibility for this plan, or any data on this plan, to be used for any other purpose.

Please check data and advise Thomson Survey Ltd of any discrepancies or omissions.

Appellation information shown hereon was sourced from Quickmap
Refer to record of title for easement or covenant details if any.
The accompanying digital data must be read in conjunction with the information shown here.

Local Authority: Far North District Council

Coordinate System: NZGD Mt Eden 2000
Coordinate Origin: IB 1 DP 397550

Level Datum: NZVD2016
Levels in terms of: RM 1 SO 55463 (C31K) RL: 93.32

Equipment used: Leica GS18 RTK GPS
All measurements are to GPS accuracy. Precise levels have not been done.

Contour interval is: 0.2m MINOR, 1.0m MAJOR

Manholes and Cespitts inverts are displayed clockwise from outlet. Eaves are measured at the face of barge or gutter as applicable.

All information supplied must be checked before construction.

We do not guarantee the underground location of any pipe or cable. Lines shown are indicative from services visible on the surface.

THOMSON SURVEY LIMITED
315 Kerikeri Rd
P.O. Box 372 Kerikeri
Email: kerikeri@tsurvey.co.nz
Ph: (09) 4077360
www.tsurvey.co.nz
Registered Land Surveyors, Planners & Land Development Consultants

2052/2054 SH10, Waipapa

Topographical Survey on Lots 1 & 2 DP 203824, Lot 2 DP 205437

PREPARED FOR: Vegar

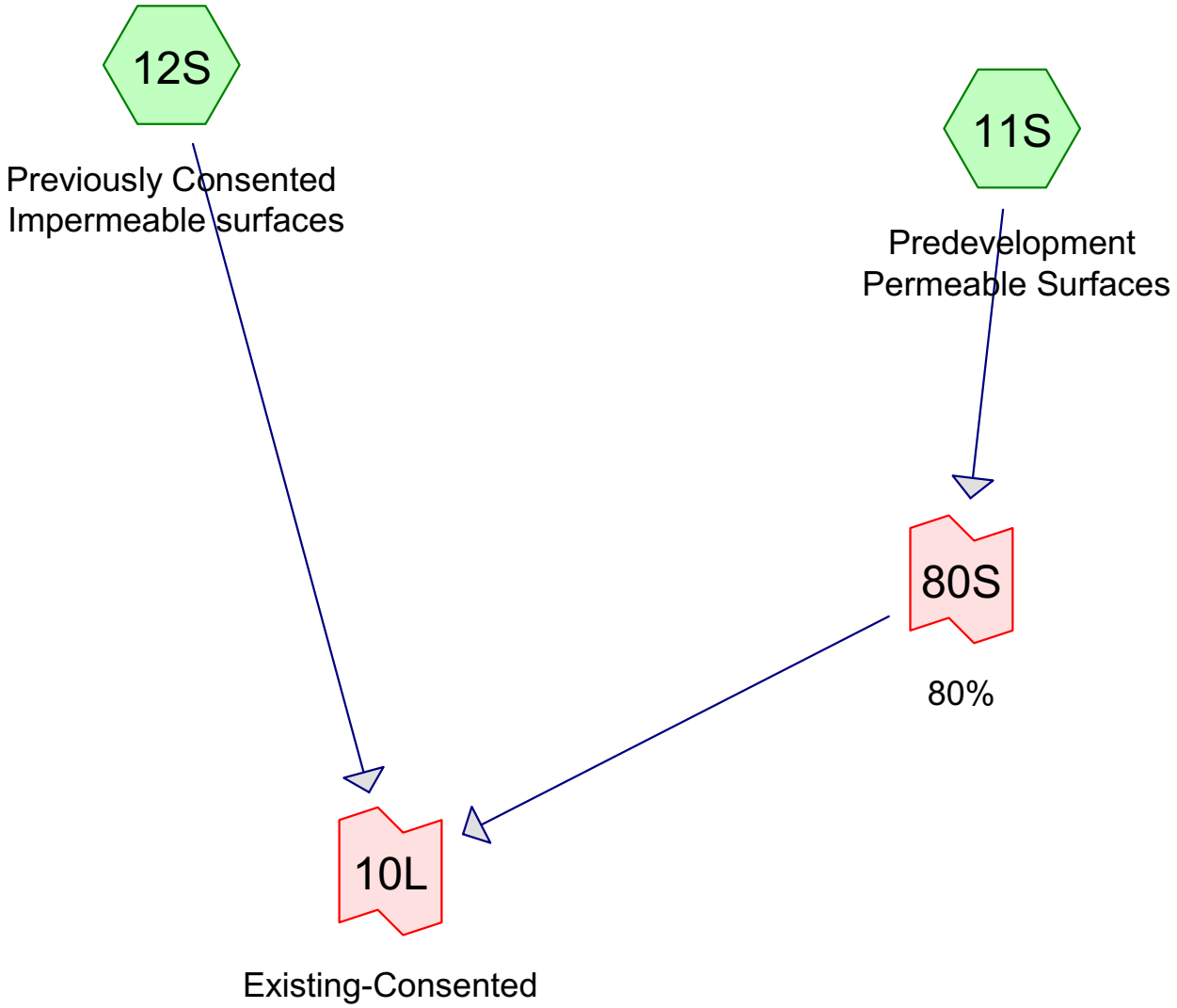
	Name	Date
Survey	*MD*	*19/02/26*
Survey		
Design		
Drawn	*MD*	*25/02/26*
Rev		

10886 Topo .LCD

ORIGINAL
SCALE *1:600*
SHEET SIZE *A3*

Surveyors Ref. No: *10886*
Series
Sheet 1 of 1

Appendix B – HydroCAD Data



Subcat Reach Pond Link

Routing Diagram for 26 067_20260506_(Type 1A)-80%Predevelopment
Prepared by Haigh Workman Limited, Printed 19/05/2026

Area Listing (all nodes)

Area (sq-meters)	CN	Description (subcatchment-numbers)
1,030.0	98	Asphalt (12S)
285.0	98	Concrete (12S)
967.0	98	Roof (12S)
2,006.0	74	grass (eng standards (11S)
4,288.0	**87**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-meters)	Soil Group	Subcatchment Numbers
0.0	HSG A	
0.0	HSG B	
0.0	HSG C	
0.0	HSG D	
4,288.0	Other	11S, 12S
4,288.0		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-meters)	HSG-B (sq-meters)	HSG-C (sq-meters)	HSG-D (sq-meters)	Other (sq-meters)	Total (sq-meters)	Ground Cover
0.0	0.0	0.0	0.0	1,030.0	1,030.0	Asphalt
0.0	0.0	0.0	0.0	285.0	285.0	Concrete
0.0	0.0	0.0	0.0	967.0	967.0	Roof
0.0	0.0	0.0	0.0	2,006.0	2,006.0	grass (eng standards
0.0	**0.0**	**0.0**	**0.0**	**4,288.0**	**4,288.0**	**TOTAL AREA**

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 11S: Predevelopment Runoff Area=2,006.0 m² 0.00% Impervious Runoff Depth>95 mm
Tc=10.0 min CN=74 Runoff=12.9 L/s 191.5 m³

Subcatchment 12S: Previously Runoff Area=2,282.0 m² 100.00% Impervious Runoff Depth>163 mm
Tc=10.0 min CN=98 Runoff=25.5 L/s 373.0 m³

Link 10L: Existing-Consented Inflow=35.7 L/s 526.2 m³
Primary=35.7 L/s 526.2 m³

Link 80S: 80% x 0.80 Inflow=12.9 L/s 191.5 m³
Primary=10.3 L/s 153.2 m³ Secondary=2.6 L/s 38.3 m³

Total Runoff Area = 4,288.0 m² Runoff Volume = 564.5 m³ Average Runoff Depth = 132 mm
46.78% Pervious = 2,006.0 m² 53.22% Impervious = 2,282.0 m²

Summary for Subcatchment 11S: Predevelopment Permeable Surfaces

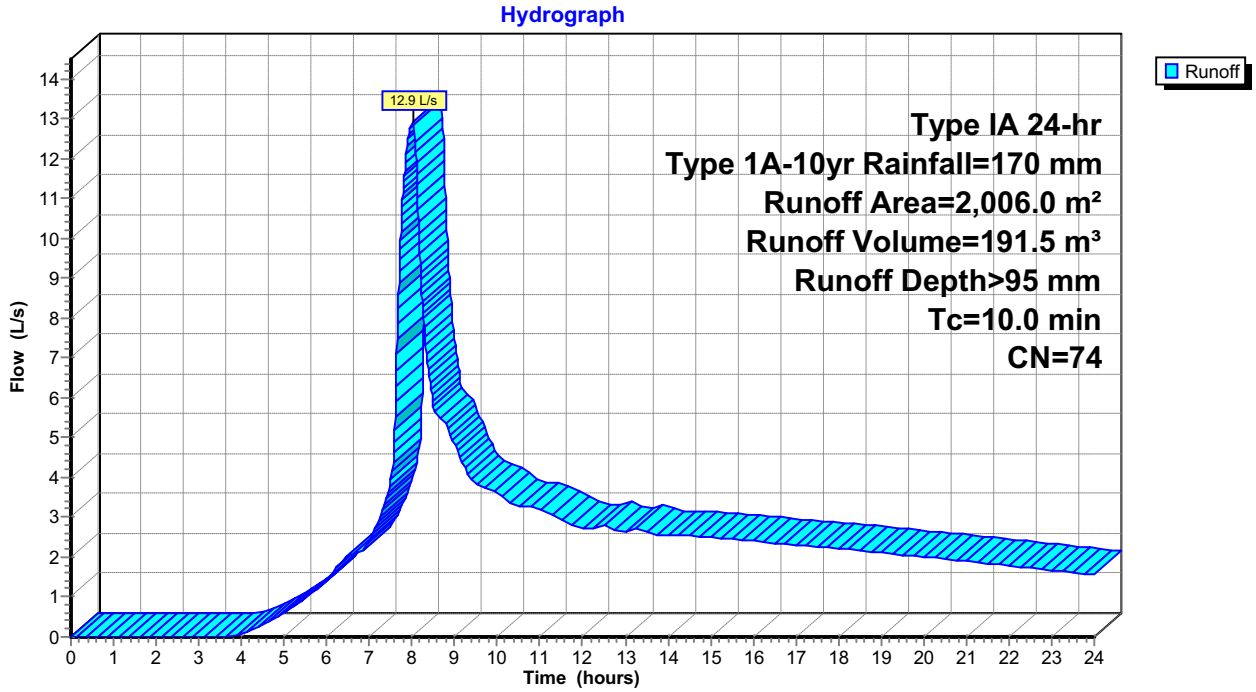
Runoff = 12.9 L/s @ 8.01 hrs, Volume= 191.5 m³, Depth> 95 mm
Routed to Link 80S : 80%

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	2,006.0	74	grass (eng standards
	2,006.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 11S: Predevelopment Permeable Surfaces



Summary for Subcatchment 12S: Previously Consented Impermeable surfaces

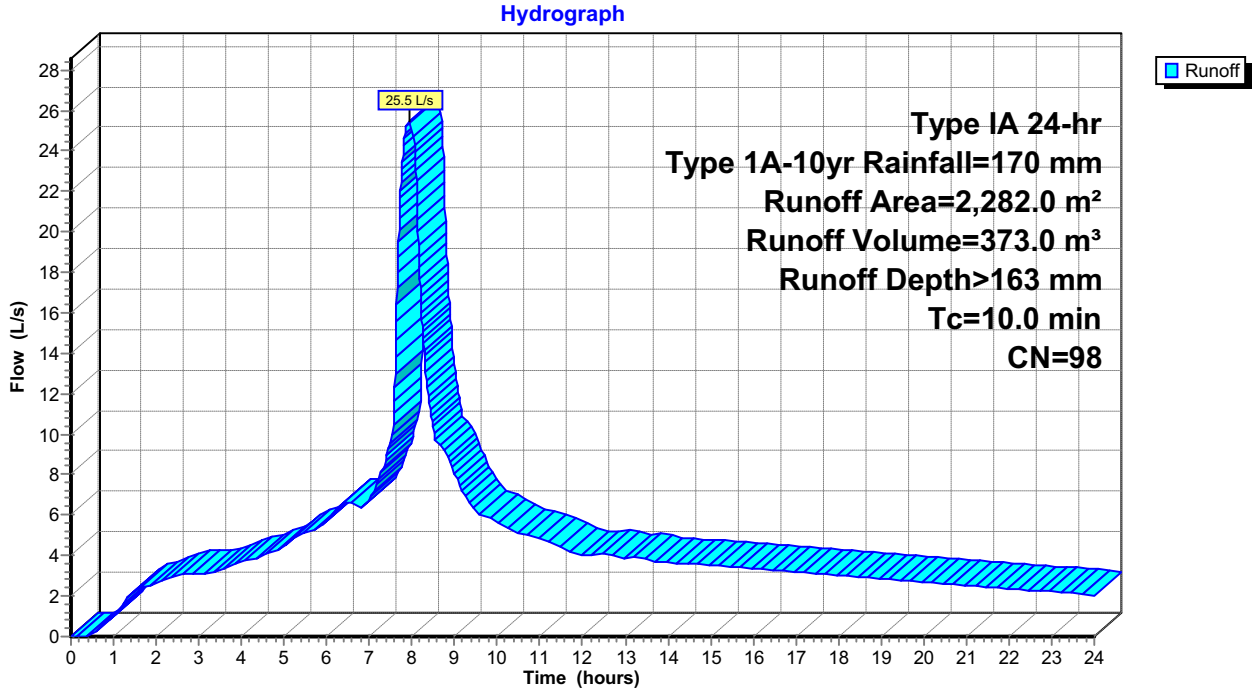
Runoff = 25.5 L/s @ 7.94 hrs, Volume= 373.0 m³, Depth> 163 mm
Routed to Link 10L : Existing-Consented

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	967.0	98	Roof
*	285.0	98	Concrete
*	1,030.0	98	Asphalt
	2,282.0	98	Weighted Average
	2,282.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 12S: Previously Consented Impermeable surfaces

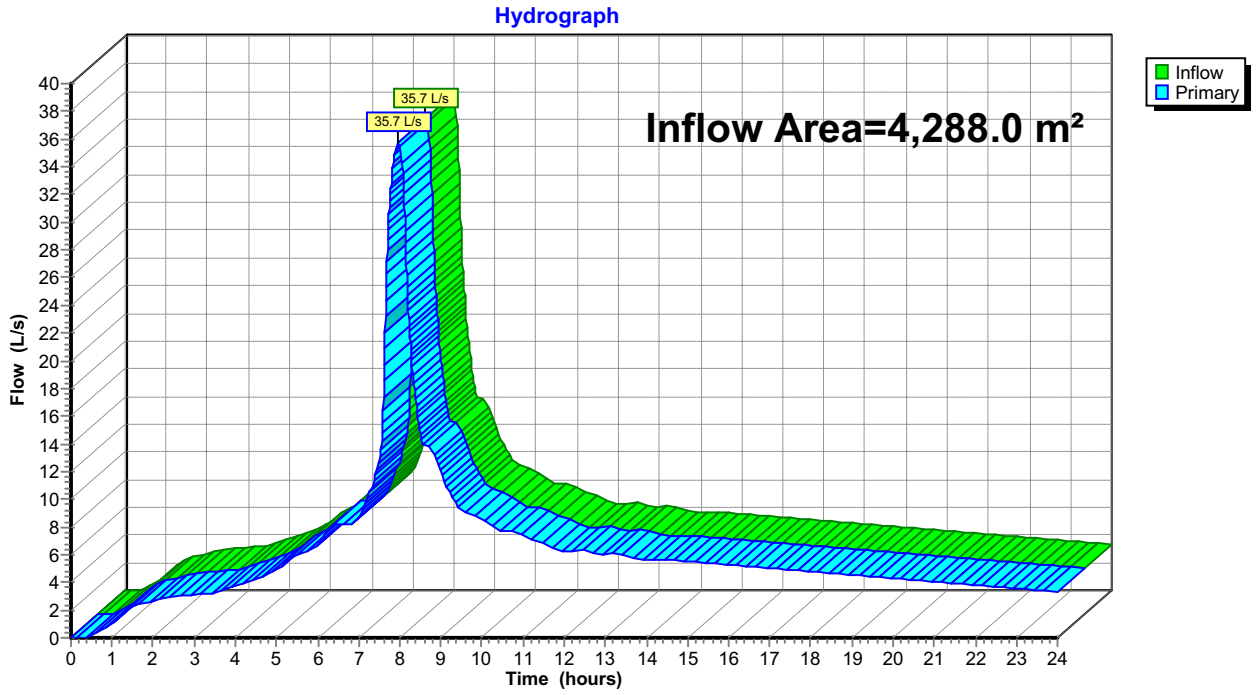


Summary for Link 10L: Existing-Consented

Inflow Area = 4,288.0 m², 53.22% Impervious, Inflow Depth > 123 mm for Type 1A-10yr event
Inflow = 35.7 L/s @ 7.97 hrs, Volume= 526.2 m³
Primary = 35.7 L/s @ 7.97 hrs, Volume= 526.2 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 10L: Existing-Consented

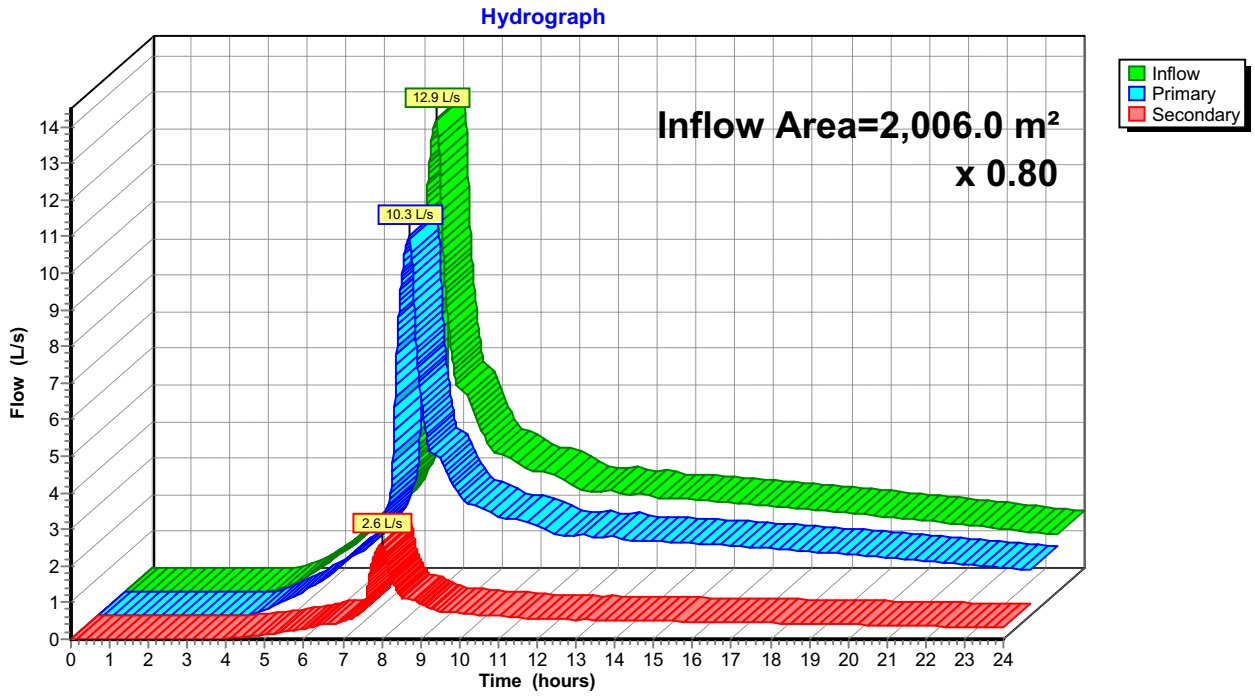


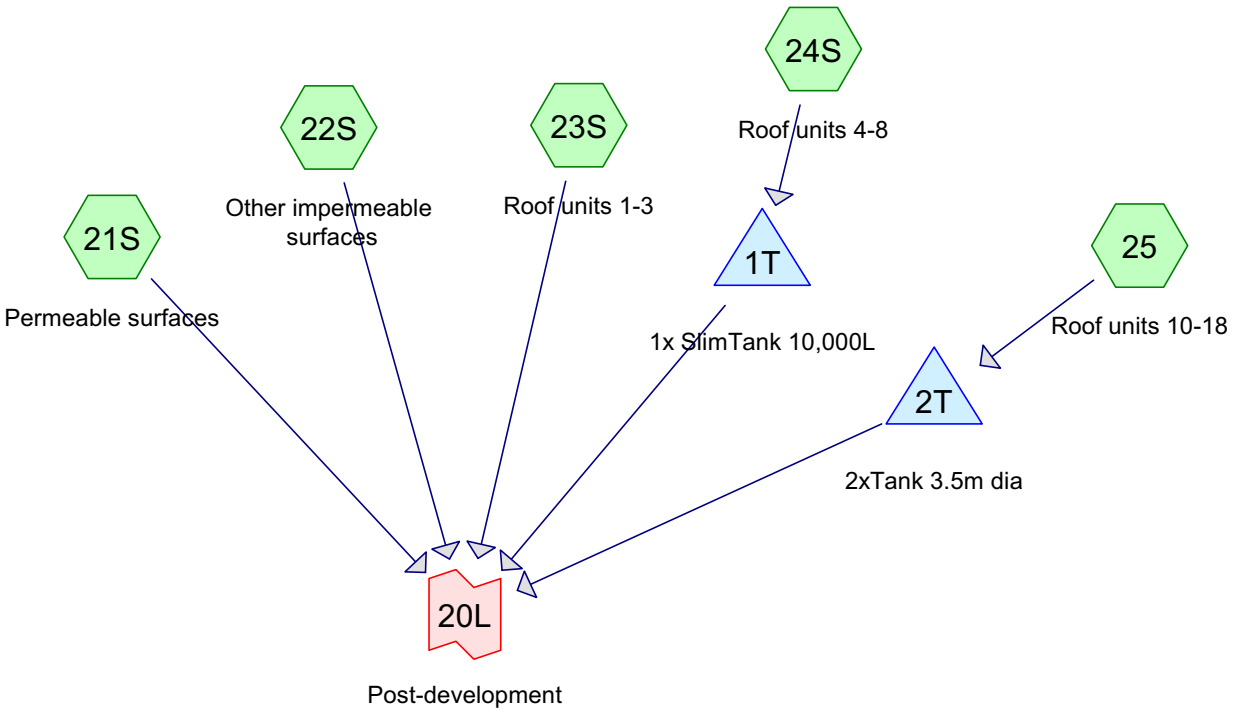
Summary for Link 80S: 80%

Inflow Area = 2,006.0 m², 0.00% Impervious, Inflow Depth > 95 mm for Type 1A-10yr event
Inflow = 12.9 L/s @ 8.01 hrs, Volume= 191.5 m³
Primary = 10.3 L/s @ 8.01 hrs, Volume= 153.2 m³, Atten= 20%, Lag= 0.0 min
Routed to Link 10L : Existing-Consented
Secondary = 2.6 L/s @ 8.01 hrs, Volume= 38.3 m³

Primary outflow = Inflow x 0.80, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 80S: 80%





Subcat Reach Pond Link

Routing Diagram for 26 067_20260518_(Type 1A)-80%-final_SLIM
Prepared by Haigh Workman Limited, Printed 18/05/2026

Area Listing (selected nodes)

Area (sq-meters)	CN	Description (subcatchment-numbers)
2,007.9	98	Concrete (22S)
256.0	74	Grass (21S)
189.0	98	Gravel roads, HSG D (22S)
1,835.1	98	Roofs (23S, 24S, 25)
4,288.0	**97**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-meters)	Soil Group	Subcatchment Numbers
0.0	HSG A	
0.0	HSG B	
0.0	HSG C	
189.0	HSG D	22S
4,099.0	Other	21S, 22S, 23S, 24S, 25
4,288.0		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (sq-meters)	HSG-B (sq-meters)	HSG-C (sq-meters)	HSG-D (sq-meters)	Other (sq-meters)	Total (sq-meters)	Ground Cover	Subcatchment Numbers
0.0	0.0	0.0	0.0	2,007.9	2,007.9	Concrete	22S
0.0	0.0	0.0	0.0	256.0	256.0	Grass	21S
0.0	0.0	0.0	189.0	0.0	189.0	Gravel roads	22S
0.0	0.0	0.0	0.0	1,835.1	1,835.1	Roofs	23S, 24S, 25
0.0	**0.0**	**0.0**	**189.0**	**4,099.0**	**4,288.0**	**TOTAL AREA**	

Time span=0.00-24.00 hrs, dt=0.01 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 21S: Permeable surfaces Runoff Area=256.0 m² 0.00% Impervious Runoff Depth>95 mm
Tc=10.0 min CN=74 Runoff=1.7 L/s 24.4 m³

Subcatchment 22S: Other impermeable surfaces Runoff Area=2,196.9 m² 100.00% Impervious Runoff Depth>163 mm
Tc=10.0 min CN=98 Runoff=24.5 L/s 359.1 m³

Subcatchment 23S: Roof units 1-3 Runoff Area=316.0 m² 100.00% Impervious Runoff Depth>163 mm
Tc=10.0 min CN=98 Runoff=3.5 L/s 51.7 m³

Subcatchment 24S: Roof units 4-8 Runoff Area=509.8 m² 100.00% Impervious Runoff Depth>163 mm
Tc=10.0 min CN=98 Runoff=5.7 L/s 83.3 m³

Subcatchment 25: Roof units 10-18 Runoff Area=1,009.3 m² 100.00% Impervious Runoff Depth>163 mm
Tc=10.0 min CN=98 Runoff=11.3 L/s 165.0 m³

Pond 1T: 1x SlimTank 10,000L Peak Elev=1.43 m Storage=6.6 m³ Inflow=5.7 L/s 83.3 m³
Outflow=3.5 L/s 83.1 m³

Pond 2T: 2xTank 3.5m dia Peak Elev=1.78 m Storage=34.2 m³ Inflow=11.3 L/s 165.0 m³
Outflow=3.5 L/s 161.5 m³

Link 20L: Post-development Inflow=35.7 L/s 679.8 m³
Primary=35.7 L/s 679.8 m³

Total Runoff Area = 4,288.0 m² Runoff Volume = 683.5 m³ Average Runoff Depth = 159 mm
5.97% Pervious = 256.0 m² 94.03% Impervious = 4,032.0 m²

Summary for Subcatchment 21S: Permeable surfaces

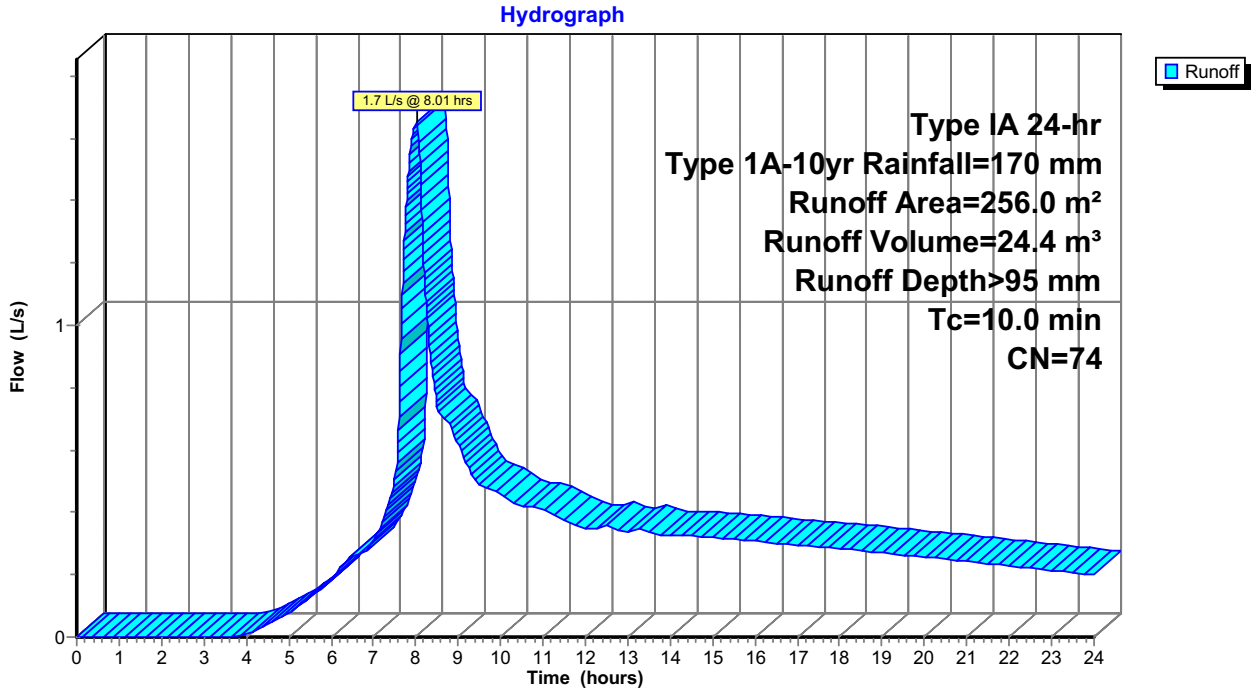
Runoff = 1.7 L/s @ 8.01 hrs, Volume= 24.4 m³, Depth> 95 mm
Routed to Link 20L : Post-development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	256.0	74	Grass
	256.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 21S: Permeable surfaces



Summary for Subcatchment 22S: Other impermeable surfaces

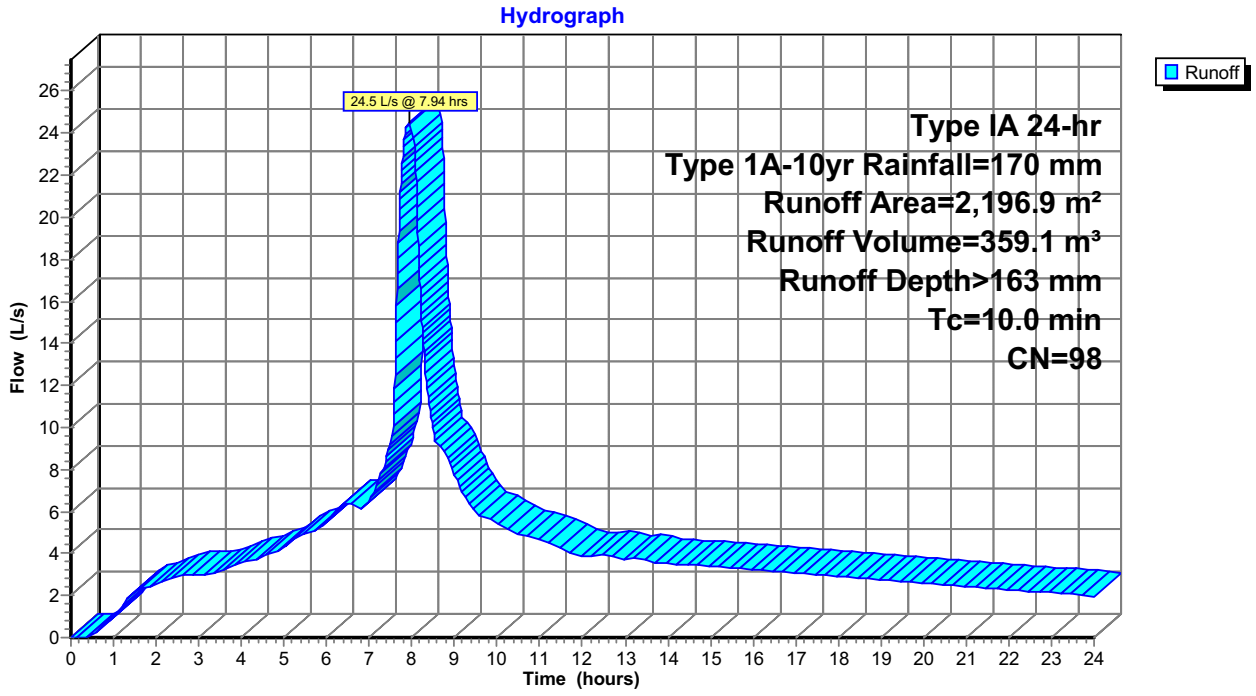
Runoff = 24.5 L/s @ 7.94 hrs, Volume= 359.1 m³, Depth> 163 mm
Routed to Link 20L : Post-development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	189.0	98	Gravel roads, HSG D
*	2,007.9	98	Concrete
	2,196.9	98	Weighted Average
	2,196.9		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 22S: Other impermeable surfaces



Summary for Subcatchment 23S: Roof units 1-3

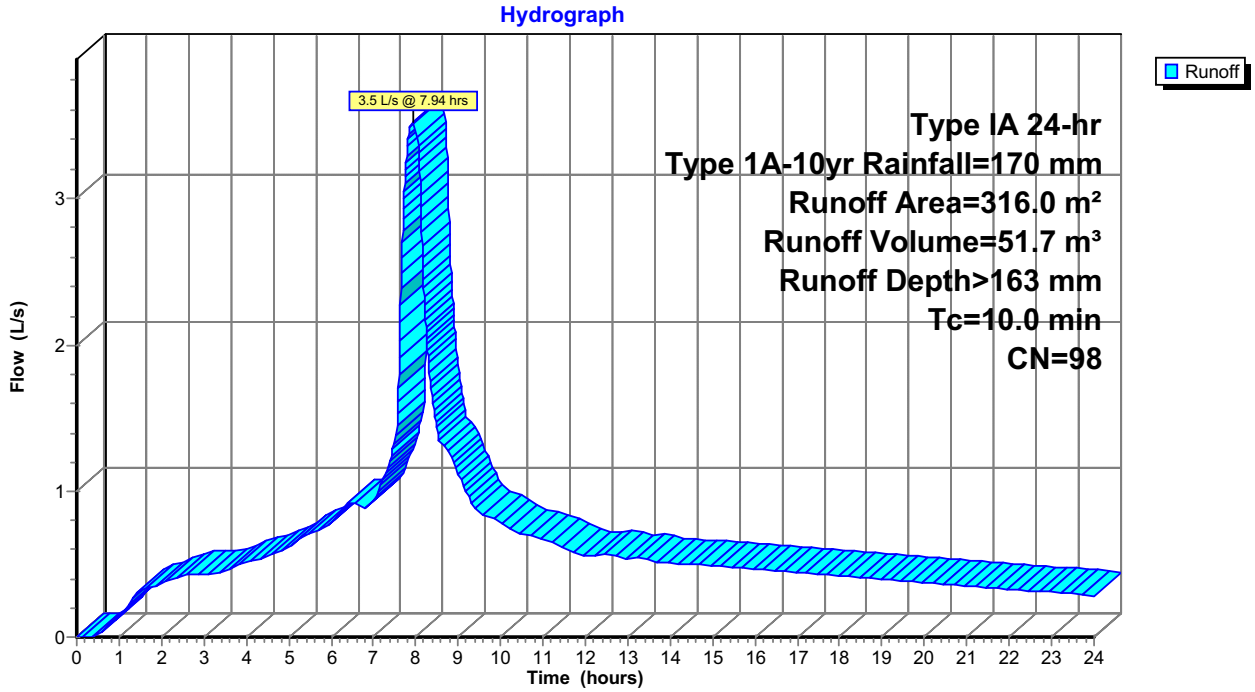
Runoff = 3.5 L/s @ 7.94 hrs, Volume= 51.7 m³, Depth> 163 mm
Routed to Link 20L : Post-development

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	316.0	98	Roofs
	316.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 23S: Roof units 1-3



Summary for Subcatchment 24S: Roof units 4-8

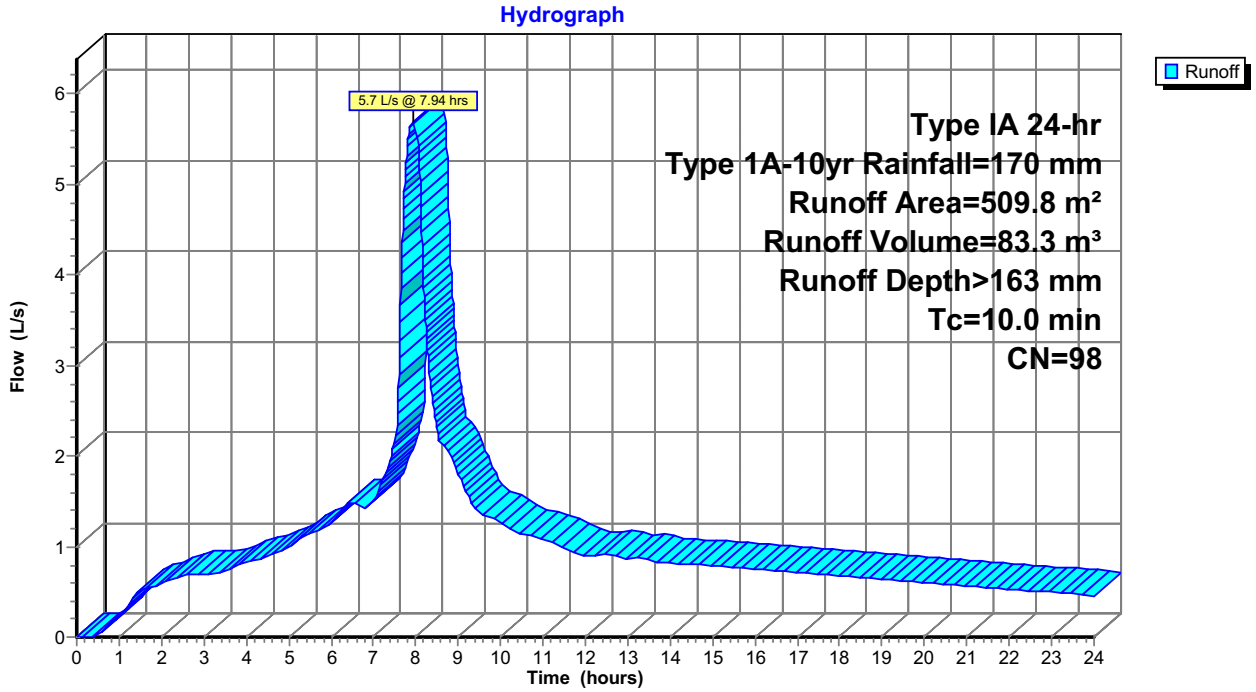
Runoff = 5.7 L/s @ 7.94 hrs, Volume= 83.3 m³, Depth> 163 mm
Routed to Pond 1T : 1x SlimTank 10,000L

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	509.8	98	Roofs
	509.8		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 24S: Roof units 4-8



Summary for Subcatchment 25: Roof units 10-18

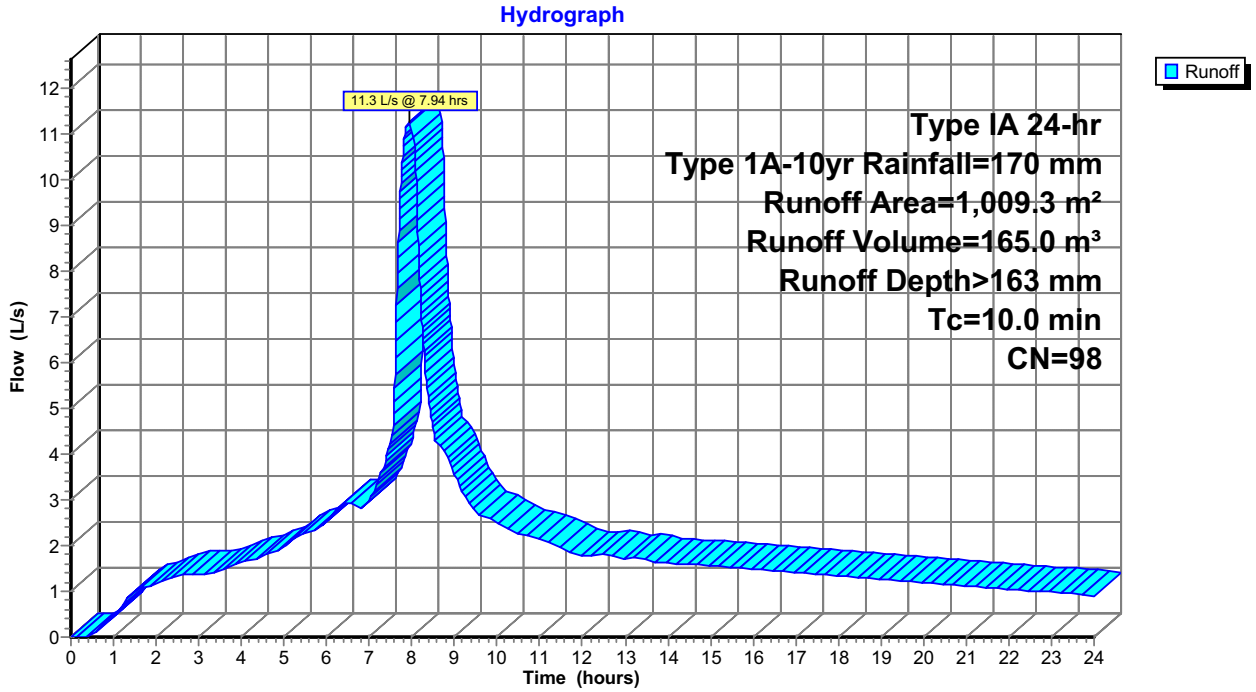
Runoff = 11.3 L/s @ 7.94 hrs, Volume= 165.0 m³, Depth> 163 mm
Routed to Pond 2T : 2xTank 3.5m dia

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type IA 24-hr Type 1A-10yr Rainfall=170 mm

	Area (m²)	CN	Description
*	1,009.3	98	Roofs
	1,009.3		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m³/s)	Description
10.0					**Direct Entry,**

Subcatchment 25: Roof units 10-18



Summary for Pond 1T: 1x SlimTank 10,000L

Inflow Area = 509.8 m²,100.00% Impervious, Inflow Depth > 163 mm for Type 1A-10yr event
Inflow = 5.7 L/s @ 7.94 hrs, Volume= 83.3 m³
Outflow = 3.5 L/s @ 8.23 hrs, Volume= 83.1 m³, Atten= 39%, Lag= 17.5 min
Primary = 3.5 L/s @ 8.23 hrs, Volume= 83.1 m³
Routed to Link 20L : Post-development

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1.43 m @ 8.23 hrs Surf.Area= 4.6 m² Storage= 6.6 m³

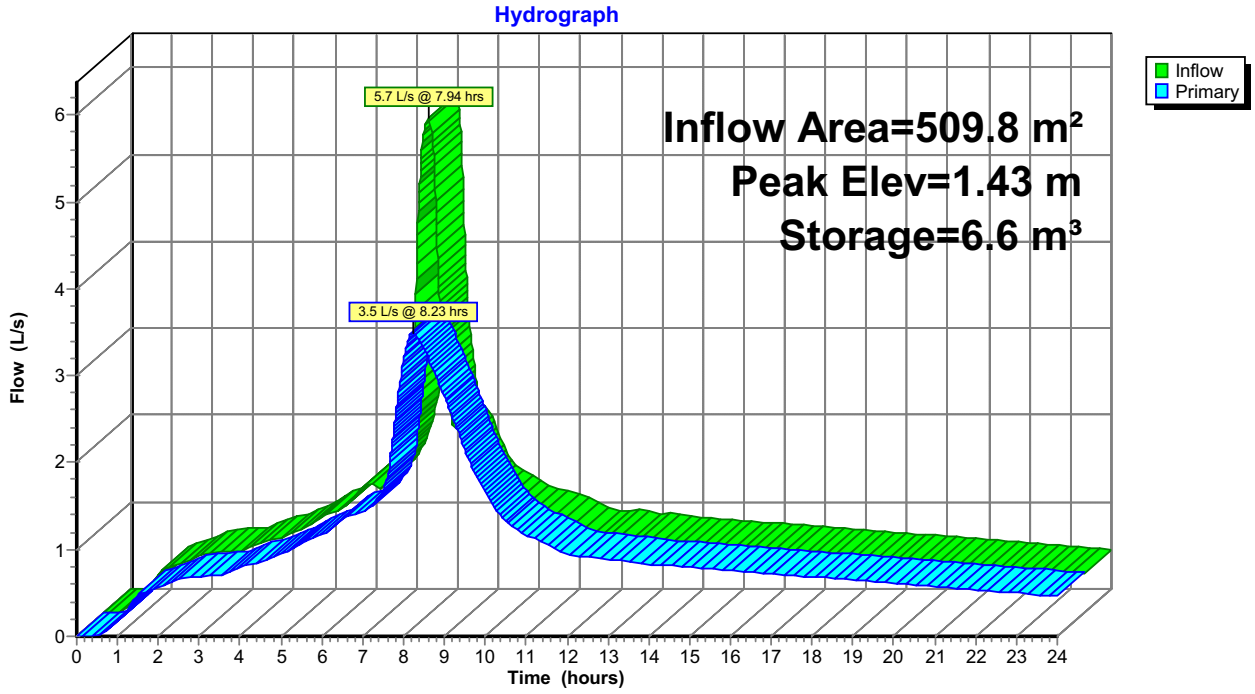
Plug-Flow detention time= 14.2 min calculated for 83.1 m³ (100% of inflow)
Center-of-Mass det. time= 12.3 min (663.4 - 651.1)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00 m	10.7 m³	**1.15 mW x 4.00 mL x 2.32 mH Prismatoid**

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00 m	**36 mm Vert. 36mm DIA Orifice/Grate** C= 0.650 Limited to weir flow at low heads

Primary OutFlow Max=3.5 L/s @ 8.23 hrs HW=1.43 m (Free Discharge)
1=36mm DIA Orifice/Grate (Orifice Controls 3.5 L/s @ 3.43 m/s)

Pond 1T: 1x SlimTank 10,000L



Summary for Pond 2T: 2xTank 3.5m dia

Inflow Area = 1,009.3 m²,100.00% Impervious, Inflow Depth > 163 mm for Type 1A-10yr event
Inflow = 11.3 L/s @ 7.94 hrs, Volume= 165.0 m³
Outflow = 3.5 L/s @ 9.05 hrs, Volume= 161.5 m³, Atten= 69%, Lag= 66.3 min
Primary = 3.5 L/s @ 9.05 hrs, Volume= 161.5 m³
Routed to Link 20L : Post-development

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1.78 m @ 9.05 hrs Surf.Area= 19.2 m² Storage= 34.2 m³

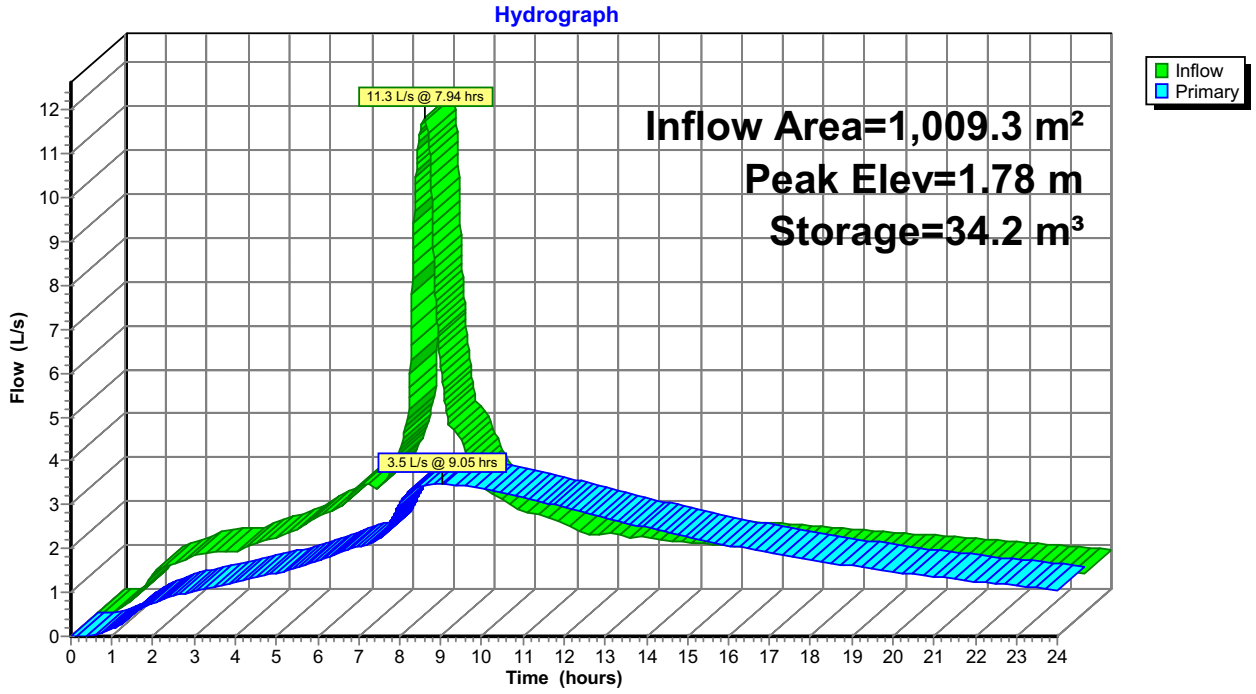
Plug-Flow detention time= 109.8 min calculated for 161.5 m³ (98% of inflow)
Center-of-Mass det. time= 93.5 min (744.6 - 651.1)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00 m	46.2 m³	**3.50 mD x 2.40 mH Vertical Cone/Cylinder** x 2

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00 m	**34 mm Vert. 34mm DIA Orifice/Grate** C= 0.650 Limited to weir flow at low heads

Primary OutFlow Max=3.5 L/s @ 9.05 hrs HW=1.78 m (Free Discharge)
1=34mm DIA Orifice/Grate (Orifice Controls 3.5 L/s @ 3.82 m/s)

Pond 2T: 2xTank 3.5m dia

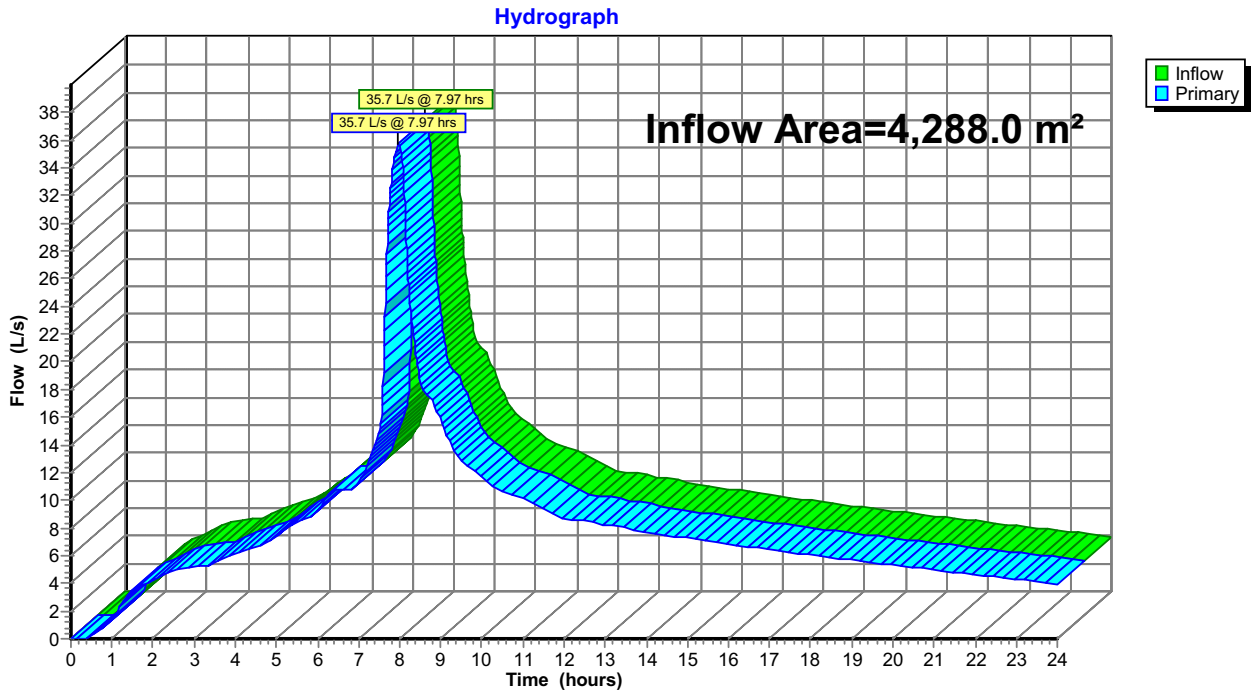


Summary for Link 20L: Post-development

Inflow Area = 4,288.0 m², 94.03% Impervious, Inflow Depth > 159 mm for Type 1A-10yr event
Inflow = 35.7 L/s @ 7.97 hrs, Volume= 679.8 m³
Primary = 35.7 L/s @ 7.97 hrs, Volume= 679.8 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 20L: Post-development



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Appendix C – Stormwater Attenuation Tank Details

OPERATION AND MAINTENANCE GUIDES

O&M For:	**XP1025000**
Date:	August 2025
Code:	XP1025000
Description:	XPRESS Water Tank 25,000 Ltr - North Island
Product Warranty:	20 years
Durability:	20 years

SPECIFICATIONS

	Capacity (L)	Diameter (mm)	Height (mm)	Weight (kg)	Manhole Dia (mm)
	25,000	3700	2820	380	610
Standard	Includes 1x 50mm Outlets. Complies with: • AS/NZS 4020: Products in contact with drinking water • AS/NZS 2070 (INT): Plastics material for food contact use • Manufactured to AS/NZS 4766:2020 Water & Chemical Tank Standard				
Uses	• Potable Water Storage • Retention/Detention Stormwater Management				
Statement	In line with today's focus on Ecologically Sustained Development, Green Building Initiatives and 5 Star Ratings, Promax is committed to supplying quality Liquid Storage and Handling Solutions. Promax Plastics confirms that if these tanks are installed according to Good Management practices set out in the Promax Installation Guides they will perform as stated throughout their intended life.				
Building Codes:	B1: Structure. Loads imposed as defined inside AS/NZS 4766. B2: Durability. 20 year durability as defined inside AS/NZS 4766. E1: Surface Water. Applies if the tank is part of a stormwater management system. G12: Water Supplies. Applies if the tank is used for potable water storage. Complies with AS/NZS 4020. F2: Hazardous Building Materials. Tanks will not release harmful substances, as per AS/NZS 4766 and AS/NZS 4020. H1: Energy Efficiency. Applies if the tank is used as a component of a Passive House system.				
Limitations	Not for any intended use case beyond the scope outlined in this document unless with prior written permission by Promax. Use of this tank in conjunction with seismic restraints requires a site specific consultation with Promax and PS1 prior to installation and commissioning				

Authorised By:
Promax Engineered Plastics Limited
PO Box 749, Kerikeri 0245, New Zealand
T: 0800 77 66 29
E: sales@promax.co.nz

OPERATION AND MAINTENANCE GUIDES

Promax
LIQUID MANAGEMENT SOLUTIONS

MAINTENANCE

Responsibility: The owner/s are responsible for maintenance of the tank.

Post Storm Inspection: Following a storm event it is recommended that a full tank inspection is carried out, please refer the maintenance section for guidelines on this.

Debris removal programme: If debris is identified in either a regular maintenance check or post storm inspection it is recommended that this is removed by a professional stormwater maintenance provider.

Description	Action	Frequency
Tank Stability	Tank must remain level, foundation must not become eroded	Monthly
Tank Lid	Remains securely fitted	Bi-Monthly
Inlet/Outlet Fitting	Remains securely fitted with no leakage	Bi-Monthly
Pump	If fitted, check pump for inlet screen blockages	Bi-Monthly
Sediment build-up	Remains lower than the base outlet. If outlet flow becomes restricted, remove sediment with vacuum truck. Re-attach tank lid securely.	Bi-annually or as necessary

Please note: Entry into this tank is at owners risk.

Authorised By:
Promax Engineered Plastics Limited
PO Box 749, Kerikeri 0245, New Zealand
T: 0800 77 66 29
E: sales@promax.co.nz

OPERATION AND MAINTENANCE GUIDES

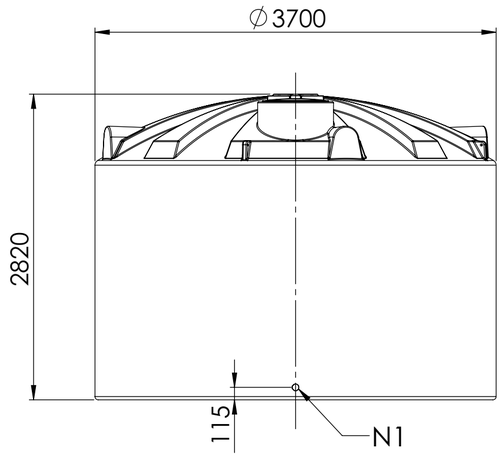
Promax
LIQUID MANAGEMENT SOLUTIONS

MAINTENANCE RECORDS

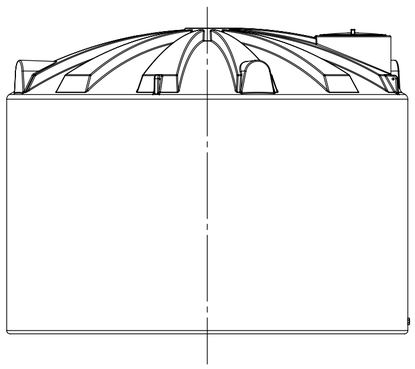
Date	Comments	Completed

Authorised By:
Promax Engineered Plastics Limited
PO Box 749, Kerikeri 0245, New Zealand
T: 0800 77 66 29
E: sales@promax.co.nz

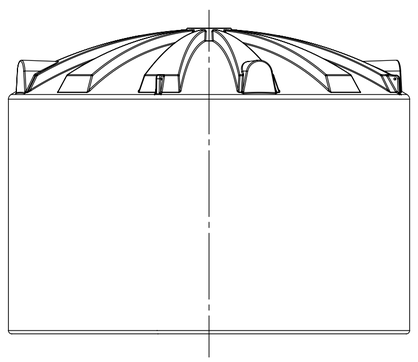
Job Customer:	Title:	Ref:



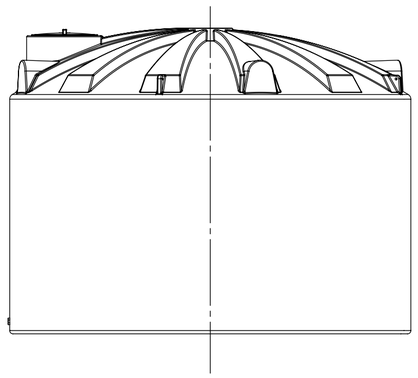
0°



90°



180°



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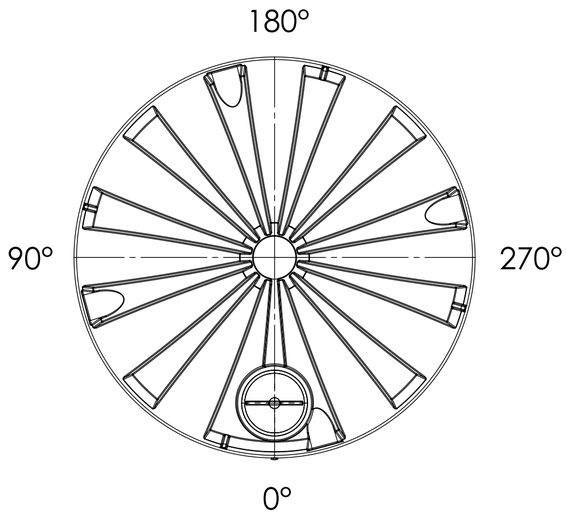
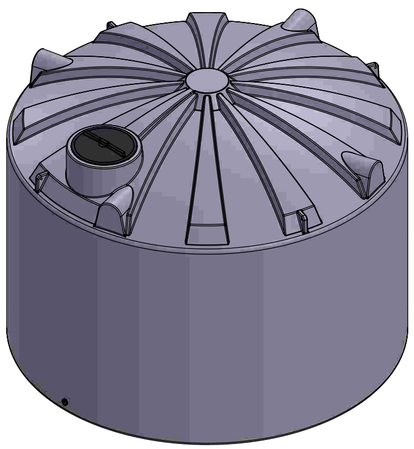




FITTING LAYOUT TABLE				PART LIST	
NOZZLE No.	DN/PE SIZE	ANGLE	DESCRIPTION	PART No.	NAME
N1	50/-	0°			(Mould in, 50mm Female)

NOTE:
1. ALL DIMENSIONS ARE IN mm
2. TOLERANCE: 3%
3. ANY CHANGES MARK UP IN RED

CLIENT APPROVAL	SIGNATURE
☐ APPROVED ☐ REVISE AND RESUBMIT ☐ FOR INFORMATION ONLY	
DATE:	

Promax LIQUID MANAGEMENT SOLUTIONS

DO NOT SCALE DRAWING

ORIGINAL ISSUE: 20/11/2023

OPP:

AUTHOR: B.H.

DISPLAY NAME/NUMBER: XPRESS Water Tank 25,000 Ltr-North Island (XP1025000)

MATERIAL: LLDPE

DWG NO. MODIFICATION PLAN A2

WEIGHT: 380 SCALE:1:40 SHEET 1 OF 1

TECHNICAL DATASHEET

SLIMLINE TANK

TANKSALOT
(09) 427 5281
info@tanksalot.co.nz
www.tanksalot.co.nz

Tanksalot Slimline water tanks are built for narrow spaces, usually to fit alongside your house or where access is limited. They are available in a range of colours in standard or made-to-measure sizes up to 10,000 litres. Internal stainless-steel cross-bracing is engineered into the tank for maximum strength and durability.

FEATURES & BENEFITS

- New Zealand made using quality AQUAPLATE® corrugated steel.
- Made-to-measure for the perfect fit in your available space.
- Choose from a range of Colorbond® colours.
- 20-year corrosion warranty & 10-year construction warranty.
- Capacity 600 - 10,000 litres.
- Available in hundreds of sizes.
- Option to nominate fitting positions for the tank inlet, outlet and overflow.
- Meets AS/NZ4020 standard for storage of drinking water.
- Food-grade polymer lining prevents water-to-metal contact.
- Rigid cross bracing system, won't bulge or bow like a plastic tank.
- Rivets sit flush against the tank.
- Can be placed onto a concrete pad or an engineered timber platform.

RECOMMENDED FOR

- Small or narrow spaces alongside dwellings.
- Aesthetic modern design blends with the architectural features of dwellings.
- Storage of drinking water.
- The harsh New Zealand environment.
- Potable or non-potable water systems.

INCLUSIONS

- 400mm inlet leaf screen & solar shield.
- 25mm outlet.
- 100mm overflow.

LOCATION

If possible, locate the tank in a shady site away from trees to prevent debris clogging the strainer resulting in contamination of the water.

PLANET FRIENDLY

The tank is mostly recyclable giving it the smallest environmental footprint.

TANK BASE

Tanks should not be placed directly onto the ground and must be installed on a firm, stable platform with no overhang of the tank over the edge of the base. For further information refer to the Tanksalot Water Tank Base Preparation Guide.

ACCESSORIES

Tanksalot offers a range of accessories including water pumps, water filters, tank level gauges and rain heads.

ODOUR & TASTE

Care should be taken to ensure that contaminants are not introduced into the water tank. If any odour or taste is noticed, the catchment area should be checked for contaminants such as lichen or deceased animals as these are known to affect water quality. New tanks should be flushed out if a slight odour or taste is present.

QUALITY ASSURANCE

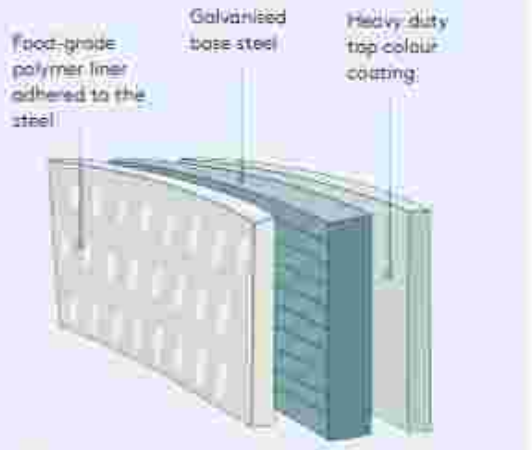
Tanks are water-tested for structural integrity.

WARRANTY

Tanksalot offers this product under a 20-year corrosion warranty and a 10-year construction warranty.

Physical Properties: Appearance – Made to Measure	
Height	580mm – 2470mm
Width	550mm – 1150mm
Length	1200mm – 4000mm
Min Size*	600 litres
Max Size*	10,000 litres
Vertical Wall	Precision roll formed 0.6mm AQUAPLATE® steel
Base	Double sided AQUAPLATE® steel (internal & external polymer lining)
Lid	Colorbond® or Z450 grade material
Rivets	Henrob self-piercing rivets Reinforced 6mm
Cross bracing	Grade 304 stainless steel tension rods
Sealing	Neutral cure silicone sealant potable water approved
Corrugations	Corrugations for the tank walls comply with AS1445
Corrosion protection	Z450 Galvanised, Z275 Colorbond®. Painted – Low VOC Acrylic type paint
AQUAPLATE® Steel	
Thermal Resistance	Do not store water at temperatures in excess of 65°C

Maximum Durability



AQUAPLATE® and Colorbond® Steels are registered trademarks of Blue Scope Steel Limited.

* Nominal volume given for fitting size and condition on tank

TANKSALOT
(09) 427 5281 info@tanksalot.co.nz www.tanksalot.co.nz
115 Foundry Road, Silverdale, Auckland 0932, New Zealand.

Appendix 6

Wastewater Report

HAIGH WORKMAN LTD
Civil & Structural Engineers

26 067

6 May 2026

2052 SH10 Waipapa Limited
Unit 12, 21 Karepiro Drive, Whangaparaoa
Auckland 0932

Attention: Paul Vegar

2052 STATE HIGHWAY 10, WAIPAPA - ONSITE WASTEWATER SYSTEM DESIGN REPORT

INTRODUCTION

Haigh Workman Limited (Haigh Workman) have been engaged by 2052 SH10 Waipapa Limited (the client) to design an on-site wastewater system to service a proposed commercial complex at the above-mentioned address. This design has been carried out in general accordance with AS/NZS1547:2012.

SITE DESCRIPTION

The site is legally described as Lots 1 & 2 DP 203824 and Lot 2 DP 205437, it has an irregular shape, covering an area of 4,288 m². The site contains an existing two-level commercial structure (Gas & Tyre) and two single-level dwellings with associated garaging. Access is via an existing crossing directly off State Highway 10. The site is mostly developed with buildings, parking and yarding but with a grassed area adjacent to the northern boundary.

The site is located to the north of the Waipapa township with residential properties to the north, east and west and commercial businesses to the south and southeast. A Site Plan is provided in **Appendix A**.

The site is serviced by an existing septic tank, pump chamber and soakage field located in the grass area in the north of the site. The proposed site redevelopment will generate an increase in effluent production requiring a new wastewater system.

PROPOSED DEVELOPMENT

A Proposed Site Plan drawing from Archiology Limited dated 23 April 2026 shows the proposed commercial redevelopment. Based on the proposed site plan, we understand that the client intends to repurpose the existing structure (Gas & Tyre) to create six units, remove the existing dwellings and associated structures to allow a further twelve units, providing a total 18 commercial units set around a central car parking area. The landscaped area at the centre of the carparking will be used for wastewater disposal. The Proposed Site Plan drawing from Archiology Limited is provided in **Appendix A**.

PUBLISHED GEOLOGY

New Zealand Land Inventory maps 290 Sheet P04/05 Soil Map of the Whangaroa – Kaikohe area indicates that the site is underlain by 'soils of the rolling and hill land; well to moderately well drained Okaihau gravelly friable clay (OK)'.

NRC Soil Fact Sheet 8.1.3 records the soils as old basalt volcanic soils, Okaihau gravelly friable clay (OK). The corresponding drainage class is, 'somewhat excessively to well drained'.

The soil map with geological units and NRC Soil Fact Sheet 8.1.3 are provided in **Appendix E**.

SITE INVESTIGATION AND TESTING

Haigh Workman carried out site investigations on 16 April 2026 confirm the soil type and ground conditions for effluent disposal.

Three test pits (TP1 – TP3) were excavated within the proposed wastewater disposal area. The test pits were dug to a depth of approximately 0.5 m below existing ground level (bgl) using an excavator. From the base of the test pits 100 mm diameter hand augers were advanced a further 550 mm to conduct in situ constant head permeability tests. Refer to Site Plan in **Appendix A** for test pit locations and test pit logs at **Appendix H.**

The underlying soils in the area were confirmed as clayey silt to silt. The first 0.2 m below ground level (bgl) comprised gravel (carpark), underlain by moist red brown clayey silt at TP1 and TP2. At TP3 the soils underlying the gravel were similar to what was encountered at TP1 and TP2, however after 0.75 m the soil became red silt. At TP2 the 100 mm bore hole was extended to a depth of 1.4 m bgl, groundwater was not encountered.

Constant Head Permeability testing was carried out in each of the three test pits. Based on the results, the average K_{sat} calculated for the soil at the site is 0.27 m/day. Permeability test results are provided in **Appendix H.**

Based on our site investigations (including constant head permeability testing) the natural soils were categorised as AS/NZS1547:2012 **Category 4 soil 'clay loam – weakly structured'.**

EXISTING WASTEWATER SYSTEM

A review of the Far North District Council (FNDC) property file indicate that a wastewater system was installed in 2010. See Figure 1 below. Our site visit confirmed the presence of the existing secondary treatment system to the north of the Gas & Tyre building with effluent delivery pipes leading to the grassed area along the northern boundary.

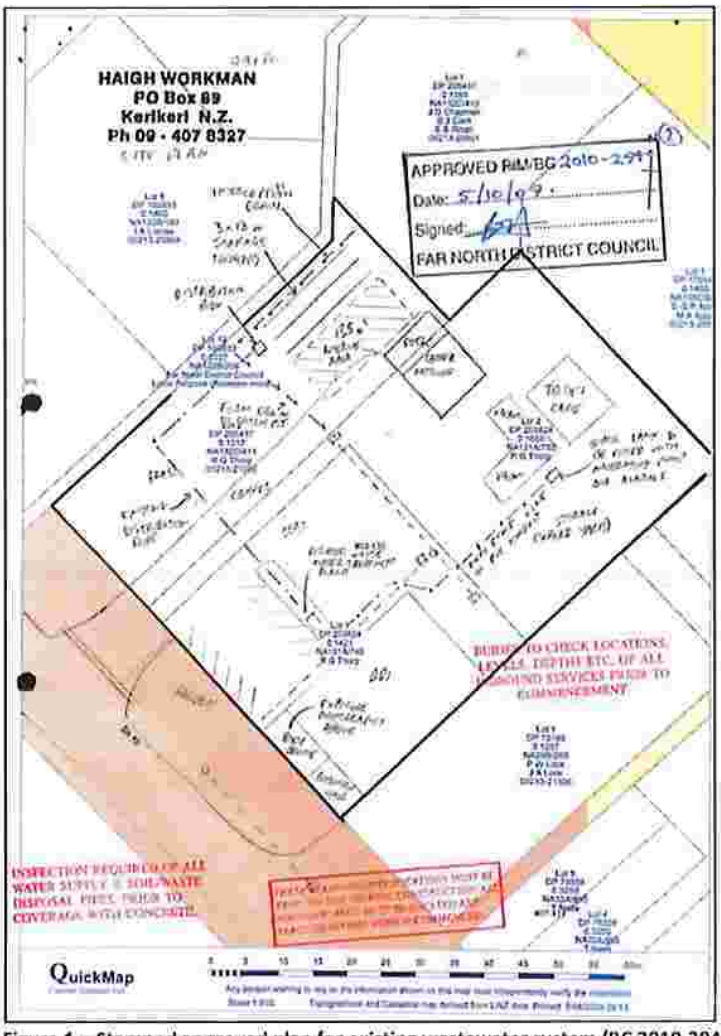


Figure 1 – Stamped approved plan for existing wastewater system (BC 2010-294-0)

WASTEWATER GENERATION

Water supply is town supply. Design wastewater flows have been calculated using the guidelines in AS/NZS1547:2012 and Auckland Council Technical Publication 58 (TP58).

The system has been sized for a maximum development of 18 units with average occupancy of 3 persons per unit (54 persons total) as confirmed by the client.

Each unit will have a toilet and hand basin with no showers, laundries or commercial kitchens for food production. Wastewater production allowance is for day staff only, i.e. no allowance for public toilets or customer facilities has been made. No allowance for trade waste discharges has been made.

For day staff with standard wastewater fixtures TP58 Table 6.2 recommends a design loading rate of 40 litres / person / day whilst AS/NZS1547 Table H4 recommends (rural factories, shopping centres) 30-50 litres / person / day, dependant on the source of water supply. We have adopted a mid-range loading rate of 40 litres / person / day.

The total daily wastewater generation of the proposed development is calculated below:

Total daily wastewater generation = Daily design occupancy x Design flow allowance

= 54 x 40 litres / person / day

= 2,160 litres / day

The volume of wastewater discharged exceeds two cubic metres per day, therefore, consent is required as per Regional Plan Rule C.6.1.3.2). Refer Assessment of Environmental Effects AEE7 provided in **Appendix B.**

We recommend a meter is included on the outlet of the treatment unit so that daily flows may be measured and reported to NRC as a condition of consent.

TREATMENT SYSTEM

A secondary treatment system is to be utilized. The treatment plant is to meet the quality output of AS/NZS 1546.3:2003 and be capable of producing effluent having less than 20 g/m³ of Biochemical Oxygen Demand 5 day (BOD_5) and 30 g/m³ Total Suspended Solids (TSS).

The secondary treatment system will be positioned in the southeast corner of the site. The area is labelled as Unit 9 on the architectural site plan, but development of the unit may not proceed, although it has been included in the wastewater loadings.

The treatment system shall be accessible for regular maintenance and servicing and be set back 3.0 m from buildings and 1.5 m from boundaries. Where 3.0 m building setback cannot be achieved, we recommend a qualified Geotechnical Engineer check the potential impact of the treatment tank excavation on the building foundations. Refer summary of regulatory requirements included in **Appendix D.**

The client has nominated a TechTreat treatment system which is a twin system using two individual TechTreat TXT plants each having a normal operating capacity of 1,500 litres / day and a peak of 2,000 litres / day. The combined system has a treatment capacity of 3,000 litres / day, plus will be fitted with an additional 4,500 L primary treatment tank and a 1,200 L irrigation chamber. Each treatment plant has 1,300 L maximum emergency storage which together with irrigation chamber provides emergency storage in excess of 24 hours. Refer TechTreat system specifications provided in **Appendix J.**

We understand that the TechTreat treatment system was accredited by the On-site Effluent Tested (OSET) programme, but that the testing has now closed down. The treatment plant is to be installed to the manufacturer's specification, and a commissioning certificate is to be provided as is standard practice. A maintenance agreement shall also be agreed upon as part of the Code Compliance application.

DISPOSAL SYSTEM

Effluent disposal is via soakage bed system located in the central landscaping area. The bed has been sized in accordance with AS/NZS1547 and is compliant with Northland Regional Council (NRC) rules.

The Category 4 soil 'clay loam' can sustain a Daily Loading Rate (DLR) of up to 10 – 30 mm / day for trenches and beds receiving secondary treated effluent. For the 'weakly structured soil' encountered on site, the appropriate DLR is 20 mm / day for a soakage bed. This is confirmed by the site testing average K_{sat} of 0.27 m/day which comfortably places the soil in Category 4 'clay loams – weakly structured', K_{sat} (0.12 – 0.5), DLR 20 mm / day for secondary treated effluent as per Table L1.

The bed size is calculated as follows:

$$\text{Disposal area} = \frac{\text{Consistent flow (litres / day)}}{\text{Loading rate (mm / day)}}$$

$$= 2{,}160 / 20 = 108\ m^2$$

The soakage bed is to be located within the central landscaped area of the carpark with dimensions of 31 m long by 3.5 m wide, two soakage beds are proposed each 15.5 m long by 3.5 m wide (108.5 m^2). Setbacks greater than 3.0 m from buildings and 1.5 m from boundaries are easily achieved. The bed shall achieve minimum 5 m setback from surface water in accordance with NRC rules. This can be achieved by sloping the parking areas on either side of the bed away to dish channel collection, as indicated on the plans appended.

To reduce the risk of short circuiting the vertical side walls of the disposal bed shall be lined with an impermeable membrane such as a heavy duty PE > 120 micron liner.

A minimum reserve area of 30% (32.5 m^2) is required and is to remain undeveloped for use in the event of a system failure or an increase of daily wastewater production. This reserve area has been allocated in the northwestern corner of the site. The proposed soakage bed drawing including reserve area is provided in **Appendix A**.

The soakage beds will each require two distribution pipes comprising 32 mm Ø PVC in 100 mm Ø perforated drainage coil running the length of the beds. The distribution pipes shall be drilled with 3mm Ø holes at 1.5 m spacings giving a total number of 9 holes per pipe.

Using an indexing valve the distribution pipes will be pressurised in sequencing. Each 3 mm jet delivers approximately 4.2 L / min. For two pipes per bed the pump out time is estimated at 4 minutes for a dosing volume of 300 L at a flow rate of 75 L/min. To achieve consistent irrigation of the bed it is recommended to use a dosing volume of not less than 300 L.

For a 32 mm OD PN4 delivery pipe with a 13 m head a standard Davey D42A/B submersible pump has a flow rate in excess of 100 L/min. which comfortably exceeds the 75 L/min required. Refer to calculation sheet provided in **Appendix I.**

The groundwater table was not encountered during site investigations, to a maximum depth of 1.4 m bgl. The base of the bed will achieve vertical groundwater clearance greater than the minimum 0.6m allowed by NRC rules.

The nearest surface water body is the Whiriwhiritoa Stream, which is approximately 330 m west of the proposed disposal area (at the closest point by plan measurement).

The proposed soakage bed is situated outside the nearest mapped flood extents up to and including the 1% AEP flooding zone (100-year event).

The soakage bed should be planted with evapotranspiration plant species outlined in **Appendix F.**

HAIGH WORKMAN LTD
Civil & Structural Engineers

DESIGN SUMMARY

ITEM	DESCRIPTION
Design Occupancy	*18 units w/ 3 persons per unit (54 persons)*
Water fixtures	*Toilets and hand basins only; no showers, laundry, commercial kitchens, public or customer facilities.*
Wastewater generation	*2,160 L/d*
Treatment system	*Secondary treatment plant (TechTreat System)*
Location of effluent disposal	*As per drawings appended*
Effluent disposal system	*Soakage bed*
Irrigation pump	*Davey 42A/B or equivalent*
Soil type	*AS / NZS1547 Category 4*
Application Rate	*20 mm/d*
Disposal area	*108.5 m^2 (2 x soakage beds of 15.5 m x 3.5 m)*
Reserve area (30%)	*35.5 m^2*
Total area required	*144 m^2*
Slope of land application area	*1.6°*
Pump out volume	*Not less than 300 L*

The volume of wastewater discharged exceeds two cubic metres per day, so consent is required as per Regional Plan Rule C.6.1.3.2).

CONSTRUCTION MONITORING

Soil types should be confirmed during construction.

RECOMMENDATIONS

To provide long term satisfactory treatment and disposal of domestic wastewater it is recommended that:

- The secondary treatment system be capable of producing effluent with less than 20 g/m^3 of BOD_5 and 30 g/m^3 TSS for all wastewater flows,
- The treatment plant and specified disposal be sited in accordance with the appended drawings,
- The treatment plant be constructed to the best professional and trade practices,
- The treatment plant be regularly serviced and maintained to the manufacturer's specifications, and
- Construction monitoring should include confirmation of soil types
- A meter is included on the outlet of the treatment unit so that daily flows may be measured and reported to NRC as a condition of consent.

HAIGH WORKMAN LTD
Civil & Structural Engineers

DISCLAIMER

This report has been prepared for the sole use of 2052 SH10 Waipapa Limited (the client) with respect to the particular brief outlined to us. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or in any other contexts, without our prior written agreement. This report may not be read or reproduced except in its entirety.

Prepared by:	Reviewed by:	Approved by:
Aaron Thorburn	**Tom Adcock**	**John Papesch**
Senior Environmental Advisor BAppSc, CEnvP	Senior Civil Engineer BEng Civil, MEngNZ	Director / Senior Civil Engineer BE (Civil), CPEng, CMEngNZ

APPENDICES:

Appendix A – Site Drawings

Appendix B – Assessment of Environmental Effects (AEE7 – NRC)

Appendix C – Onsite Wastewater Disposal Investigation (FNDC Engineering Standards 2023)

Appendix D – Summary of Regulatory Requirements

Appendix E – Soil Type and Drainage Northland Regional Council Maps

Appendix F – Evapotranspiration Planting List

Appendix G – Operation and Maintenance Guidelines

Appendix H – Test Pit Logs and Permeability Testing

Appendix I – Soakage Bed Calculations

Appendix J – TechTreat Treatment Plant Specifications incl. OSET testing

Appendix K – Producer Statement – Design (PS1)

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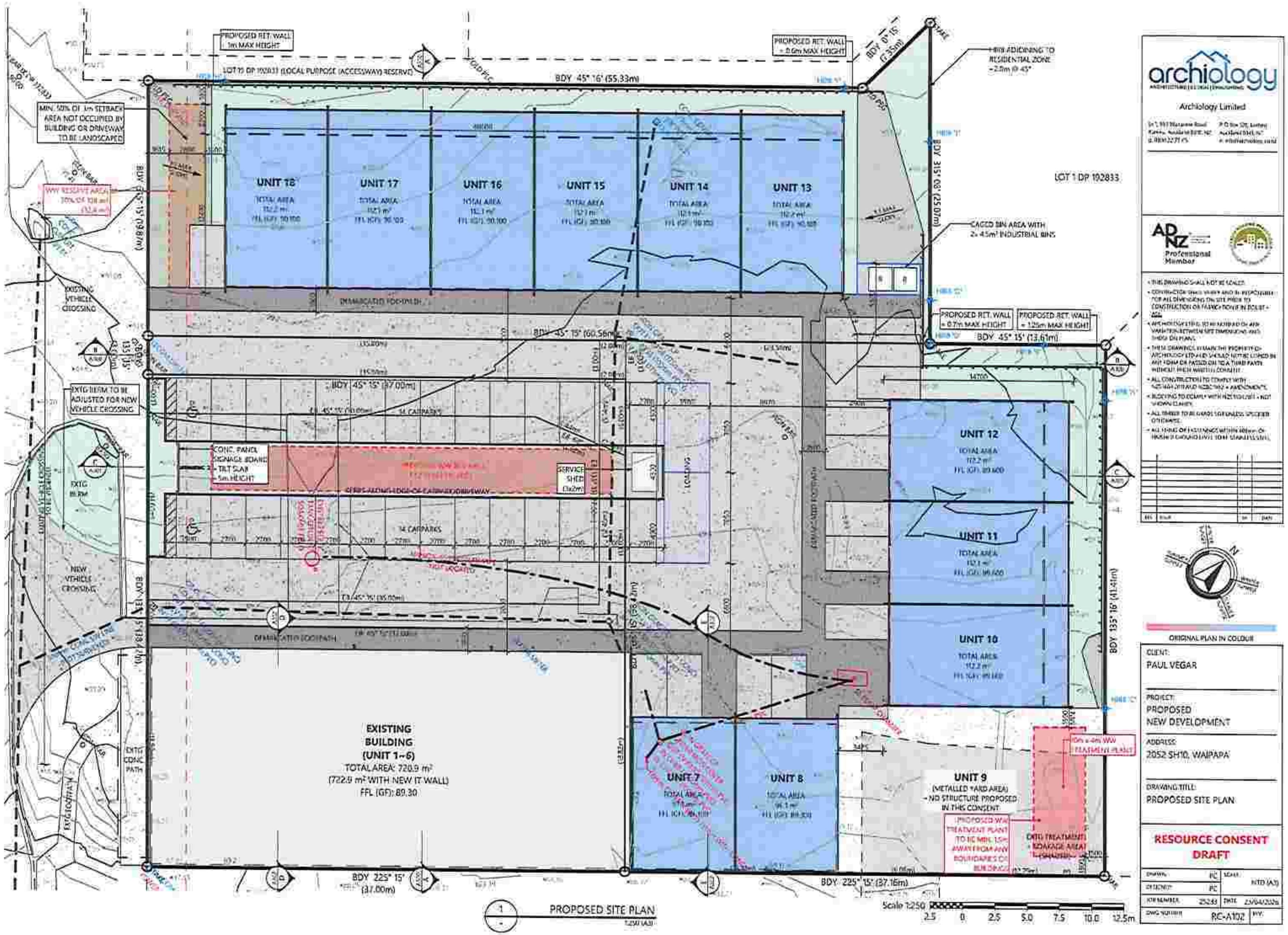
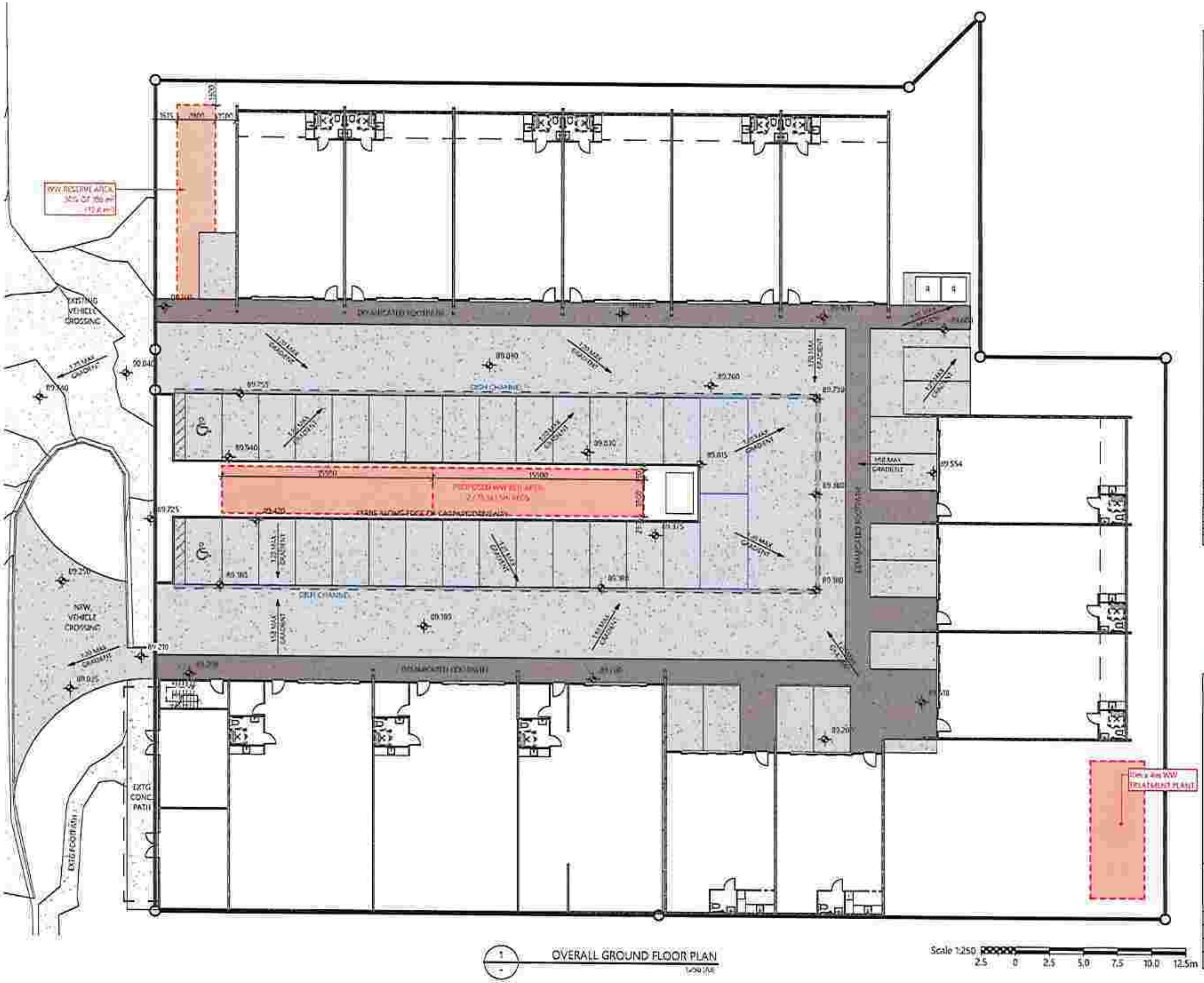
Appendix A – Site Drawings

Drawing No.	Title
26 067 / 1	Site Location Plan
RC-A102	Proposed Site Plan *(Archiology Limited, dated 23 April 2026)*
WWP01	Wastewater Plan *(Haigh Workman)*
WWP02	Typical Wastewater Soakage Bed Detail

26 067 / 1 – Site Location Plan



PROPOSED RET. WALL 1m MAX HEIGHT
LOT 15 DP 192833 (LOCAL PURPOSE (ACCESSWAY) RESERVE)
BDY 45° 16' (55.33m)
PROPOSED RET. WALL ≈ 0.6m MAX HEIGHT
HIRB ADJOINING TO RESIDENTIAL ZONE = 2.0m @ 45°
MIN. 50% OF 1m SETBACK AREA NOT OCCUPIED BY BUILDING OR DRIVEWAY TO BE LANDSCAPED
UNIT 18
UNIT 17
UNIT 16
UNIT 15
UNIT 14
UNIT 13
LOT 1 DP 192833
CAGED BIN AREA WITH 2x 4.5m³ INDUSTRIAL BINS
BDY 315° 08' (25.07m)
EXISTING VEHICLE CROSSING
DEMARCATED FOOTPATH
PROPOSED RET. WALL ≈ 0.7m MAX HEIGHT
PROPOSED RET. WALL ≈ 1.25m MAX HEIGHT
BDY 45° 15' (60.56m)
BDY 45° 15' (13.61m)
BDY 45° 15' (37.00m)
EXTG BERM TO BE ADJUSTED FOR NEW VEHICLE CROSSING
14 CARPARKS
CONC. PANEL SIGNAGE BOARD - TILT SLAB - 5m HEIGHT
SERVICE SHED (3x2m)
LOADING
KERBS ALONG EDGE OF CARPARK/DRIVEWAY
UNIT 12
UNIT 11
UNIT 10
EXTG BERM
NEW VEHICLE CROSSING
EXISTING BUILDING (UNIT 1~6)
TOTAL AREA: 720.9 m²
(722.9 m² WITH NEW IT WALL)
FFL (GF): 89.30
UNIT 7
UNIT 8
UNIT 9
(METALLED YARD AREA)
- NO STRUCTURE PROPOSED IN THIS CONSENT
PROPOSED WW TREATMENT PLANT TO BE MIN. 1.5m AWAY FROM ANY BOUNDARIES OF BUILDINGS
EXTG TREATMENT / SOAKAGE AREA
BDY 225° 15' (37.00m)
BDY 225° 15' (37.16m)
BDY 135° 16' (41.41m)
PROPOSED SITE PLAN
Scale 1:250
archiology
Archiology Limited
ADNZ Professional Member
ORIGINAL PLAN IN COLOUR
CLIENT: PAUL VEGAR
PROJECT: PROPOSED NEW DEVELOPMENT
ADDRESS: 2052 SH10, WAIPAPA
DRAWING TITLE: PROPOSED SITE PLAN
RESOURCE CONSENT DRAFT
DWG NUMBER RC-A102



archiology

Archiology Limited

ADNZ Professional Member

- THIS DRAWING SHALL NOT BE SCALED

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

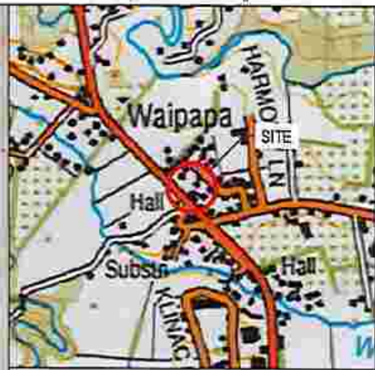
PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
OVERALL GROUND FLOOR PLAN

RESOURCE CONSENT DRAFT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	25/04/2025
DWG NUMBER:	RC-A110	REV:	



Locality Plan (NTS)

SITE INFORMATION:

Legal Description: Lot 1 and Lot 2 Deposited Plan 203824, Lot 2 DP 205437
Area: 1,431 m², 1,650 m², and 1,217 m²
Zone: Commercial

Legend:

- Property Boundaries
- Wastewater Line (Existing, to be decommissioned)
- Wastewater Line (Proposed)
- Wastewater Delivery Line (Proposed)
- Stormwater Line (Existing)
- Test Pit

NOTES:

1. LOT BOUNDARIES TAKEN FROM ARCHITECT PLAN.
2. URBAN 2014-15 IMAGE COURTESY OF LINZ.
3. CONTOUR LINES AT 0.5m INTERVALS SOURCED FROM LINZ (LIDAR 2018-20, NZVD 2016).
4. ALL OTHER FEATURES ARE TAKEN FROM AERIAL IMAGE AND SITE WALKOVER.
5. LOCATIONS HAVE NOT BEEN SURVEYED AND ARE INDICATIVE ONLY.
6. ALL DRAINAGE TO COMPLY WITH AS/NZS 1547 NZBC G13/AS1. DRIPPER LINES TO FOLLOW CONTOUR LINES.
7. MINIMUM SECONDARY TREATMENT PLANT SETBACKS:
   - INVERT LEVEL AT INLET - NOT LESS THAN 0.5m BELOW FLOOR LEVEL
   - 3m FROM BUILDINGS
   - 1.5m FROM BOUNDARIES
   - EASILY ACCESSIBLE FOR MAINTANACE.

   CHECK ALL DIMENSION ON SITE.
7. MINIMUM EFFLUENT DISPOSAL SETBACKS
   - 1.5m FROM PROPERTY BOUNDARIES
   - 3m FROM BUILDINGS AND RETAINING WALLS. FOR TREATMENT PLANT SETBACK FROM BUILDINGS < 3.0 m GEOTECHNICAL ENGINEER TO CHECK INFLUENCE ON BUILDING FOUNDATION.
   - 5m FROM SURFACE WATER (SECONDARY TREATMENT)
   - 15m FROM COASTAL MARINE AREA (NRC)
   - 30m FROM COASTAL MARINE AREA (FNDC)

   CHECK ALL DIMENSION ON SITE.

FOR CONSENT

Rev	Date	Description	By	Checked
A	05/05/2026	FOR CONSENT	JT	AT

DWG WASTEWATER PLAN

A3 Scale 1:500 | 0 10m 25m | Date 05/05/2026

Drawn JT | Checked AT | Approved TA

File

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Project: PROPOSED COMMERCIAL DEVELOPMENT
2052 STATE HIGHWAY 10, WAIPAPA

Client: 2052 SH10 WAIPAPA LIMITED

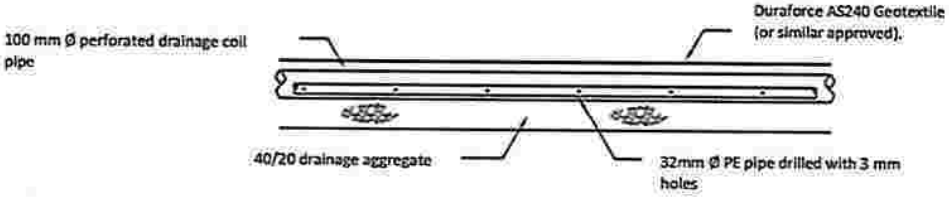
Project No. 25 067 | RC no.

Stage

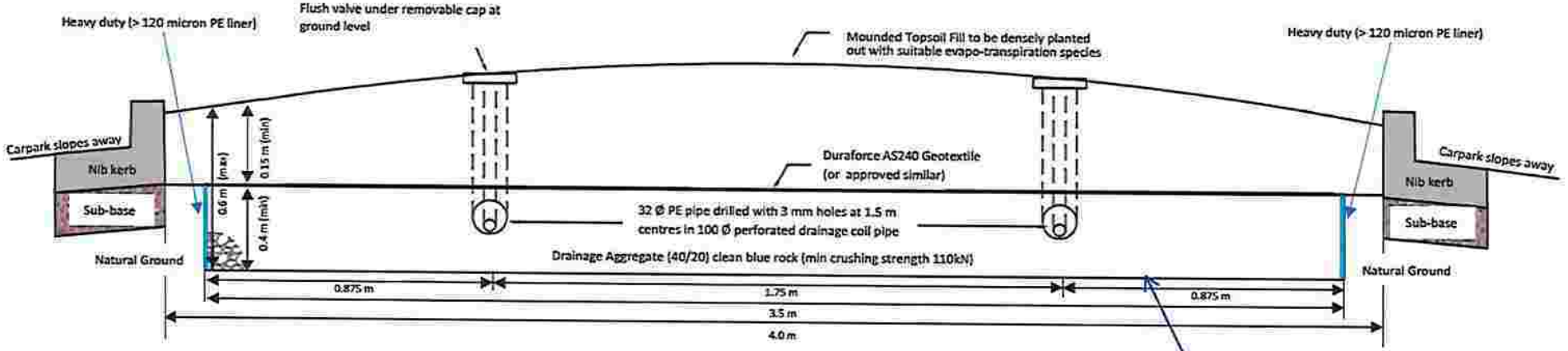
Dwg No. WWP01

Sheet No. 1 of 1

On-Site Effluent Disposal
Typical Shallow Soakage Bed



Longitudinal Section (NTS)



Cross Section (NTS)

Notes:

1. Distribution drains to be 100 mm Ø perforated drainage coil pipe. Holes shall be 3 mm Ø at 1.5 m centres for the 15.5 m long pipe section and arranged as shown above.
2. Distribution pipes to be laid flat or at gradient no greater than 1 in 200.
3. Base of beds to be carefully scratched with a pointed tool before laying filter media.
4. Where two or more beds are to be laid parallel, the beds shall be spaced with 1.5 m sidewall separation.
5. Removable caps shall be installed on inspection risers at the end of the perforated drainage coil pipe trench.
6. Use indexing valves to dose distribution pipes alternatively.

Subgrade to be protected in construction. No plant to work from the subgrade.

Ground conditions to be checked by Engineer prior to placement of drainage aggregate

Rev	Date	Description	By	Checked

DWG ON-SITE EFFLUENT DISPOSAL SOAKAGE BED DETAILS

AS SCALE NTS | Date 09/05/2026

Drawn AT: | Checked TMA | Approved JP

File

HAIGH WORKMAN Civil & Structural Engineers

Project PROPOSED COMMERCIAL DEVELOPMENT
2052 STATE HIGHWAY 10, WAIPAPA, LOTS 1 & 2 DP 203824 and Lot2 DP 205437

Client 2052 SH10 WAIPAPA LIMITED

Project No. 26 067 | RC no.

Stage

Dwg No. WWP02

Sheet No. 1 of 1

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Appendix B – Assessment of Environmental Effects (AEE7 – NRC)

Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

Part B: Assessment of Environmental Effects

Discharge Treated Sewage Effluent to Land

This application is made under Section 88/Section 127 of the Resource Management Act 1991

To: Consents Department
Northland Regional Council
Private Bag 9021
Te Mai
Whangārei 0143

Whangārei office: 09 470 1200
0800 002 004
Email: info@nrc.govt.nz
Website: www.nrc.govt.nz

PART B – ASSESSMENT OF ENVIRONMENTAL EFFECTS

Your application must include an Assessment of Effects on the Environment. This form is a guide to help you prepare one.

An assessment of effects is required so that you and others can understand what happens to the environment when you discharge domestic wastewater ("treated sewage effluent") to land. This will help you to propose ways to minimise those effects to the council's satisfaction.

The degree of detail required is in proportion to the scale of the environmental effects of your proposal. If you are required to apply for a consent to discharge sewage effluent into or onto land, then you will most probably need a qualified engineer (or similar) to design your on-site system. The information requested below is the minimum detail that your engineer must supply.

Please note that the word *"environment"* includes the surrounding waterways and groundwater, surrounding coastal water, adjoining land, any surrounding resource users, and local iwi.

It is advised that you make an appointment with an appropriate council officer to discuss your application prior to lodging it. This will help you to supply all the required information at the onset and ensure the efficient processing of your application.

A. Description of the Proposed Activity

A.1 What is the intended water supply?

- ☐ Rainwater collection
- ☑ Community or bore water supply
- ☐ Other *(please specify)* : _____

A.2 What is the source of the wastewater? *(please tick the appropriate box and answer those questions)*

☐ **Domestic House**

How many bedrooms are there in the house? _____

Will the house be permanently occupied? ☐ Yes ☐ No

☐ **Small Motel/Campground/Hostel/Marae/Sports Club**

What is the maximum number of occupants that your facility can accommodate? _____

How frequently does this maximum occupancy occur and for what length of time? _____

What is the typical number of occupants during the other periods of the year? _____

☐ **Shared On-site Systems/Subdivisions**

How many individual lots are/will the treatment and disposal system be servicing? _____

What will be the average number of bedrooms per house? _____

What is the area of the lot on which the discharge will occur? _____

☑ **Other**

Provide details of the source of effluent, the number of persons contributing to the wastewater and the source of water supply for the facility.

Commercial development (18 units) generating domestic wastewater.

A.3 What is the likely maximum daily volume of wastewater to be discharged? 2,160 litres

The Wastewater Treatment System

A.4 What is your Proposed Wastewater Treatment System?
(please tick appropriate box and answer the associated questions)

☐ **Septic Tank**

What is the capacity of the tank? _____ litres

Will an effluent filter be fitted on the outlet? ☐ Yes ☐ No

☑ **Aerated Wastewater Treatment System (AWTS)**

What brand is the AWTS? TechTreat TXT Aerated Wastewater System

Will a programmed maintenance contract be entered into with the treatment systems manufacturer or agent? ☑ Yes ☐ No

☐ **Other,** what level of treatment do you consider the wastewater receives through your *"other"* treatment system?

☐ Primary

☐ Secondary

Describe the proposed *"other"* treatment system

The Wastewater Disposal System

A.5 What is your proposed disposal system?
(please tick the appropriate box and answer the associated questions)

☑ **Soakage Trench/Bed System**

What are the dimensions of the proposed soakage trenches/beds?

Width 3.5 m
Depth 0.6 (max) m

What is the total length of all the soakage trenches/beds? 31 m

How will the soakage trench/bed system be loaded?

☐ Trickle

☑ Pump

☐ Dose loaded via a syphon

Has a 100% reserve area of undeveloped land been allowed for in the disposal system design?

☐ Yes

☑ No, what percentage has been allowed for and why?

30% of proposed main disposal area where wastewater has received secondary treatement.

What is the proposed loading rate to the trenches/beds? 20 mm/day

☐ **Irrigation Lines**

What area will the irrigation lines cover? _____ m²

What is the distance between adjacent irrigation lines? _____ m

What is the distance between adjacent drip emitters along the irrigation line? _____ m

What brand is the irrigation line? _____

What is the proposed aerial loading rate to the disposal area? _____ mm/day

Has a 30% reserve area of undeveloped land been allowed for in the disposal system design?

☐ Yes

☐ No, what percentage has been allowed for and why?

☐ **Other** *(please describe)*

Conventional Soakage bed

A.6 What is the intended ground cover within the disposal area after the disposal system is operational? *(i.e. what plant species do you intend to plant, if any)*

The soakage bed can be grassed or planted with evapotransipration plant species as appended in the report.

B. Site Details

B.1 You must attach a map that shows the following:

- The location of your lot in relation to the nearest town.
- The legal property boundaries of your lot and the distance of your disposal system (including reserve area) from those boundaries.
- The layout of your disposal system (including reserve area) within your lot boundaries.
- The location of any groundwater bores within 20 metres of your disposal system (including reserve area).
- The location of any surface water (i.e. streams, roadside drains, lakes and rivers) within 20 metres of your disposal system (including reserve area).

B.2 What is the map reference of the proposed disposal system? *(if known)*

NZMS 260 Series map number:

Easting 1683435 (seven digit number)

Northing 6103812 (seven digit number)

B.3 Which District Council is the property administered under?

☐ Kaipara ☑ Far North ☐ Whangārei

B.4 What is the slope of the proposed disposal area?

☑ Flat

☐ Slightly sloping (5°–15°)

☐ Steep (>15°)

B.5 Are any drainage controls required?

☑ Yes, describe

Surrounding carparks slope away from the disposal bed to stormwater drainage channels achieving greater than 5.0 m setback.

☐ No, state why not

B.6 **Was a soakage test (percolation test) performed at the location of the proposed disposal system?** *(please tick the appropriate box and answer those questions)*

☑ Yes

What was the date of the test? 16 April 2026

What were the weather conditions prior to the soakage test? Fine

What is the average soakage rate of the disposal area? 0.27 m/day (Ksat)
(please ensure the individual soakage test results are included with this application)

Are the locations of the soakage tests marked on the map that shows the layout of the disposal system?

☑ Yes

☐ No, state why not

☐ No, what are the reasons for not performing a soakage test?

B.7 **Was any groundwater encountered during the site investigation?**

☑ No ☐ Yes, at what depth? _____ metres

B.8 **What is the estimated winter groundwater level for the disposal area?** > 3.5 metres

How was this winter groundwater level determined?

Data from previous wastewater reports prepared for the site (Haigh Workman, 2010).

B.9 **Has a detailed soil profile been included with this application form?**

☑ Yes

☐ No, state why not _____

B.10 **What is the estimated soil category of the disposal area?**

☐ 1: Gravel and sands, Rapidly draining

☐ 2: Sandy loams, Well drained

☐ 3: Loams, Moderately well drained

☑ 4: Clay loams, Imperfectly drained

☐ 5: Light clays, Poorly drained

☐ 6: Medium to heavy clays, Very poorly drained

Please state the criteria used for selecting the above soil category.
Site testing in conjunction with published soil maps.

C. Assessment of Effects on the Environment

An assessment of effects should be proportional to the scale and significance of the proposed activity. Where your discharge could have an adverse effect on the environment, a detailed environmental assessment is required.

C.1 Affected Parties

Note: If you are proposing to dispose of your wastewater using a deep soakage system the determination of affected parties can be more complex, especially with relation to groundwater users. It is recommended that you contact the council to help determine who the affected parties from your proposal may be.

Are there any groundwater bores within 20 metres of any part of the disposal system (including reserve area) that are not owned by the applicant?

☐ Yes ☑ No

If you have answered **Yes**, then you will need to gain the written approvals of all the owners of neighbouring groundwater bores identified by the above question.

If written approvals cannot be obtained from all affected parties, describe what effect your discharge may have on the neighbouring groundwater bore and the steps you propose to take to minimise (i.e. mitigate) these effects *(attach a separate sheet if necessary)*

C.2 Given the estimated winter groundwater level (see Question B8) and your proposed treatment and disposal system, what is the risk of groundwater contamination occurring and why?

C.3 **What is the smallest horizontal separation distance between the disposal system (including reserve area) and any nearby watercourse, including roadside water table drains?**

_____ metres

C.4 **Given the smallest horizontal separation distance to the nearest surface watercourse and your proposed treatment and disposal system (including reserve area), what is the risk of surface water contamination occurring and why?**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

C.5 **Consultation**

Have you consulted with any of the following potentially affected parties?

	Yes	No
Neighbours	☐	☑
Department of Conservation *(if relevant)*	☐	☑
Fish and Game Council *(if relevant)*	☐	☑
District Council *(if relevant)*	☐	☑
Local iwi *(specify)*: _____	☐	☑
Other *(specify)*: _____	☐	☑

Please ensure all of the relevant questions on this form have been answered fully.

If you have any queries relating to information requirements or wish to meet with a council consents officer, please contact a Duty Planner at the Northland Regional Council.

Northland Regional Council offices:			
Whangārei Office 36 Water Street Whangārei 0110 P 0800 002 004 E info@nrc.govt.nz www.nrc.govt.nz	**Dargaville Office** Ground Floor 32 Hokianga Road Dargaville 0310 P 09 439 3300	**Kaitāia Office** 192 Commerce Street Kaitāia 0410 P 09 408 6600	**Waipapa Office** Shop 9 12 Klinac Lane Waipapa 0295 P 0800 002 004

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Appendix C – Onsite Wastewater Disposal Investigation (FNDC Engineering Standards 2023)

This form is to be read in conjunction with AS/NZS 1547:2012 (or any amendments as applicable), and, in particular with Part 4: Means of Compliance

Part A – Contact Details

1 - Applicant

Name: *2052 SH 10 Waipapa Limited*

Property Address: *2052 Stage Highway 10, Waipapa*

Lot/DP Number: *Lots 1 & 2 DP 203824, Lot 2 DP 205437*

2 – Consultant / Site Evaluator

Site Evaluator Name: *Aaron Thorburn*

Company Name: *Haigh Workman Limited*

Postal Address: *PO Box 89, Kerikeri*

Business Phone: *09 407 8327* Mobile:

Email: *info@haighworkman.co.nz*

SQEP Registered[1]: ☑ Yes ☐ No If no, details of suitably registered SQEP who will countersign the report are to be supplied below.

Name of SQEP: *John Papesch*

Company Name: *Haigh Workman Ltd*

Postal Address: *PO Box 89, Kerikeri*

Business Phone: *09 407 8327* Mobile:

Email: *johnp@haighworkman.co.nz*

Part B - Site and Soil Evaluation

[1] It is a requirement that the Evaluator be SQEP registered to carry out on-site effluent investigations/designs. If not, then evaluation/design will need to be counter-signed by a suitably registered SQEP

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1: Desk Study

Requirements (✓ appropriate box) Please complete **all** options. (*If more than one option applies to land under consideration, please clarify with supporting information)*

☐	*FNDC REQUIREMENT*	*APPLIES TO LOT(S)*	*COMMENTS*
1	**Hazard maps/GIS Hazard layer - stability**		
✓	Low instability risk		*Proposed investigation site near level (1.6°)*
	Medium instability risk		
	High instability risk		
2	**GIS Hazard layer - effluent on slope stability**		
✓	Low disposal potential		*Gentle / flat ground (soakage bed area)*
	Moderate disposal potential		
	High disposal potential		
3	**GIS Hazard Layer - effluent suitability**		
✓	Medium unsuitability		*Cat 4 soils, groundwater table > 1.4 m bgl.*
	High unsuitability		
4	**GIS Hazard Layer - Flood susceptibility**		
	Is flood susceptible		
	Is partially flood susceptible		
✓	Is not flood susceptible		*The site is not located in either coastal or river flood hazard zone areas.*
5	**GIS land resources layer - Streams**		
Are there streams on or adjacent to land under investigation?		Yes	
	✓	No	
6	**GIS land resources layer – aquifers at risk**		
Is land situated over or adjacent to aquifer?		Yes	
	✓	No	

7	**Annual Rainfall (HIRDS)**	*~1500 mm*

Note: It is to be noted that all information obtained off FNDC GIS/Hazard Maps is to be taken as a guide only.

Note: All information obtained from the above sites is to be confirmed by a specific site investigation as localised conditions could vary substantially. However, should the above data checks indicate the potential for a hazard/non-complying activity etc., this must be further investigated to confirm/deny the indicated situation.

2: On-Site Evaluation

a. Determination of Soil Category *(refer table 4.1.1 AS/NZS 1547:2012)* (✓ appropriate box)

Soil Category		Structure	Applies to lot(s)	Comments
1 Gravels & Sands		Structureless (massive)		
2 Sandy loams		Weakly Structured		
		Massive		
3 Loams		High/Moderate structured		
		Weakly structured or Massive		
4 Clay loams		High/moderate structured		
	✓	Weakly structured		In accordance with Appendix C & based on site observations
		Massive		
5 Light clays		Strongly structured		
		Moderately structured		
		Weakly structured or massive		
6 Medium to heavy clays		Strongly structured		
		Moderately structured		
		Weakly table 9 or massive		

Note: Refer 4.1 A4 – Soil Assessment AS/NZS 1547:2012 for assessment criteria.

Note: Details of the method used to determine soil type etc. are to be clearly stated, along with positions of boreholes/test pits etc. clearly marked on a site plan. Bore logs are to be provided. Photos should be included.

Note: The site plan should also clearly show the intended area for effluent disposal, along with any site features such as drains, water bores, overland flows etc., along with separation distance achieved.

On-Site Evaluation (continued)

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b. Site Characteristics for Proposed Disposal Area: (if there is a marked difference between sites, please fill in a separate form for each site and clearly note which site the assessment applies to) (ü appropriate box)

☐	*DETAILS*	*APPLIES TO SITE(S)*
1	**Flooding potential to proposed field and reserve field (refer note 1 below)**	
✓	Fields will not flood, or	*Fields are located outside of any mapped flood extent*
	Fields will flood in	
	20% AEP event	
	5% AEP event	
	1% AEP event	
2	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
✓	*Main/reserve soakage bed comply with NRC rules*	*Main / reserve soakage beds are outside 20% AEP event areas in compliance with NRC offset requirements*
	Main/reserve soakage bed do not comply with NRC rules	
3	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
	Main/reserve soakage bed comply with NRC rules	*As above*
	Main/reserve soakage bed do not comply with NRC rules	
4	**Winter ground water separation to proposed field and reserve field (refer note 3 below)**	
✓	*Main and reserve soakage bed comply with NRC rules*	Depth to ground water in excess of 1.4m, thus achieving > 0.6m vertical separation.
	Main and reserve soakage bed do NOT comply with NRC rules	
5	**Slope of ground of proposed field and reserve field (refer note 4)**	
Description	*Near level, slopes likely to be < 1°*	
6	**Shape of ground of proposed field and reserve field (Refer note 5 below)**	

	Waxing divergent		*Linear divergent*		*Waning divergent*
	Waxing planar		*Linear planar*		*Waning planar*
	Waxing convergent		*Linear convergent*		*Waning convergent*

Comments	*Near level*

☐	*DETAILS*	*APPLIES TO SITE(S)*

7	Intended water supply source	
✓	Public supply	
	Rainwater	
	Bore	

8	Proposed method of disposal and recommended Daily Loading rate (DLR) (refer note 6 below)
Description	Soakage Bed
Subsurface soakage bed. DLR 20 mm/day.	

Peak loading factored in (refer note 6 below)		Yes	✓	No
Comments	Commercial development with multiple units (day users)			

9	Site exposure (refer note 7 below)	Description	Applies to Site(s)
Site(s) aspect		Southwest facing	
Pre-dominant wind direction		Southwest	
Presence of shelter belts		n/a	
Presence of topographical features or structures		Open site	

10	Proximity of water bores (include adjacent to properties) (refer note 9 below)
Nil	

11	Visible evidence of slips / instability (refer not 8 below)
Nil	

12	Total suitable area available for type of effluent disposal proposed (including reserve area)
144 m² - 108.5 m² for disposal area and 35.5 m² (30%) for reserve area	

13	Setback areas proposed (if any) (refer note 10 below)
Exclusion areas and setback distances are provided in Table 9 of the Regional Plan and presented herein	

Notes

1. If the FNDC hazard maps/GIS indicate a flooding susceptibility on the site being evaluated, an on -site evaluation is to be carried out to determine the effects from 20%, 5% and 1% AEP storm events. This evaluation is to include all calculations to substantiate conclusions drawn. If necessary, include a detailed contour plan and photos.
2. NRC Water & Soil plan defines surface water as 'All water, flowing or not, above the ground. It includes water in continually or intermittently flowing rivers, artificial watercourses, lakes and wetlands, and water impounded by structures such as dams or weirs but does not include water while in pipes, tanks, cisterns, nor water within the Coastal Marine Area'. By this definition, separation (complying with NRC rules) is to be maintained by both the proposed disposal and reserve areas from

any overland flowpaths and/or swale drains etc. or R/C will be required from NRC. Surface water is to be clearly marked on each site plan, showing the extent of a 1% AEP storm event, and detailing separation distances to main/reserve disposal areas.

3. *Positions of test borehole/s to be shown and bore logs to be provided. Separation (complying with NRC rules) is to be maintained by both the proposed disposal and reserve areas from winter ground water level or R/C will be required from NRC. If the investigation is done outside of the winter period, allowance is to be made in determining the likely winter level.*
4. *Slopes of ground are to be compared with those recommended maximums for type of system proposed (refer Appendix 4.2B AS/NZS 1547:2012). Designs exceeding those maximums will require specific design to justify the proposal and may also need Resource Consent from NRC.*
5. *Shape of ground is important as it will determine whether there is potential for concentrated overland flows from the upper slopes and also if effluent might be concentrated at base of slope if leeching occurs. Refer Figure 4.1B2 AS/NZS 1547:2012.*
6. *The proposed system (for residential developments) should be sized to accommodate an average 3-bedroom house with 5 people. Sites in holiday areas need to take peak loading into effect in determining daily volumes. The design must state what DLR was used to determine area necessary (including reserve area). If ground conditions are marginal for type of disposal proposed, then a soil permeability test utilising the constant head method is to be carried out across the proposed disposal area. Refer Appendix 4.1F AS/NZS 1547:2012.*
7. *The site aspect is important as a north-facing site that is not sheltered from wind and sun by shelterbelts or other topographical features or structures will perform far better than a south-facing site on the lee of a hill that is shaded from wind and sun etc.*
8. *If any effluent disposal area (including any reserve area) proposed has or is adjacent to areas that show signs of instability, then a full report from a CPEng (Geotech) will be required to justify the viability of the area for effluent disposal.*
9. *If there are any water bores on the subject property or adjacent properties then a site plan will be required showing bore positions in relation to any proposed effluent field(s).*
10. *If setback areas are proposed to mitigate effects, the extent and position/s need to be shown on a site plan.*

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Appendix D – Summary of Regulatory Requirements

Operational Regional Plan for Northland (March 2026)

C.6.1.3 Other on-site treated domestic wastewater discharge – permitted activity

The discharge of domestic type wastewater into or onto land from an on-site system and the associated discharge of odour into air from the on-site system are permitted activities, provided:

Criterion	Comment
1) The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012), and	*Complies*
2) The volume of wastewater discharged does not exceed two cubic metres per day, and	*Non-compliant* *(Wastewater volume is estimated at 2,160 litres per day)*
3) The discharge is not via a spray irrigation system or deep soakage system, and	*Complies*
4) The slope of the disposal area is not greater than 25 degrees, and	*Complies*
5) For wastewater that has received secondary treatment or tertiary treatment, it is discharged via: a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of Australian/New Zealand Standard On-Site Domestic Wastewater Management (AS/NZS 1547:2012); or b) an irrigation line system that is dose loaded and covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and	*Complies*
6) for the discharge of wastewater <u>onto the surface of slopes greater than 10 degrees:</u> a) the wastewater, excluding greywater, has received at least secondary treatment, and b) the irrigation lines are firmly attached to the disposal area, and c) where there is an up-slope catchment that generates stormwater runoff, a diversion system is installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and d) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and e) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or f) the irrigation lines are covered by a minimum of 100 millimetres of topsoil, mulch, or bark, and	*Complies*
7) the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in Table 9: Exclusion areas and	*Complies*

setback distances for on-site domestic wastewater systems, and	
8) for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and	*N/A*
9) the following reserve disposal areas are available at all times: a) one hundred percent of the existing effluent disposal area where the wastewater has received primary treatment or is only comprised of greywater, or b) thirty percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment.	*30% reserve area provided*
10) the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and	*Proposed per maintenance recommendations*
11) the discharge does not contaminate any groundwater water supply or surface water, and	*Will comply given design parameters*
12) there is no surface runoff or ponding of wastewater, and	*Will comply given design parameters*
13) there is no offensive or objectionable odour beyond the property boundary.	*Will comply given design parameters*

Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems

Feature	Primary treated domestic type wastewater	Secondary and tertiary treated domestic type wastewater	Greywater
Exclusion areas			
Floodplain	5% annual exceedance probability	5% annual exceedance probability	5% annual exceedance probability
Horizontal setback distances			
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres
Coastal marine area	20 metres	15 metres	15 metres
Existing water supply bore	20 metres	20 metres	20 metres
Property boundary	1.5 metres	1.5 metres	1.5 metres
Vertical setback distances			
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres

Far North District Plan (Operative) 2009

12.7.6.1.4 Land Use Activities Involving Discharges of Human Sewage Effluent

Land use activities which produce human sewage effluent (including grey water) are permitted provided that:

Criterion	Comment
The effluent discharges to a lawfully established reticulated sewerage system; or	
The effluent is treated and disposed of on-site such that each site has its own treatment and disposal system no part of which shall be located closer than 30m from the boundary of any river, lake, wetland or the boundary of the coastal marine area.	*Complies*

Note: The discharge may also require consent under the Regional Water and Soil Plan.

Exclusion areas			
Floodplain	5% annual exceedance probability	5% annual exceedance probability	5% annual exceedance probability
Horizontal setback distances			
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres
Coastal marine area	20 metres	15 metres	15 metres
Existing water supply bore	20 metres	20 metres	20 metres
Property boundary	1.5 metres	1.5 metres	1.5 metres
Vertical setback distances			
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres

Far North District Plan (Operative) 2009

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Note: The discharge may also require consent under the Regional Water and Soil Plan.

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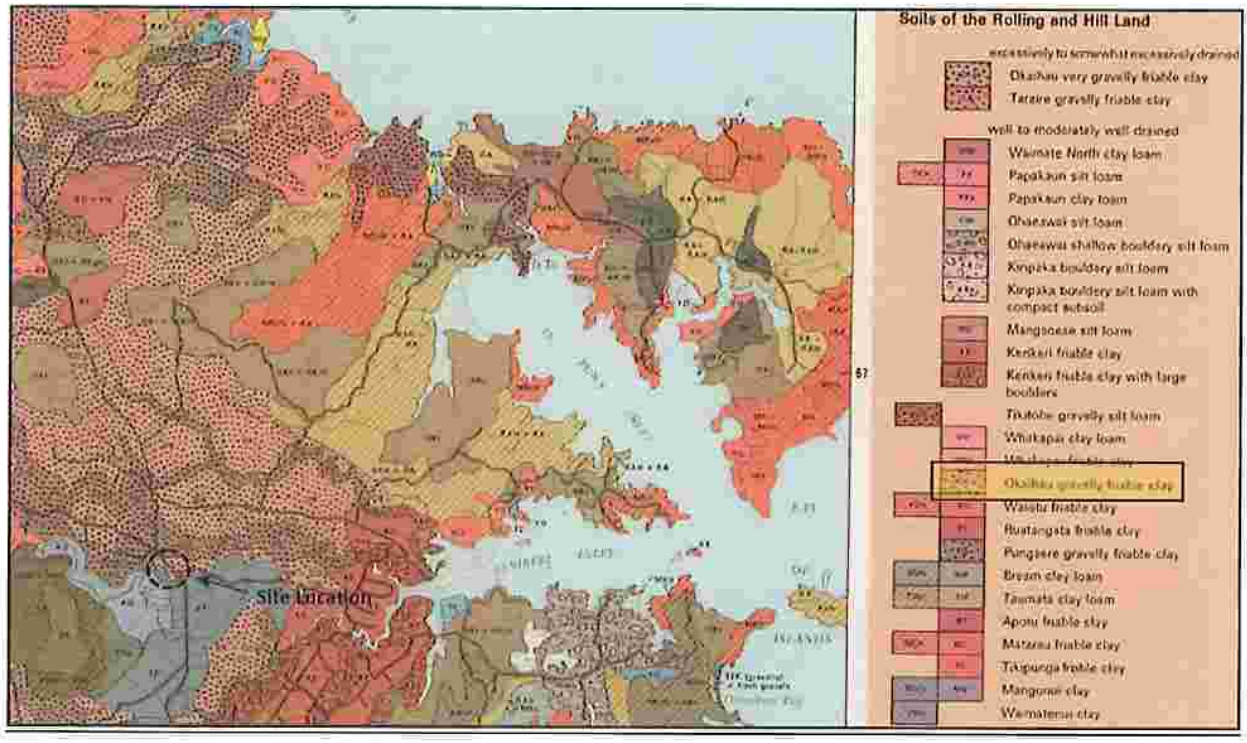
Appendix E – Soil Type and Drainage Northland Regional Council Maps



MANAGING NORTHLAND SOILS

8.1.3

Old basalt volcanic soils

Soil types in this group

- Ōkaihau gravelly friable clay - OK
- Ōkaihau gravelly friable clay with dull brown subsoil - OKu
- Ōkaihau very gravelly friable clay - OKg
- Otaha clay – OD, ODH*
- Otaha gravelly clay loam - ODg
- Pungaere gravelly friable clay - PG
- Taraire gravelly friable clay - TA

This fact sheet uses NZ Soil Bureau map series soil type names and abbreviations.

The H* denotes the hill variant of this soil type, which occurs on slopes over 20° and has a shallower profile.

Okaihau gravelly friable clay (OK) soil profile. Photo by Ian Harmsen.

Drainage classes

Soil symbol	Full name	Drainage class
KIRIPAKA SUITE Basement rock: volcanic basalt lava flows		
OKg	Ôkaihau very gravelly friable clay	5 - Somewhat excessively drained
ODg	Otaha gravelly clay loam	5⇌4 - Somewhat excessively to well drained
OK	Ôkaihau gravelly friable clay	5⇌4 - Somewhat excessively to well drained
TA	Taraire gravelly friable clay	4⇌3 - Well to moderately drained
OD, ODH	Otaha clay	4 - Well drained
OKu	Ôkaihau gravelly friable clay with dull brown subsoil	4 - Well drained
PG	Pungaere gravelly friable clay	3 - Moderately drained

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Appendix F – Suitable Plants for Evapo-transpiration Systems

SUITABLE PLANTS FOR EVAPO-TRANSPIRATION SYSTEMS

Native Shrubs and Trees

Coprosma	*Coprosma propinqua*
Hebe	*Hebe*
Manuka	*Leptospermum Scoparium*
Weeping Mapou	*Myrsine Divaricata*
Flax (fast)	*Phormium Tenax*
Pokaka (slow)	*Elaeocarpus Hookerianus*
Cabbage Tree (fast)	*Cordyline Australis*
Rangiora (fast)	*Brachyglotis Repanda*
Lacebark (fast)	*Hoheria Populnea*
Ribbonwood (fast)	*Plagianthus Regius*
Poataniwha	*Melicope Simplex*
Heketara	*Olearia Rani*
Poataniweta	*Carpodetus Serratus*
Kohuhu (fast)	*Pittosporum Tenuifolium*

Grasses

Jointed Twig Sedge	*Baumea Arthrophylla*
Longwood Tussock	*Carex Comans*
Pukio	*Carex Secta*
Toetoe (use native species- not invasive Pampas Grass)	*Cortaderia Fulvida*
Umbrella Sedge	*Cyperus Ustulatus*
Oioi	*Leptocarpus Similis*
Hooksedge	*Uncinia Uncinata*

Introduced Species

Canna Lilies, Taro, Aralia, Fuschia, Philodendrons, and Begonias

NORTHLAND REGIONAL COUNCIL

CARING FOR NORTHLAND AND ITS ENVIRONMENT

WHANGAREI: 36 Water Street, Private Bag 9021, Whangarei. Phone 09 438 4639, Fax 09 438 0012

OPUA: Unit 10, Industrial Marine Park, Opua. Phone 09 402 7516, Fax 09 402 7510

DARGAVILLE: 61B Victoria Street, Dargaville. Phone 09 439 3300, Fax 09 439 3301

KAITAIA: 192 Commerce Street, Kaitaia. Phone 09 408 6600, Fax 09 408 6601

Freephone: 0800 002 004 Environmental Hotline: 0800 504 639 Website: www.nrc.govt.nz

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Appendix G – Example Operation & Maintenance Guidelines

water NEW ZEALAND
The New Zealand Water & Wastes Association Wairoa Aotearoa

ON-SITE WASTEWATER SYSTEMS

Maintenance Guidelines for Homeowners

PROTECTING YOUR HEALTH, YOUR ENVIRONMENT, YOUR INVESTMENT

PRODUCED BY: SWANS-SIG

The Small Wastewater and Natural Systems Special Interest Group of Water New Zealand

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Contact Details:

SWANS-SIG
Water NZ PO Box 1316
WELLINGTON 6140

Telephone: 64-4-472 8925
Fax: 64-4-472 8926

Website: www.waternz.org.nz/swans.html

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WHY MAINTENANCE OF YOUR ON-SITE WASTEWATER SYSTEM IS IMPORTANT

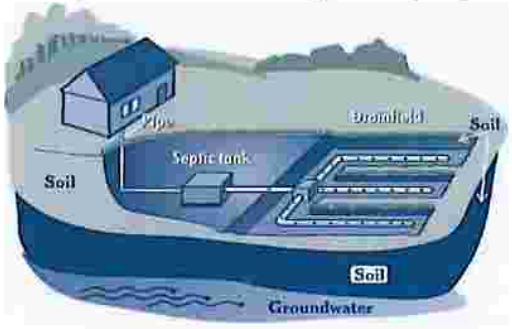
Whether you have a new "high-tech" treatment unit and drip irrigation system or an older "low-tech" septic tank and soakage trench system, regular attention to system inspection and maintenance is important. Effective regular maintenance of the wastewater servicing system on your property is essential for:

(a) protecting family health by ensuring a high level of sanitary performance;
(b) maintaining environmental values both within and beyond your property
(c) protecting the investment in your wastewater system; and
(d) enhancing amenity values in your neighbourhood through contributing to a high level of environmental performance for local on-site wastewater systems.

WHAT TYPE OF SYSTEM IS INSTALLED ON YOUR PROPERTY?

You are likely to have one of four types of system on your property:

- an old unknown system about which you have no information;
- an older style septic tank and soakage trench or soak hole system;
- a new modern septic tank and land application system (such as dosed trenches, or shallow planted evapo-transpiration beds, or a mound, or a low-pressure dosed irrigation area);
- a new advanced treatment unit (such as an aerobic treatment plant, sand filter, or packed bed reactor) plus drip irrigation land application system.



Older style septic tank and soakage trench system

Modern septic tank, sand filter and drip irrigation field

Before you can attend to the maintenance requirements for your system you will have to establish the system type and capacity. This will require a detailed site inspection and/or a check of building records held by council. You may be able to do some of this yourself, but if a site investigation is needed, it is best to engage a drainage contractor or on-site wastewater servicing professional to investigate as follows:

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(a) For an older unknown system	• Carry out a field inspection to locate and identify the treatment unit and soakage field area. • Excavate or probe as appropriate to identify system components, their size and condition. • Prepare a loading certificate based on an assessment of system capacity and its performance potential. • Identify a suitable reserve area for extending the system if need be.
(b) For an older style septic tank and soakage trench or soak hole system	• If necessary, carry out a field inspection to locate the septic tank and soakage field area. • Check the maintenance record for the tank, and/or pump out and inspect tank condition. • Evaluate the capacity and current performance of the soakage system. • Prepare a loading certificate based on an assessment of system capacity and its performance potential. • Identify a suitable reserve area for extending the system if need be.
(c) For a new modern septic tank and land application system	• Check council building consent records. • Check designer/installer reports and as-built records. • Obtain the designer's loading certificate (see box below). • Check availability of operation and maintenance instructions provided by the designer. • Confirm the availability of a suitable reserve area for extending the system if need be.
(d) For a new advanced treatment unit and land application system	• Check council building consent records. • Check designer/installer reports and as-built records. • Obtain the designer's loading certificate. • Check availability of operation and maintenance instructions provided by the designer. • Check if a maintenance contract is in place, and if not investigate options for and commission such a contract. □ Ensure the maintenance contract is renewed

Checking scum and sludge levels in a septic tank

Servicing an advanced wastewater treatment unit

Whatever system is installed on your property, it is important that you understand the capabilities of the system. These are best identified and summarised in the preparation of a loading certificate. The loading certificate will enable you to understand the limitations or constraints of your system; however, the most important thing is to know your system type so that the right sort and frequency of maintenance can be carried out. This can simply be done through an inspection by a wastewater servicing specialist who will prepare the loading certificate.

LOADING CERTIFICATE

This should set out the following information:

(a) System type (obtained from the as-built details provided by the designer/installer);

(b) System capacity (number of persons and daily flow volume);

(c) Summary of design criteria;

(d) The location of and use of the 'reserve area';

It is also essential that if you have an advanced treatment and land application system subject to a maintenance contract, this contract is renewed annually.

DO YOU HAVE A SET OF USER GUIDELINES?

Your Regional, City or District Council is likely to have available a set of user guidelines for owner/occupiers of dwellings serviced by on-site wastewater systems. Such guidelines may be

based on the provisions of the joint Australia New Zealand Standard AS/NZS 1547:2012 "On-site Domestic Wastewater Management" and will typically set out 'dos' and 'don'ts' related to household activities which generate wastewater flows (see box below).

USER ADVICE for a PROPERTY OWNER/OCCUPIER (from AS/NZS 1547:2012)

For the on-site system to work well, there are some good habits to encourage and some bad habits to avoid:

(a) To reduce sludge building up in the tank:

(i) Scrape all dishes to remove fats, grease, and so on before washing

(ii) Keep all possible solids out of the system
(iii) Don't use a food waste disposal unit unless the wastewater system has been specifically designed to carry the extra load, and
(iv) Don't put sanitary napkins and other hygiene products into the system;

(b) To keep the bacteria working in the tank and to maintain soil condition in the land application area:

(i) Use biodegradable soaps
(ii) Use a low-phosphorus detergent (less than 1 gram per wash – very good; "no phosphorus" labelled product – best)
(iii) Use a low-sodium detergent in erosive or clayey soil areas (less than 20 grams per wash – OK; less than 10 grams per wash – best)

(iv) Use detergents in the recommended quantities

(v) Don't use powerful bleaches, whiteners, nappy soakers, spot removers and disinfectants
(vi) Don't put chemicals or paint down the drain, and

(vii) Check potential for effects from antibiotic and other medication use.

(c) Conservation of water will reduce the volume of effluent requiring disposal to the land application area, make it last longer and improve its performance. Conservation measures include:

(i) Installation of water conservation fittings

(ii) Taking showers instead of baths
(iii) Washing clothes only when there is a full load, and

(iv) Using the dishwasher only when there is a full load;

(d) Avoid overloading the system by spacing out water use as evenly as possible. For example:

(i) Do not do all the washing on one day, and

(ii) Do not run the washing machine and dishwasher at the same time.

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MAINTENANCE INSPECTION REQUIREMENTS

Once you know the details and operating capacity of your on-site wastewater system then you can check out the maintenance inspection and servicing requirements from the table below. Note that your system will include a distribution device to convey the treated effluent to each element of your land application system so as to provide uniform use of the soil in further treating the wastewater flow.

Treatment System Type	Inspection and Maintenance Requirements
Older style septic tank	• Pump out at 3-year intervals • Alternatively, check scum and sludge levels and pump out on demand (around half full of scum and sludge)
Modern septic tank with effluent outlet filter	• Check scum and sludge levels (2-yearly) and pump out on demand (around 6 to 8 years) • Check and hose down effluent outlet filter during pump out
Aerobic treatment unit (aerated system)	• Periodic effluent quality "sniff and look" inspection (6-months) • Check power consumption (3-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Septic tank/sand filter system	• Periodic effluent quality "sniff and look" inspection (6-months) • Confirm sand is draining satisfactorily and not clogging (12-months) • Replace upper sand layer if draining slowly (as required) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Packed bed reactor unit	• Periodic effluent quality "sniff and look" inspection (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)

Distribution System	Inspection and Maintenance Requirements
Gravity distribution box	• Check distribution evenly balanced to all outlets (12-months) • Remove any accumulated solids in base of box (12-months)
Flood load gravity dosing system	• Check distribution is evenly balanced to all outlets (12-months) • Remove any accumulated solids in base of dose chamber (12-months)

Siphon dosing system	• Check siphon operation (ensure system not dribbling following 'shut-off') (6-months) • Remove any accumulated solids in base of siphon chamber (6-months)
Pump chamber and manifold distribution to dosing lines	• Check pump start and stop level controllers (clean off grease and solids) (6-months) • Check pump power use (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Pump chamber and automatic sequencing valve distribution to dosing lines	• Check pump start and stop level controllers (clean off grease and solids) (6-months) • Check pump power use (6-months) • Check sequencing valve operation (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)

Land Application System Type	Inspection and Maintenance Requirements
Soakage trenches (or beds)	• Inspect soakage field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Check level of standing effluent in trenches using vent pipes for liquid depth observation (6-months) • Add extra trenches in reserve area if overload (wetness or flooded system) becomes apparent
ETS (evapo-transpiration seepage) beds (or trenches)	• Inspect space between ETS beds/trenches for signs of wetness, surface seepage and/or excess grass growth (12-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check level of standing effluent in beds/trenches using vent pipes for liquid depth observation (12-months) • Add extra beds/trenches in reserve area if overload (wetness or flooded system) becomes apparent
Mounds (for septic tank effluent)	• Inspect edges (toe) of mound for signs of wetness, surface seepage and/or excess grass growth (6-months) • Install and plant a 1 metre wide by 400mm deep topsoil layer around mound perimeter if toe seepage becomes apparent • Install extra mound in reserve area if toe seepage not

	managed by supplementary soil and ET plantings.
LPED (low pressure effluent distribution) irrigation field	• Inspect soakage field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check level of standing effluent in LPED trenches using vent pipes (6-months) • Add extra LPED trenches in reserve area if overload (wetness or flooded system) becomes apparent
Drip irrigation field	• Inspect irrigation field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check air release valves are operating effectively (6-months) • Operate irrigation line flush valves (6-months) • Add extra drip lines in reserve area if overload (wetness or flooded system) becomes apparent • Carryout service check at 6-months (as specified in the supplier/installer maintenance contract)
NOTE: Where your wastewater system is subject to a resource consent from your Regional Council, you should note and follow the maintenance conditions imposed by the consent.	

DIY MAINTENANCE TASKS

As homeowner (or occupier) there are several inspection and maintenance tasks which you can carry out yourself. However, you must remember at all times that you are dealing with unsanitary waste material which may potentially be infectious, and hence in handling equipment and effluent samples you must take adequate precautions to prevent contamination of yourself and your equipment.

The following simple tasks involve a common-sense approach to on-site wastewater system homeowner/occupier DIY inspection and maintenance requirements (see tables above).

- Check septic tank scum and sludge levels (organise pump-out if required).
- Check drainage lines for evidence of 'backup' (slow draining).
- If backup due to outlet filter blockage, lift and hose down filter into septic tank.
- Check distribution box for even distribution of flow to trenches.

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- Inspect land application system (trenches, beds, mounds, LPED and drip irrigation fields) for signs of wetness, seepage, excess grass growth.
- Carry out "sniff and look" assessment of advanced treatment plant effluent quality (if a glass container full of effluent does not appear cloudy, and smells only slightly musty and not offensive, effluent quality is good).
- Check treatment unit and pumping system power consumption (if increases over time, need system check by servicing personnel).
- Check operation of irrigation line flush valves.
- If need be, call in drainage contractor, servicing specialist or maintenance contract service provider to undertake servicing and/or remedial works.

Healthy worm activity in septic tank scum layer

Septic tank pump out

Backup to gully trap from clogged tank

Lifting and hosing down effluent outlet filter

Distribution box

Automatic sequencing valve

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SERVICING AGENT MAINTENANCE TASKS

If you as owner/occupier wish to have no role in maintaining your system, this is fine, but you will need to engage a drainage contractor, servicing specialist or maintenance contract service provider to undertake servicing and/or remedial works.

Even if you do carry out DIY maintenance tasks as outlined above engaging servicing personnel will be essential to carrying out mechanical and electrical servicing as well as specialist servicing tasks such as effluent quality sampling and testing. In addition, servicing specialists are best fitted to undertake tasks such as:

- Checking scum and sludge levels in tanks.
- Lifting and hosing down effluent outlet filters.
- Checking distribution effectiveness from distribution boxes and automatic sequencing valves.
- Checking power consumption and adjusting treatment plant controls and pumping cycles to achieve better efficiency.
- Checking distribution effectiveness and flushing drip irrigation lines.
- Undertaking remedial works and system extensions.

MAINTENANCE CERTIFICATE

Where a specialist servicing check is undertaken, including servicing under a maintenance contract, you should be provided with a maintenance certificate (see box below). This certificate should be filed away and provided as required to your District or Regional Council as proof of maintenance. This requirement may be a consent condition.

A maintenance certificate shall include (from AS/NZS 1547:2012)

(a) Certification by a qualified and experienced person that the on-site system is operating and performing effectively;

(b) A note of any specific operation and maintenance attention which is due;

(c) Identification of any operation and maintenance problems, their likely cause and recommended remedial action;

(d) Any evidence of system capacity being exceeded or likely to be exceeded (for example, by extra residents, or by holiday period occupiers);

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CONTACT DETAILS FOR ADVICE AND SERVICE

To find a wastewater servicing specialist, contact your local council, septic tank pump-out contractor, treatment plant supplier or plumbing/drainlaying company. Enter contact details/phone numbers in the boxes below of those persons whom you may need to call on at some stage to gain advice on issues related to operation, inspection and maintenance of your on-site wastewater system

System Designer	
Council On-site Wastewater Officer	
Maintenance Contract Servicing Agent	
Local Drainage Contractor	

Acknowledgements – Illustrations:

- Marlborough District Council
- US EPA Educational Materials
- Reflection Treatment Systems Ltd
- Ministry for the Environment
- Super-Treat NZ Ltd
- On-Site New Zealand
- North Dakota State University
- InspectAPedia
- Southeast Septic, USA
- Dola Transport, USA

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Appendix H – Test Pit Logs and Permeability Testing

Client: 2052 SH10 Waipapa Ltd Job: 26 067 Excavation Number: TP1 Logged by: TMA

Address: 2052 SH10 Waipapa Surface level:

Date of Test: 16.04.2026

Slope %: Flat Land form element: Surface conditions: dry (gravel sealed) Indicative drainage: moderate to slow

Surface stones: Gravel Ground cover: Gravel Watertable depth: >1.4 m bgl

Land surface notes: Parent material: BOI Volcanics

Layer	Lower depth (mm)	Horizon	Moisture conditions (see Note 2)	Colour (moist)	Field texture	Coarse fragments % volume	Structure (see Note 3)	Modified Emersion	Sample taken (Y/N)	Consistency (see Note 4)	Soil category	Other assessment
1	0.20	fill/gravel										
2	1.10	Natural	moist	red/brown	clayey silt	< 5%	weak to moderate	-	N	Firm	4	K_{sat} = 0.20
3												
4												
5												

NOTES:

1 Use another form if >5 layers on major horizons.

2 Dry, moist, very moist, saturated.

3 Apedal (no peds) Either single grain or massive. Pedal (observable peds) Weak, moderate or strong.

4 Strength – loose, very weak, weak, firm, very firm, strong, very strong, rigid. Stickiness (when wet) – non, slightly, moderately, very.

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Notes/comments/observations:

No ground water table at 1.1 m below GL

Site comprised sealed gravel yard

Test pit depth 0.55 m below ground level (seal) yarding.

Organisational details/Logo:

Overall soil category assigned: 4 - clay loams, weakly structured Maximum depth of system: 0.5 m below original ground level

Soil appears favourable for (list system types): soakage bed Checked by: John Papesch

SITE-AND-SOIL EVALUATION FORM - EXCAVATION LOG (FIGURE B1 1547:2012)

Client: 2052 SH10 Waipapa Ltd Job: 26 067 Excavation Number: TP2 Logged by: TMA

Address: 2052 SH10 Waipapa Surface level:

Date of Test: 16.04.2026

Slope %: Flat Land form element: Surface conditions: dry (gravel sealed) Indicative drainage: moderate to slow

Surface stones: Gravel Ground cover: Gravel Watertable depth: >1.4 m bgl

Land surface notes: Parent material: BOI Volcanics

Layer	Lower depth (mm)	Horizon	Moisture conditions (see Note 2)	Colour (moist)	Field texture	Coarse fragments % volume	Structure (see Note 3)	Modified Emersion	Sample taken (Y/N)	Consistency (see Note 4)	Soil category	Other assessment
1	0.20	fill/gravel										
2	1.40	Natural	moist	red/brown	clayey silt	<5%	weak to moderate	-	N	Firm	4	K_{sat} = 0.14
3												
4												
5												

NOTES:

1 Use another form if >5 layers on major horizons.

2 Dry, moist, very moist, saturated.

3 Apedal (no peds) Either single grain or massive. Pedal (observable peds) Weak, moderate or strong.

4 Strength – loose, very weak, weak, firm, very firm, strong, very strong, rigid. Stickiness (when wet) – non, slightly, moderately, very.

HAIGH WORKMAN LTD
Civil & Structural Engineers

Notes/comments/observations:

Following test the 100 mm hole was extended to 1.4 m bgl

No ground water table at 1.4 m below GL

Site comprised sealed gravel yard

Test pit depth 0.50 m below ground level (seal) yarding.

Organisational details/Logo:

Overall soil category assigned: 4 - clay loams, weakly structured Maximum depth of system: 0.5 m below original ground level

Soil appears favourable for (list system types): soakage bed Checked by: John Papesch

SITE-AND-SOIL EVALUATION FORM - EXCAVATION LOG (FIGURE B1 1547:2012)

Client: 2052 SH10 Waipapa Ltd Job: 26.067 Excavation Number: TP3 Logged by: TMA

Address: 2052 SH10 Waipapa Surface level:

Date of Test: 16.04.2026

Slope %: Flat Land form element: Surface conditions: dry (gravel sealed) Indicative drainage: moderate to slow

Surface stones: Gravel Ground cover: Gravel Watertable depth: >1.4 m bgl

Land surface notes: Parent material: BOI Volcanics

Layer	Lower depth (mm)	Horizon	Moisture conditions (see Note 2)	Colour (moist)	Field texture	Coarse fragments % volume	Structure (see Note 3)	Modified Emersion	Sample taken (Y/N)	Consistency (see Note 4)	Soil category	Other assessment
1	0.20	fill/gravel										
2	0.75	Natural	moist	red/brown	clayey silt	< 5%	weak to moderate	-	N	Firm	4	K_{sat} = 0.30/0.45
3	1.00	Natural	moist	red	silt	0	weak to moderate	-	N	Firm	4	K_{sat} = 0.30/0.45
4												
5												

NOTES:

1 Use another form if >5 layers on major horizons.

2 Dry, moist, very moist, saturated.

3 Apedal (no peds) Either single grain or massive. Pedal (observable peds) Weak, moderate or strong.

4 Strength – loose, very weak, weak, firm, very firm, strong, very strong, rigid. Stickiness (when wet) – non, slightly, moderately, very.

HAIGH WORKMAN LTD
Civil & Structural Engineers

Notes/comments/observations:

No ground water table at 1.4 m below GL

Site comprised sealed gravel yard

Test pit depth 0.50 m below ground level (seal) yarding.

Organisational details/Logo:

Overall soil category assigned: 4 - clay loams, weakly structured Maximum depth of system: 0.5 m below original ground level

Soil appears favourable for (list system types): soakage bed Checked by: John Papesch

SITE-AND-SOIL EVALUATION FORM - EXCAVATION LOG (FIGURE B1 1547:2012)

Test Pit 01 - 550 mm below ground level

Constant Head Permeability Test Results

HAIGH WORKMAN LTD
Civil & Structural Engineers

Job number:	26 067
Location:	2052 SH1 Waipapa
Client:	2052 SH1 Waipapa Ltd
Tested by:	TMA
Test No:	Test Pit 01 BH 01
Date tested:	16/04/2026

Depth of auger hole (cm)	49	
Depth of water in auger hole (cm)	49	
Average radius of auger hole (cm)	5	
Depth to any impermaeable layer		min >2xhole depth
Time elapsed between first filling and start of measurement	30 sec	
Soil moisture at time of excavation	moist	

Permeameter and time readings		
Time (s)	Level in tube (cm)	Velocity (cm/s)
0		
20	53	
40	51.2	0.09
60	49.5	0.09
80	48	0.08
100	46	0.10
120	44.5	0.08
140	43	0.08
160	41.5	0.08
180	40	0.08
200	39	0.05
220	37.5	0.08
240	36.5	0.05
260	34.5	0.10
280	33.5	0.05
300	32.5	0.05
320	31.5	0.05

average 0.07

Chosen infiltration velocity (cm/s)	0.07
Flowrate, Q (cm³/min)	63.86
Ksat (cm/min)	0.01
Ksat (m/day)	0.20

$$K_{sat} = \frac{4.4Q\left[0.5\sinh^{-1}\left(\frac{H}{2r}\right) - \sqrt{\left[\left(\frac{r}{H}\right)^2 + 0.25\right]} + \frac{r}{H}\right]}{2\pi H^2}$$

Test Pit 02 - 500 mm below ground level

Constant Head Permeability Test Results

HAIGH WORKMAN LTD
Civil & Structural Engineers

Job number:	26 067
Location:	2052 SH1 Waipapa
Client:	2052 SH1 Waipapa Ltd
Tested by:	TMA
Test No:	Test Pit 02 BH 01
Date tested:	16/04/2026

Depth of auger hole (cm)	56	
Depth of water in auger hole (cm)	56	
Average radius of auger hole (cm)	5	
Depth to any impermaeable layer		min >2xhole depth
Time elapsed between first filling and start of measurement	30 sec	
Soil moisture at time of excavation	Moist	

Permeameter and time readings		
Time (s)	Level in tube (cm)	Velocity (cm/s)
0		
20	44.5	
40	43.5	0.05
60	42	0.08
80	41	0.05
100	39.5	0.08
120	38.5	0.05
140	37	0.08
160	36	0.05
180	34.5	0.08
200	33	0.08
220	32	0.05
240	31	0.05
260	30	0.05
280	29	0.05
300	27.5	0.08
320	26.5	0.05

Average 0.06

Chosen infiltration velocity (cm/s)	0.06
Flowrate, Q (cm³/min)	54.74
Ksat (cm/min)	0.01
Ksat (m/day)	**0.14**

$$K_{sat} = \frac{4.4Q\left[0.5\sinh^{-1}\left(\frac{H}{2r}\right) - \sqrt{\left[\left(\frac{r}{H}\right)^2 + 0.25\right]} + \frac{r}{H}\right]}{2\pi H^2}$$

Phone: +64 9 407 8327 • Fax: +64 9 407 8378 • info@haighworkman.co.nz • www.haighworkman.co.nz
PO Box 89 • 6 Fairway Drive • Kerikeri 0245 • New Zealand

Test Pit 03 - 500 mm below ground level

Constant Head Permeability Test Results

HAIGH WORKMAN LTD
Civil & Structural Engineers

Job number:	26 067
Location:	2052 SH1 Waipapa
Client:	2052 SH1 Waipapa Ltd
Tested by:	TMA
Test No:	Test Pit 03 BH 01
Date tested:	16/04/2026

Depth of auger hole (cm)	50	
Depth of water in auger hole (cm)	50	
Average radius of auger hole (cm)	5	
Depth to any impermaeable layer		min >2xhole depth
Time elapsed between first filling and start of measurement	sec	
Soil moisture at time of excavation	Moist	

Permeameter and time readings		
Time (s)	Level in tube (cm)	Velocity (cm/s)
0		
20	39	
40	36	0.15
60	33.5	0.13
80	31	0.13
100	29	0.10
120	27	0.10
140	24.5	0.13
160	22.5	0.10
180	20	0.13
200	18	0.10
220	16	0.10
240	14	0.10
260	12	0.10
280	10	0.10
300	7.5	0.13

Average 0.11

Chosen infiltration velocity (cm/s)	0.11
Flowrate, Q (cm³/min)	100.36
Ksat (cm/min)	0.02
Ksat (m/day)	0.30

$$K_{sat} = \frac{4.4Q\left[0.5\sinh^{-1}\left(\frac{H}{2r}\right) - \sqrt{\left[\left(\frac{r}{H}\right)^2 + 0.25\right]} + \frac{r}{H}\right]}{2\pi H^2}$$

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Test Pit 03 - 500 mm below ground level

Constant Head Permeability Test Results

HAIGH WORKMAN Ltd
Civil & Structural Engineers

Job number:	26 067
Location:	2052 SH1 Waipapa
Client:	2052 SH1 Waipapa Ltd
Tested by:	TMA
Test No:	Test Pit 03 BH 02
Date tested:	16/04/2026

Depth of auger hole (cm)	53	
Depth of water in auger hole (cm)	53	
Average radius of auger hole (cm)	5	
Depth to any impermaeable layer		min >2xhole depth
Time elapsed between first filling and start of measurement	sec	
Soil moisture at time of excavation	Moist	

Permeameter and time readings

Time (s)	Level in tube (cm)	Velocity (cm/s)
0		
20	40.5	
40	36.5	0.20
60	32.5	0.20
80	29	0.18
100	26	0.15
120	22	0.20
140	18.5	0.18
160	15.5	0.15
180	12	0.18
200	8.5	0.18

Average 0.18

Chosen infiltration velocity (cm/s)	0.18
Flowrate, Q (cm³/min)	164.22
Ksat (cm/min)	0.03
Ksat (m/day)	0.45

$$K_{sat} = \frac{4.4Q\left[0.5\sinh^{-1}\left(\frac{H}{2r}\right) - \sqrt{\left[\left(\frac{r}{H}\right)^2 + 0.25\right]} + \frac{r}{H}\right]}{2\pi H^2}$$

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HAIGH WORKMAN Ltd
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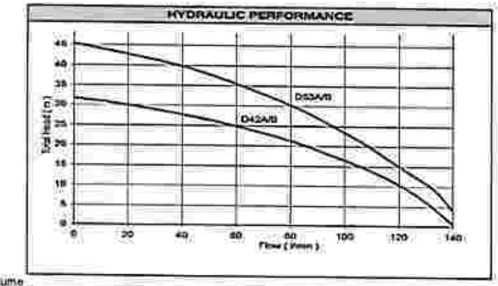
Appendix I – Soakage Bed Calculations

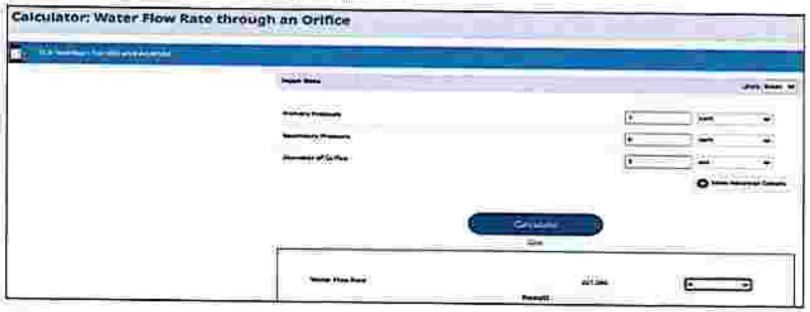
Disposal Bed Hydraulics Calculations

Job: 25 067
By: AT
Date: 30/4/25
Reviewed by: TMA

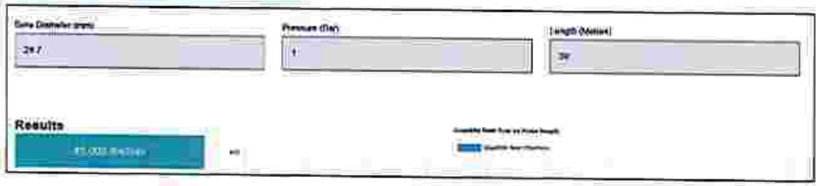
Elevation treatment plant to disposal	2	m	
Delivery pipe length	30	m	
Delivery pipe external dia.	32	mm	
Delivery pipe internal dia.	28.7	mm	
Required pressure at jets	10	m	
Delivery pipe losses (allow 10% of head)	1.2	m	
Delivery pipe total head	13.2	m	
Distribution pipe diameter	32	mm	
Number of distribution pipes (max. 1 per 1.5m width)	2		If >1 then use indexing valve
Distribution pipe length	15.5	m	
Number of jets (3mm ø) at max 1.5m spacing	9	per pipe, for two pipes per bed 18	
Each 3mm jet delivers 251L/hr or 4.2L/min	4.2	L/min	See calculator below
Total flow	75.6	L/min	
Dosing volume	300	L	
Dose delivery time	4.0	min	
Delivery pipe volume	12.5	L per pipe, for two pipes	24.9 i.e. 1/12 or 8% of pump out volume
Pump operating pressure	13.2	m	
Required pump flow rate	75.6	L/min	Use Davey D42A/B
Check delivery pipe flow rate capacity	45	L/min	See calculator below



https://toolbox.tlv.com/global/TI/calculator/water-flow-rate-through-orifice.html



https://www.copely.com/discover/tools/flow-rate-calculator/



3.0 PE80B Pipe Dimensions

Standard AS/NZS 4130

Dimensions
PE80B: SDR 33 - SDR 17

		PN4 SDR 33				PN5 SDR 26				PN6.3 SDR 21				PN8 SDR17			
Nominal Size	Mean OD	Mean Bore	T Min	T Max	Mass kg/m	Mean Bore	T Min	T Max	Mass kg/m	Mean Bore	T Min	T Max	Mass kg/m	Mean Bore	T Min	T Max	Mass kg/m
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

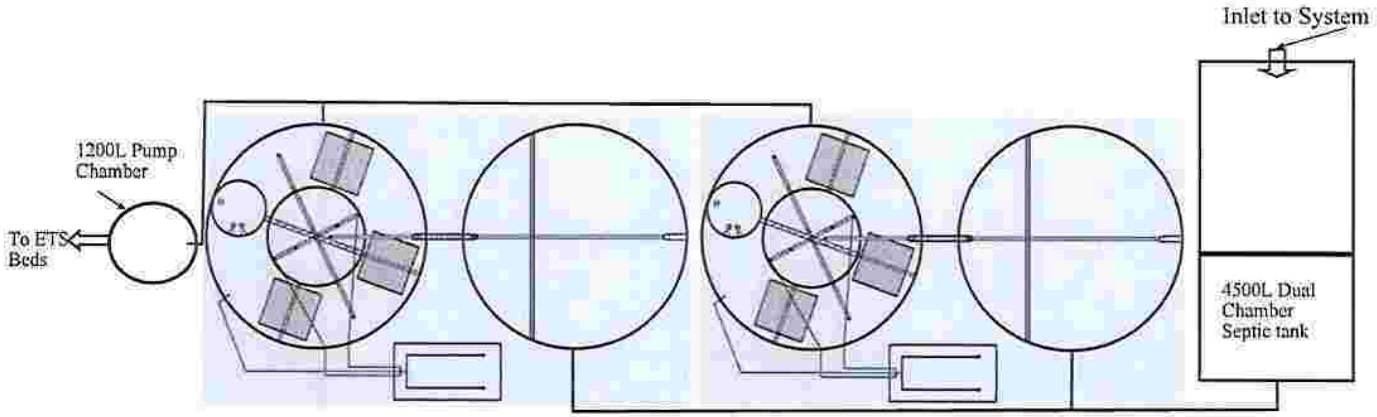
HAIGH WORKMAN LTD
Civil & Structural Engineers

Appendix J – TechTreat Treatment Plant Specifications

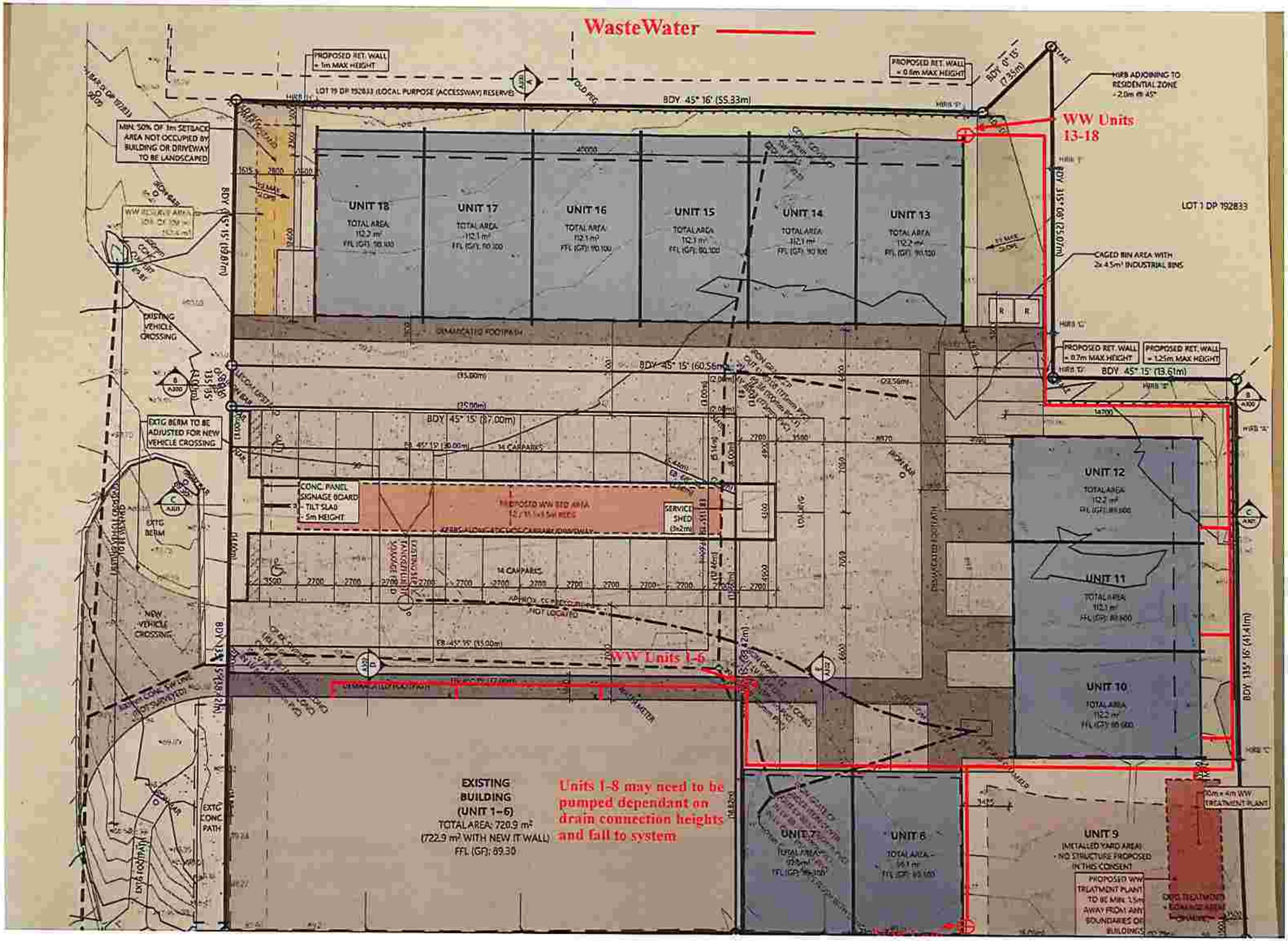
Specifications for TechTreat Advanced System 3000L/Day-Twin System

Process Description of System	Aerated submerged fixed film media Fine bubble aeration Textile packed bed reactor (external filter box)
Volumes • Total Operational Volume • Number of tanks • Total Liquid Volume • Emergency Storage	 3000 L/Day 5 (4 x Reln 3200L septic tanks and one TechTreat Pump Chamber 1200L) Additional 2 Textile Filter Boxes 13920L 3000L
2 Filters (AS/NZS 154 Standard) Primary septic tanks	Simtech STF 110 septic tank bristle filter
Aeration 2 Blowers Treatment Tanks • Make/Model • Run Time • kW • Power Usage	 Nitto LA80 18hrs/Day 0.086kW 86x18=1.548 kWh/day x2 = 3.096kWh/day
Recirculation	Sludge return from clarification to septic
Submersible Pump (Pump chamber) Trevoli EF30/Davey Sump Pump or similar • kW • Flow Rate • Run Time (based on max 4000L/Day) • Power Usage (based on max 4000L/Day)	 1.1kW 160L/minute 25mins/day 0.458kWh/day
Electrical Control & Alarms	Air & high water alarms (audio & visual) 10A Circuit Breaker

2052 SH10 Advanced Secondary Wastewater Treatment System 3000L/day with Additional 4500L Primary Treatment and Additional Storage



TechTreat Limited
1 Sammaree Place Kerikeri
Ph 0274472322
info@techtreat.co.nz


WasteWater
WW Units 13-18
WW Units 1-6
Units 1-8 may need to be pumped dependant on drain connection heights and fall to system
PROPOSED RET. WALL = 1m MAX HEIGHT
PROPOSED RET. WALL = 0.6m MAX HEIGHT
PROPOSED RET. WALL = 0.7m MAX HEIGHT
PROPOSED RET. WALL = 1.25m MAX HEIGHT
LOT 19 DP 192833 (LOCAL PURPOSE (ACCESSWAY) RESERVE)
BDY 45° 16' (55.33m)
HIRB ADJOINING TO RESIDENTIAL ZONE - 2.0m @ 45°
LOT 1 DP 192833
CAGED BIN AREA WITH 2x 4.5m³ INDUSTRIAL BINS
MIN. 50% OF 1m SETBACK AREA NOT OCCUPIED BY BUILDING OR DRIVEWAY TO BE LANDSCAPED
UNIT 18
TOTAL AREA: 112.2 m²
FFL (GF): 90.100
UNIT 17
TOTAL AREA: 112.1 m²
FFL (GF): 90.100
UNIT 16
TOTAL AREA: 112.1 m²
FFL (GF): 90.100
UNIT 15
TOTAL AREA: 112.1 m²
FFL (GF): 90.100
UNIT 14
TOTAL AREA: 112.1 m²
FFL (GF): 90.100
UNIT 13
TOTAL AREA: 112.2 m²
FFL (GF): 90.100
DEMARCATED FOOTPATH
EXISTING VEHICLE CROSSING
EXTG BERM TO BE ADJUSTED FOR NEW VEHICLE CROSSING
BDY 45° 15' (60.56m)
BDY 45° 15' (87.00m)
BDY 45° 15' (13.61m)
BDY 135° 16' (41.41m)
14 CARPARKS
CONC. PANEL SIGNAGE BOARD - TILT SLAB - 5m HEIGHT
PROPOSED WW BED AREA
SERVICE SHED (3x2m)
LOADING
EXISTING SEPTIC TANK/EFFLUENT SOAKAGE FIELD
UNIT 12
TOTAL AREA: 112.2 m²
FFL (GF): 89.600
UNIT 11
TOTAL AREA: 112.1 m²
FFL (GF): 89.600
UNIT 10
TOTAL AREA: 112.2 m²
FFL (GF): 89.600
NEW VEHICLE CROSSING
EXTG CONC PATH
EXISTING BUILDING (UNIT 1-6)
TOTAL AREA: 720.9 m²
(722.9 m² WITH NEW IT WALL)
FFL (GF): 89.30
UNIT 7
UNIT 8
UNIT 9
INSTALLED YARD AREA - NO STRUCTURE PROPOSED IN THIS CONSENT
PROPOSED WW TREATMENT PLANT TO BE MIN. 1.5m AWAY FROM ANY BOUNDARIES OR BUILDINGS
WW TREATMENT PLANT

ROTORUA LAKES COUNCIL

water NEW ZEALAND

Bay of Plenty REGIONAL COUNCIL

On-site Effluent Treatment National Testing Programme (OSET NTP)

Benchmark Ratings

The TechTreat TXT system achieved the following effluent quality ratings over the sixteen benchmarking results in weeks 20 to 35 (when operated at 1,000 Uday or 67% of the advised plants design capacity):

Indicator Parameters	Median	Std Oev	Rating	Rating System				
				A+	A	B	C	D
BOD (mg/L)	2	0.9	A+	<5	<10	<20	<30	230
TSS (mg/L)	2	1.4	A+	<5	<10	<20	<30	230
Total Nitrogen (mg/L)	13.5	14	A	<5	<15	<25	<30	230
NHr Nitrogen (mg/L)	2.1	3.5	A	<1	<5	<10	<20	220
Total phosphorus (ngg/L)	2.7	0.5	B	<1	<2	<5	<7	27
Faecal Conforms (cfu/100mL)	3,000	16,300	B	<10	<200	<10,000	<100,000	2100,000
Energy (kWh/d) (mean)	1.5	0.05	B	0	<1	<3	<5	25

This Certificate of Performance applies to the TechTreat TXT treatment plant with a rated capacity of 1,500 Uday as described in the 'System Tested' above.

This certificate is valid for 5 years from the date below. For the full OSET NTP report on the performance of The TechTreat TXT treatment plant comprising a submerged aerated filter (SAF) in series with a recirculating textile filter packed bed reactor (RTF) contact TechTreat Ltd, Dave Snowden,
Mobile 0274 472 322 or Email: techtreat@hotmail.com

Authorised By:

Ray Hedgland, Technical Manager, OSET NTP
20 December 2017

On-site Effluent Treatment National Testing Programme,
c/- Technical Manager 10 Tide Close, Mount Wellington, AUCKLAND 2013
Mob: 021626 772 E-mail: ray@hedgland.co.nz

HAIGH WORKMAN Ltd
Civil & Structural Engineers

Appendix K – Producer Statement PS1

PRODUCER STATEMENT–PS1
DESIGN

Building Code Clause(s):	G13	Job number: 26 067
ISSUED BY: *(Engineering Design Firm)*	Haigh Workman Limited	
TO: *(Client)*	2052 SH10 Waipapa Limited	
TO BE SUPPLIED TO: *(Building Consent Authority)*	Far North District Council	
IN RESPECT OF: *(Description of building work))*	On-Site Wastewater System	
AT: *(Address)*	2052 State Highway 10, Waipapa	
LEGAL DESCRIPTION	Lots 1 & 2 DP 203824 and Lot 2 DP 205437	

We have been engaged by 2052 SH10 Waipapa Limited (the client) to provide:

Design of an on-site wastewater system

in respect of the requirements of the Clause(s) of the Building Code specified above for part only, as specified in the attached Schedule, of the proposed building work.

The design carried out by Haigh Workman Limited has been prepared in accordance with:

✓ compliance documents issued by the Ministry of Business, Innovation & Employment (Verification method /acceptable solution): VM4

The proposed building work covered by this producer statement is described in the drawings specified in the attached Schedule, together with the specification, and other documents set out in the attached Schedule.

On behalf of Haigh Workman Limited, and subject to:

- site verification of the following design assumptions:
  - Site verification of the soil types
- all proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that:

- the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached Schedule, will comply with the relevant provisions of the Building Code specified above; and that
- the persons who have undertaken the design have the necessary competence to do so.

I recommend the CM2 level of construction monitoring.

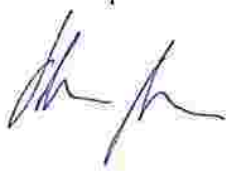
I, John Papesch, am:

- CPEng number 224301
- and hold the following qualifications: B.E.

Haigh Workman Limited holds a current policy of Professional Indemnity Insurance no less than $200,000.

✓ Haigh Workman Limited is a member of ACE New Zealand.

SIGNED BY: John Papesch

(Signature):  Date: 13/5/2026

ON BEHALF OF: Haigh Workman Limited

Note: This statement has been prepared solely for Far North District Council and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to Haigh Workman Limited only. As a condition of reliance on this statement, Far North District Council accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to Far North District Council in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

SCHEDULE TO PS1

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

- Construction Monitoring Schedule
- Engineering Calculations: Wastewater design report dated 5/5/2026

Limited Scope of Engagement

We have been engaged by 2052 SH10 Waipapa Limited to provide services in respect of the requirements of the Clause(s) of the Building Code specified above for the following parts of the proposed building work:

Design of an on-site wastewater system

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on either the ACE New Zealand or Engineering New Zealand websites.

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN: Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;
PS2 DESIGN REVIEW: Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;
PS3 CONSTRUCTION: Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 20112
PS4 CONSTRUCTION REVIEW: Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.
This must be accompanied by a statement of completion of building work (Schedule 6).
The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional

This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.
The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).
Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.
Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance

As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.
The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase

There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers3).
The BCA is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4

BCAs should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued. No design professional should be expected to provide a producer statement unless such a requirement forms part of Haigh Workman Ltd's engagement.

Refer Also:

1 Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2 NZIA Standard Conditions of Contract SCC 2011
3 Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4 PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org

CONSTRUCTION MONITORING SCHEDULE

SCHEDULE OF MONITORING FOR

Address: 2052 State Highway 10, Waipapa 0230

Job number: 26 067

We propose that at least the following site monitoring is undertaken to Engineering New Zealand/ACENZ CM2:

No.	Item of monitoring	Timeframe	To be monitored by
1.	Treatment plant	Tanks placed in excavation, all connections visible, prior to back filling	Building Consent Officer
2.	Soakage Bed	All on-site components installed, prior to covering	Building Consent Officer
3.	Soakage Bed	Confirmation of the soil type, before placement of aggregate	Engineer
4.	Soakage Bed	Inspection of the pipes laid in the bed, before covering over	Engineer

Appendix 7

Traffic Assessment Report

PROPOSED COMMERCIAL UNTS

2052 State Highway 10 | Waipapa

Transport Assessment Report

Prepared For: 2052 SH10 Waipapa Limited

Date of Issue: 27th May 2026

Contents

Quality Assurance & Version Management

Limitations:

This report has been prepared for the sole use of our client, 2052 SH10 Waipapa Limited, for the particular brief and on the terms and conditions agreed with our client. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or in any other contexts, without our prior written agreement. This report may not be read or reproduced except in its entirety.

This report has been prepared by Traffic Engineering & Management Ltd (TEAM) based on information provided by our Client, 2052 SH10 Waipapa Limited. TEAM have not independently verified the provided information and relied upon it as being accurate and suitable for use by TEAM in preparing this report. TEAM accepts no responsibility for errors or omissions in, or the currency or sufficiency of the provided information.

Quality Assurance

Prepared by:

Eric Hebner

Senior Associate

Version Management

Date	Revision
24/04/26	R0
27/05/26	R1

Traffic Engineering & Management Ltd
Level 2, 1b Buscomb Avenue, Henderson, Auckland
PO Box 21-803, Henderson, Auckland
09-836 3888
info@teamtraffic.co.nz

1. Introduction

Traffic Engineering & Management Ltd has been engaged by 2052 State Highway 10 Waipapa Limited Ltd to undertake a transport assessment of a proposed commercial unit development at 2052 State Highway 10 in Waipapa. The site is a 4,288m^2 commercial zoned property.

18 commercial units are proposed with each unit having a gross floor area of circa 100m^2.

The 18 proposed commercial units consists of an existing commercial building on the site that is to be redeveloped into 6 units with an extension for 2 more units, plus 2 new buildings developed for an additional 9 units and one vacant lot as a final 18th unit.

A central carpark area is proposed to accommodate 40 parking spaces, 2 loading spaces, rubbish storage area, demarcated footpaths, and a circulating manoeuvring aisle with 2 vehicle crossing accesses.

There is an existing large commercial vehicle crossing on State Highway 10 that serves the site and this is to be consolidated as an entry crossing, with a second vehicle crossing proposed as an exit crossing. This access arrangement minimises traffic effects to State Highway 10 and with an existing painted median on State Highway 10 traffic effects have been assessed to be minor and satisfactory.

This report considers:

- The existing traffic environment.
- The vehicle and pedestrian access arrangements.
- The parking, loading, and servicing arrangements.
- The traffic generated by the development.
- Motorist and pedestrian safety.
- Recognised engineering standards and guidelines including Far North District Council's district plan transport objectives, policies, rules and standards.

These and other transport matters are addressed in the details of this report.

2. Existing Site

The site is located at 2052 State Highway 10 in Waipapa and it is identified in the Figure 1 aerial photo. It is located at Waipapa's northern commercial/residential threshold.

Access is currently provided by a large commercial vehicle crossing on State Highway 10. To the south of the crossing towards Waipapa's commercial area State Highway 10 is kerbed on the subject site's side of State Highway 10 (eastern side). On all other sides of State Highway 10 there is no kerb.

Currently on the site is a commercial warehouse building, sheds and yard area.

Figure 1: Aerial photo of site

3. Existing Transport Environment

As can be seen in Figure 1 the site's location is on Waipapa's northern commercial/residential threshold. Larger industrial and commercial activities are located further to the south, and further to the north is rural.

The adjacent land uses, as shown in Figure 1, includes a superette, café, food takeways, and petrol station to the south, modular home factory to the west, and residential houses to the north and east.

3.1 Traffic and Roading Characteristics

The site has its only access on State Highway 10, which is a key regional north-south route and as such accommodates moderate traffic volume, which is recorded in mobileroad.org to be 5,760 vehicles per day. This volume correlates with the State highway traffic monitoring sites to the north and south along State Highway 10 that records a higher volume to the south, and lower volume to the north, with comparable heavy vehicle percentages of circa 7%.

To accommodate this traffic volume State Highway 10's carriageway width adjacent to the site is 11 metres consisting of one traffic lane in each direction separated by a painted median. The speed limit is 70km/hr.

The site's existing access consists of a large asphalt sealed vehicle crossing that is 10 metres wide at the property boundary. This access has been operating well with no known traffic issues and this is to be expected given its large size, painted median and clear sightlines.

The historical traffic volume accessing the site based on its previous commercial activities is estimated to range up to a maximum of 300 vehicles per day.

Sight distance measured from the site's access is clear south to the roundabout with Waipapa Road 125 metres away, and unrestricted to the north in excess of 200 metres sight distance. These sight distances satisfy the Austroads Safe Intersection Sight Distance (SISD) criteria with consideration of slower speed for traffic approaching from the roundabout to the south[1].

3.2 Road Safety

A study has been made of the traffic accident record maintained by the New Zealand Transport Agency (NZTA) for the five-year period 2021 to 2026 inclusive.

The searched area covered an area of 50 metres either side of the site's access on State Highway 10. 1 minor injury accident was recorded, refer to Figure 2 for the search area and location of the recorded accident.

The recorded accident involved a cyclist passing traffic queued at the Waipapa roundabout and a motorist turned right through the queue into a superette carpark without giving way to the cyclist.

This is a common type of accident where there is queued traffic, property access and cyclists present. The accident record does not raise significant concerns with regard to the current traffic operation in the vicinity of the site site's access or the proposal as assessed in more detail in the following sections of this report.

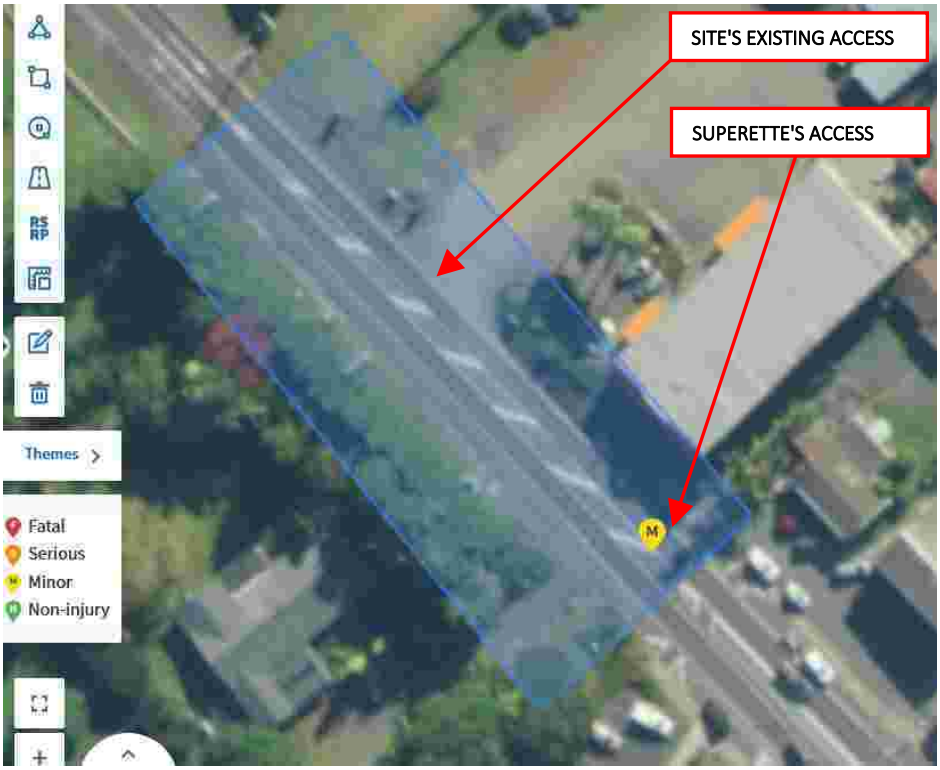
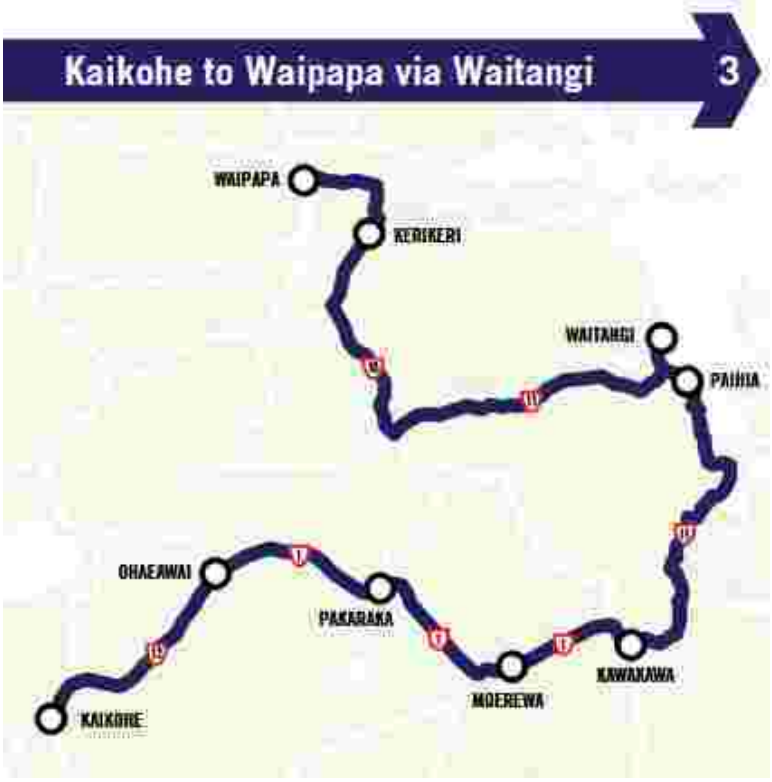


Figure 2: Traffic accident history location

[1] Guide to Road Design Part 4A Table 3.2, 151 metres at 70km/hr, 2 second reaction time.

3.3 Passenger Transport

The available bus routes to the site are 2 district routes identified in Figure 2 and Figure 3 that operate on a Tuesday and a Thursday with 1 outbound route in the morning and 1 inbound route in the afternoon.



3 : Kaikohe to Waipapa via Waitangi (Morning - AM)	
TUESDAY AND THURSDAY	
Depart Kaikohe (Kaikohe Bus Company, 3 Mangakahia Road) (Transfer from Hokianga Link here to Paihia and Waitangi)	10:00
Ohaeawai (Te Corner)	10:10
Moerewa Town Centre (between BP and shops)	10:20
Kawakawa (Bus stop outside Community Link) (Hospital and InterCity stops by prior arrangement)	10:30
Opua (Opua General Store)	10:50
Paihia (Ferry Terminal Building)	11:00
Waitangi (Waitangi Treaty Grounds) (PLEASE: No smoking on Treaty Grounds)	11:05
Kerikeri (Cobham Road bus stop)	11:45
Arrive Waipapa Klinac Lane	12:00

3 : Waipapa to Kaikohe via Waitangi (Afternoon - PM)	
TUESDAY AND THURSDAY	
Depart Waipapa (Klinac Lane)	1:45
Kerikeri (Cobham Road bus stop)	2:00
Waitangi (Waitangi Treaty Grounds) (PLEASE: No smoking on Treaty Grounds)	2:25
Paihia (Ferry Terminal Building)	2:30
Opua (Opua General Store)	2:45
Kawakawa (Bus stop opposite Community Link)	2:55
Moerewa (Town Centre, Plunket Street)	3:05
Ohaeawai (Te Corner)	3:15
Arrive Kaikohe (Kaikohe Bus Company, 3 Mangakahia Road)	3:25

Figure 3: Bus Route

2 : Kaikohe to Kerikeri/Waipapa (Morning - AM)	
TUESDAY AND THURSDAY	
Depart Kaikohe (Kaikohe Bus Company, 3 Mangakahia Road) (Transfer from Hokianga Link here to Kerikeri)	10:00
Okaihau Hall	10:10
Kerikeri (Cobham Road bus stop)	10:30
Arrive Waipapa (Klinac Lane)	10:45

2 : Kerikeri/Waipapa to Kaikohe (Afternoon - PM)	
TUESDAY AND THURSDAY	
Depart Waipapa (Klinac Lane)	1:00
Kerikeri (Cobham Road bus stop) (To Kaikohe via Wairoa Road past airport)	1:30
Okaihau Hall	1:55

Figure 4: Bus Route

3.4 Pedestrian Amenity

Footpath is provided on the site's side of State Highway 10 connecting the site to the commercial areas of Waipapa to the south. There is a public walkway along the site's northern boundary connecting State Highway 10 to the residential street of Mawson Ave.

3.5 Cycling Amenity

Cycling is possible for confident cyclists on State Highway 10 with its wide traffic lanes and marked road shoulder on the western side. The site's vicinity to the nearest existing and proposed cycleways and shared paths is shown in Figure 4.

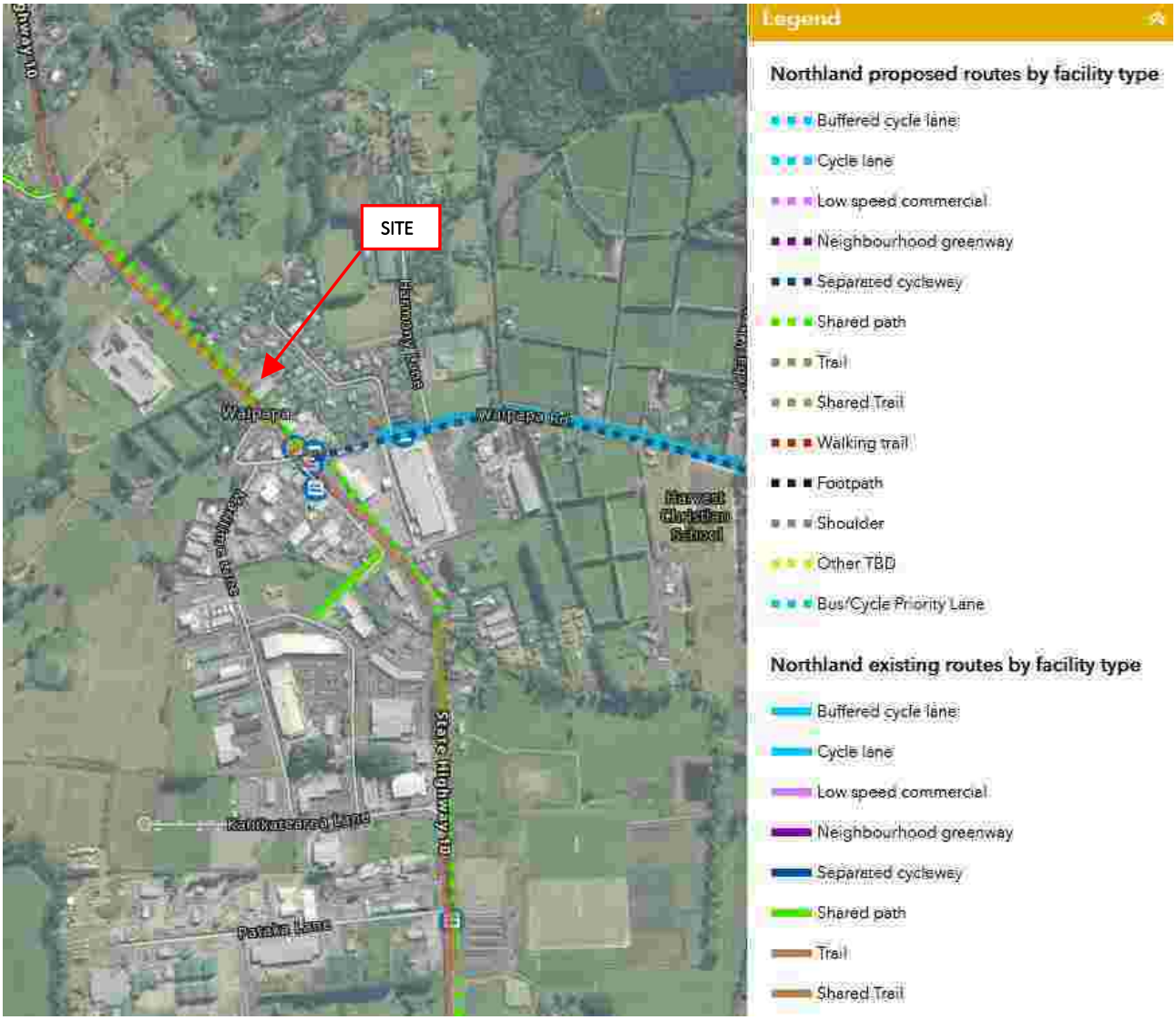


Figure 5: Existing and proposed cycling routes in the area

4. The Proposal

The proposal is to develop 18 commercial units that are all generally the same size of 100m^2 The total gross floor area proposed is 1,925m^2, refer to Figure 6 for the proposed site plan. 1 of the units is proposed as a metalled yard area in the south-eastern corner of the site. The types of activities envisaged in the units are a range of small commercial, light industrial and warehouse/storage businesses.

The transport attributes of the proposal include:

- 2 vehicle crossings proposed that can operate as a separate entry and exit.
- A circulating manoeuvring aisle connecting to both proposed vehicle crossings and all units.
- 40 parking spaces.
- 2 loading spaces.
- Rubbish storage area.
- Demarcated footpath leading to each unit.

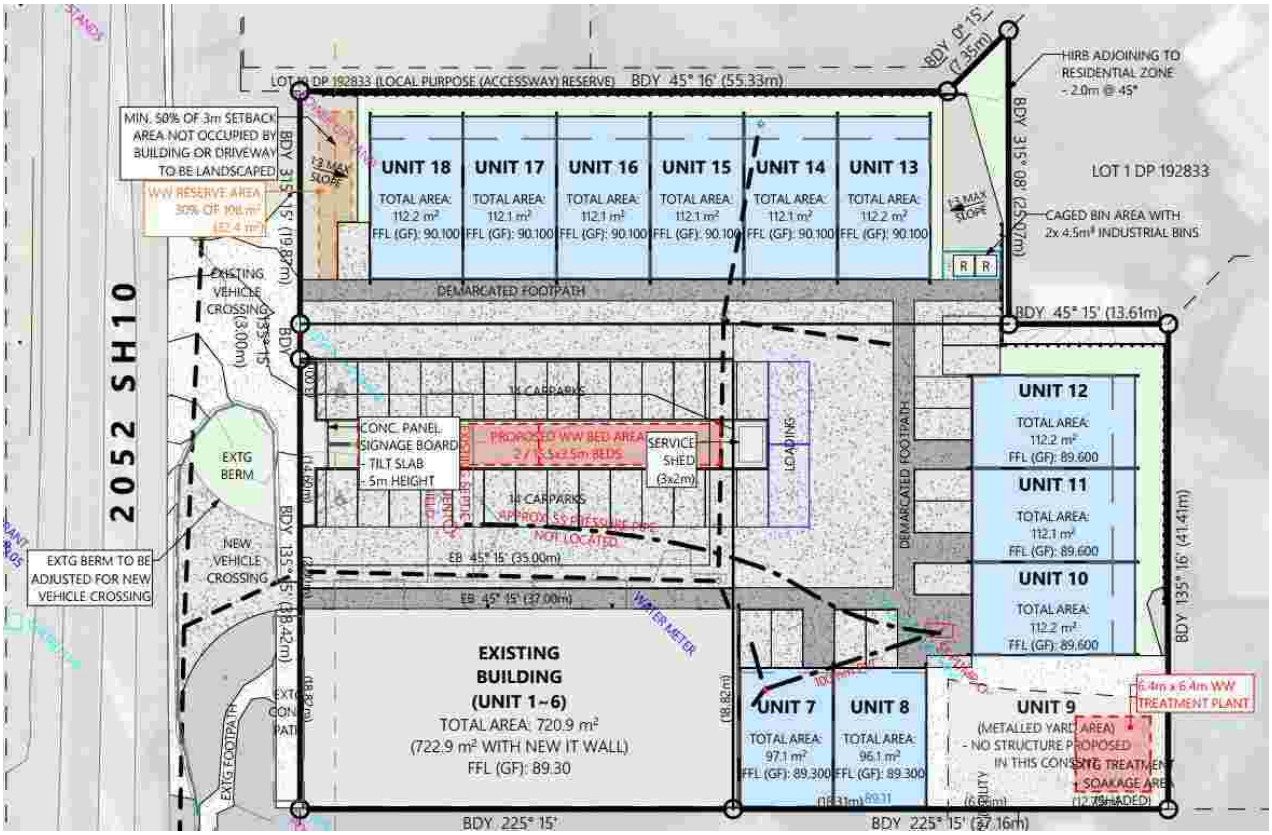


Figure 6: Proposed site plan

4.1 Access

4.1.1 Vehicle Access

As can be seen in the Figure 6 site plan, the proposed access arrangement consists of 2 vehicle crossings that can operate as a separated entry and exit. Entry is envisaged at the northern existing vehicle crossing, and exit is envisaged at a proposed new vehicle crossing located 10 metres to the south.

Standard 'ENTRY' and 'NO ENTRY' signs together with arrow markings within the site can manage a separated entry and exit arrangement, and it is considered to be an ideal arrangement to minimise delays, avoid conflicts, and minimise traffic effects to State Highway 10.

The proposed separated vehicle crossings are connected by a circulating manoeuvring aisle within the site. The majority of parking spaces are on one side of the manoeuvring aisle and the commercial units with each having roller door loading access are on the other side.

With the largest vehicle accessing the site anticipated to be an 11.5 metre long large rigid truck[2], the proposed vehicle crossings have specific engineering design (SED) in terms of corner radii and taper to accommodate the swept path of this vehicle, refer to tracking for this truck demonstrated in Figure 6.

The proposed access design aligns with the access specifications in the New Zealand Transport Agency's Planning Policy Manual 'Access onto the state highway from private property' document[3].

Figure 7: Large rigid truck tracking at the site's proposed separated entry and exit vehicle crossings

4.1.2 Pedestrian & Cyclist Access

A 1.8 metre wide demarcated footpath is proposed in the circulating manoeuvring that provides a connection to each commercial unit, refer to this illustrated in the Figure 7 artist rendering.

[2] RTS18 design truck, which is comparable to the Far North District Council's Appendix 3E 'Vehicle Tracking Curves' Heavy Rigid Vehicle

[3] Access Type C , 9 metre corner radii. Access Type E, 15 metre corner radii and 1:10 taper.

Figure 8: Artist rendering showing demarcated footpath

The demarcated footpath emphasises to site motorists that pedestrians are present and to give them priority whilst also directing pedestrians away from vehicle circulation areas. With the footpath being demarcated and flush it does not compromise loading access for each unit's roller door.

The demarcated footpath connects to the existing street on State Highway 10 that leads into Waipapa. Cyclists can use the site's proposed vehicle crossings for access.

4.2 Parking

There are 40 onsite car parking spaces proposed. The parking space dimensions are standard 5 metre long by 2.7 metre wide spaces with a minimum manoeuvring depth of 6.6 metres (inclusive of demarcated footpath). These dimensions satisfy the Far North District Council's engineering design standards[4], which references the building code standard NZS2890 'Off-street parking'.

The NZS2890 user class for these dimensions allow full door opening and are generously sized parking spaces to facilitate loading activities. They also satisfy the District Plan Appendix 3D 'Manoeuvring and Parking Space Dimensions' for casual user parking spaces.

Refer to Figure 7 demonstrating 85th percentile car tracking for a range of the proposed parking spaces. This car is comparable to the Far North District Council's 85th percentile motor car[5]

[4] 3.2.15. Parking and Manoeuvring 3.2.15.2 Off Road Parking

[5] NZS2890 design car, which is comparable to the Far North District Council's Appendix 3E 'Vehicle Tracking Curves' 85 percentile motor car

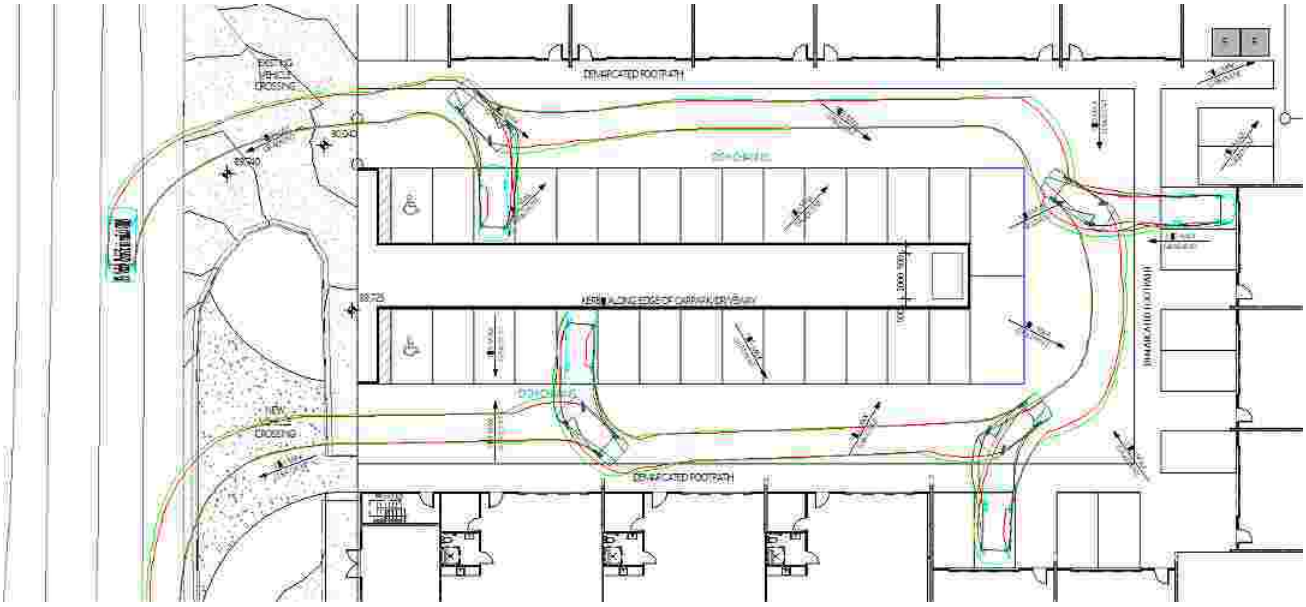


Figure 9: 85th Percentile car tracking

Bicycle parking can be accommodated within each commercial unit when required without issue.

4.2.1 Accessible Parking Requirements

The building code's NZS4121 standard requires accessible parking at the rates listed in Table 1. This is the same as that specified in Far North District Council's District Plan[6].

Table 1: Accessible Parking Requirements

Total number of parking spaces	Number of accessible parking spaces
1-20	Not less than 1
21-50	Not less than 2
For every additional 50 parking spaces	Not less than 1

With 40 parking spaces proposed, not less than 2 parking spaces are required to be accessible parking spaces.

2 accessible parking spaces are proposed with compliant 3.5 metre width. On this basis, NZS4121's accessible parking space standards are satisfied.

4.2.2 Parking Spaces Required

The Operative Far North District Plan does not have minimum carparking requirements. As a guide to the expected parking demand the previous version of the District Plan required parking for commercial premises to be provided at a rate of 1 space per 40m^2 of Gross Business Area (GBA)[7]. With a proposed GBA of 1,925m^2 demand is expected to be in the order of 48 parking spaces, and with 40 parking spaces proposed this is a practical number to accommodate staff and visitor parking onsite in a managed manner to avoid adverse parking effects.

4.2.3 Loading Spaces Required

The Far North District Plan requires 2 loading spaces for activities established within a commercial zone having a Gross Building Area (GBA) of between 500m^2 and 5,000m^2. The proposal has a GBA of 1,925m^2 and 2 loading spaces are

[6] 15.16B.1.4 Accessible Car Parking Spaces

[7] Appendix 3C 'Parking Spaces required'

proposed that are suitably sized to accommodate 2 medium rigid trucks or 1 large rigid truck. Refer to the truck tracking in Figure 10 demonstrating parking in the proposed loading spaces.

Further assessment of truck servicing and loading is provided in Section 4.4.

Figure 10: Medium rigid truck tracking

4.2.4 Carpark Gradients

The proposed access, manoeuvring corridor, and parking space gradients are a gentle maximum of 5% (1 vertical by 20 horizontal), which is suitable for the intended commercial use and satisfies the building code's NZS2890 specifications[8]. The accessible parking spaces have a maximum gradient of 4% (1 vertical by 25 horizontal), which satisfies the building code's NZS4121 specifications.

4.3 Traffic Generation

To determine the anticipated traffic generation of the development, reference has been made to the New Zealand transport Agency's Research Report 453 'Trips and parking Related to Land Use' document[9] that provides comprehensive traffic generation information regarding warehousing, contractor and manufacture activities.

The more conservative 85th percentile data set has been considered as detailed in Table 2.

The proposed development is considered to comprise an even mix of these activities, and on this basis the average of the rates provided has been considered. These rates are shown in Table 3 below.

Table 2: Traffic Generation Rates

Weekday Rates	Warehousing	Contractor	Manufacture	Average Rate
Peak hour (1 hour) vehicle trips/100m² GBA	1.0 trips/100m² GBA	6.2 trips/100m² GBA	2.7 trips/100m²	3.3 trips/100 GBA

[8] 2.4.6 Gradients within parking modules

[9] Table C.1 New Zealand trip generation and parking demand

Daily vehicle trips/unit	2.4 trips/100m^2 GBA	Not available	30 trips/100m^2	16.2 trips/100 GBA

Application of these average rates to the proposed total 1,925m^2 GBA results in the Table 3 number of vehicle movements associated with the development.

Table 3: Traffic Generation Estimates

Time Period	Average Rate	Trips
Peak hour	3.3 trips/hour/100m^2	64 trips/hour
Daily	16.2 trips/day/100m^2	312 trips/day

This number of trips is relatively low from a traffic engineering perspective and relates to on average one trip every 1 minute in the peak hours, and this level of traffic movement can be accommodated without adversely impacting the function of State Highway 10 given that the access has a separated entry and exit, there is a painted median on State Highway 10, and there is sufficient time between site traffic movements to avoid queuing and delays.

Compared to the Far North District Council's traffic intensity factor[10] for commercial activities, which is 10 trips per 100m^2 GBA, the daily traffic intensity is 192. This traffic intensity is a permitted activity in accordance with the District Plan threshold values[11].

Overall, the traffic generation for the proposal is satisfactory form a traffic engineering perspective.

4.4 Fire Appliance Access, Loading & Servicing

The Building Code C/AS1 document requires commercial developments to provide fire appliance access to within 75 metres of any point in any unit contained within the building except if there is a sprinkler system. If there is a sprinkler system access to within 20 metres to the sprinkler system inlets is needed.

It is not known if a sprinkler system will be used or not, but irrespective of this a fire appliance truck can gain access next to all units via the circulating manoeuvring aisle.

An onsite rubbish storage area is proposed that can accommodate a variety of private waste bins that can be wheeled to the site's 2 allocated loading spaces for collection by a private contractor.

The design of each units loading doors allow for a medium rigid truck to access the units, refer to the truck tracking in Figure 11 that demonstrates this.

[10] Appendix 3A- Traffic Intensity Factor

[11] 15.1.6A.1 Maximum Daily One Way Traffic Movements' for commercial zone is 200.

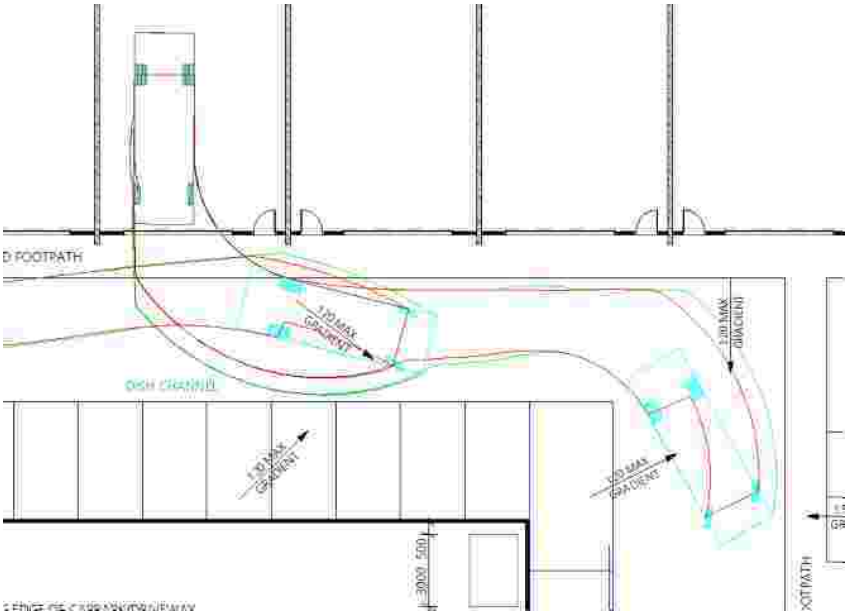


Figure 11: Medium rigid truck tracking

In summary, the proposed fire appliance access and servicing arrangements for the site are acceptable for the intended use.

4.5 Construction Traffic Management Plan

It is standard practice that the applicant is to submit a Construction Traffic Management Plan (CTMP) so that any potential adverse effects of construction traffic will be mitigated. The CTMP is to be approved by Council and this requirement should be included in the conditions of consent. In this case the CTMP will likely be developed by the contractors as they will have the best information with regards to the staging of the development.

The CTMP needs to address how deliveries would be made to the site, the location of loading areas (such as any temporary use of the on-street traffic lane), how heavy or over dimension vehicles would be brought to and removed from the site, etc.

The CTMP should include details (among other general issues listed in the standard CTMP list) of hours of operation, location of parking for workers or sub-contractors who need to have their vehicles on or close to the site, when vehicles would be able to use the roadway to load or unload (if at all), wheel washing, maintenance of pedestrian access, adequate signage and ensuring that access to neighbouring properties is not compromised.

Overall, the provision of an appropriate CTMP will ensure that details of the construction traffic are carefully considered, and the effects mitigated.

Given the good site access arrangements available for construction traffic and the good connectivity to the surrounding arterial network, there is not expected to be any issues in this regard.

5. Conclusions

The proposed 18 unit commercial development has been assessed in regard to its traffic arrangements, which includes assessment of its vehicle access, traffic generation, parking, loading and pedestrian/cycling amenity. Where relevant an assessment against the Far North District Council's engineering standards and District Plan transport rules have also been completed.

In considering each of these aspects there are no adverse traffic impacts highlighted that are cause for concern from a transport engineering perspective.

The vehicle access arrangements provided by a separate entry and exit vehicle crossing are able to safely accommodate the expected volume and type of traffic generated by the commercial development without adversely affecting the functioning and safety of State Highway 10.

The on-site parking provisions provide a practical supply of parking that allows parking to be managed onsite for staff and visitors and avoid adverse parking effects.

Truck loading and servicing arrangements have been assessed to be suitable for the envisaged commercial use.

The pedestrian access arrangement provided by a demarcated footpath connects all units to the street footpath network to provide safe pedestrian access.

Overall, the proposal is satisfactory from a transport engineering perspective and aligns with the Far North District Council's transport objectives, policies, rules and standards.

TRAFFIC ENGINEERING & MANAGEMENT LIMITED

NZ +64 9 836 3888 | info@teamtraffic.co.nz | www.teamtraffic.co.nz

Level 3, 1B Buscomb Avenue,

Henderson 0610, Auckland

PO Box 21-803, Henderson 0650,

Auckland

Appendix 8

Consultation with NZTA

THOMSON SURVEY LIMITED

SURVEYORS AND RESOURCE PLANNERS

Our Reference: 10886.NZTA

4 June 2026

NZ Transport Agency
Waka Kotahi
Private Bag 106602
AUCKLAND 1143

Dear Sir/Madam

RE: 2052 SH 10, Waipapa - Proposed subdivision of land zoned Commercial currently held in three titles – P Vegar

I am pleased to submit application on behalf of P Vegar for subdivision of land at 2052 SH 10, Waipapa. The application site is zoned Commercial under the Operative District Plan and Mixed Use (commercial and residential) under the Proposed District Plan which will soon have legal effect alongside the Operative District Plan.

The land to be subdivided is currently in three separate titles, all held together under the Building Act such that they cannot be disposed of separately, due to historic building consents for structures crossing boundaries. That restriction will be removed in order to give effect to the proposed subdivision as there will no longer be any buildings over boundaries.

A copy of the proposed scheme plan is attached. It shows a total of 16 lots, with each having an equal share of the large 'common' Lot 17, which will provide for parking and internal traffic circulation.

The application site currently has two registered / authorised Crossing Places – CP56A, registered on Record of Title NA131A/749 and NA131A/750; and CP57B, registered on NA132C/411. Copies of both CP notices are attached.

CP56A is authorised for Commercial Use whereas CP57B is authorised for Residential Use. My understanding is the crossings are immediately adjacent one another such that currently there appears one physical (very wide) two-way crossing into / out of the application site.

This application is supported by a Traffic Assessment Report and preliminary design drawings of the new proposed access /exit arrangement.

315 Kerikeri Road, Kerikeri
P.O. Box 372, Kerikeri 0245, New Zealand.
Email: Kerikeri@tsurvey.co.nz
denis@tsurvey.co.nz, sam@tsurvey.co.nz

Telephone: **09 4077360**
Facsimile: **09 4077322**
After Hours: Director: Denis Thomson 09 4071372
After Hours: Office Manager: Sam Lee 021 1370060

The Proposal

The client proposes to convert the application land into commercial units, within their own freehold titles, each owning a portion of a central lot accommodating parking, manouevring and circulation for vehicles, and services. Refer to supporting plans and documents.

The types of businesses envisaged are a range of small commercial, light industrial and warehouse/storage businesses.

The transport attributes of the proposal include:

- Two replacement (and separate) vehicle crossings to replace the existing side by side crossings, intended to operate as separate entry and exit crossings;
- A circulating manoeuvring aisle connecting vehicle crossings, internal circulation and proposed lots;
- Capacity for 40 parking spaces;
- Capacity for 2 loading spaces;
- Rubbish storage areas; and
- Demarcated footpath leading to each lot/unit.

The northern crossing is proposed as the 'entry' crossing, with the southern crossing as the 'exit' crossing. Signage will be required making vehicle users well aware of the flow.

The Traffic Assessment Report supporting this application contains more details. It concludes that there are no adverse traffic impacts highlighted that are cause for concern from a transport engineering perspective and that the proposed crossing arrangement is able to safely accommodate the expected volume and type of traffic to be generated by the commercial development.

The applicant would appreciate NZTA's consideration of this proposal.

Regards

Lynley Newport
Senior Planner
THOMSON SURVEY LTD

Attachments:

1. Scheme Plan
2. Records of Title
3. CP's
4. Traffic Assessment Report
5. Plans of proposed crossing arrangement

lynley@tsurvey.co.nz

From: Tessa Robins <Tessa.Robins1@nzta.govt.nz>
Sent: Wednesday, 24 June 2026 9:30 am
To: Lynley Newport
Subject: Re: 2052 State Highway 10, Waipapa - Application-2026-0692 CRM:0503000537

Kia ora Lynley,

Thank you for being patient while NZTA reviewed your client's proposed commercial subdivision and land use. NZTA has reviewed the proposal and determined that conditions would mitigate potential effects on State Highway 10. These conditions will need to be volunteered in writing to Council, so they become a substantive part of the resource consent application prior to written approval being provided by NZTA.

Our assessment has considered the following:

- The proposed subdivision will result in three existing record of titles being subdivided into 16 freehold lots with one shared JOAL.

- This section of State Highway 10 is a limited access road with two existing crossing places authorised for the subject site - CP's 56A and 57B. They have been authorised as separate crossings but have been constructed as on larger joint crossing. This crossing will no longer exist following the subdivision and land use consent being implemented.

- Two separate vehicle crossings have been proposed as an entry and exit only flow. Each crossing will require a new Section 91 notice to be imposed on the record of title and allocated new references - CPs 56B and 57C.

- The proposed traffic generation for the site is 312 vehicles per day, with 64 peak hour movements. This is not dissimilar from the existing commercial activity operating on site.

- NZTA considers the proposed vehicle crossings and transport generation to be appropriate in this environment, subject to compliance with the conditions below. Please note this is an urban section of the state highway, and the inspection of the vehicle crossing will be undertaken by the District Council; approval of the design and a CAR is still required from NZTA.

Conditions:

1. The existing vehicle crossing (NZTA ref. 56A and 57B) located at approx. 1683410.9701, 6103806.9914 shall be permanently closed, including reinstatement of any fence line, grassed areas, berm, highway drainage or kerb. Reinstatement works shall be consistent with the adjacent road reserve treatment, to the satisfaction of the New Zealand Transport Agency Network Manager.
2. The proposed vehicle crossings (NZTA ref. 56B and 57C) shall be constructed in general accordance with the plans prepared by Haigh Workman Ltd titled "DWG ACCESS", Dwg No. RDP01 dated 18/05/2026.
3. Prior to undertaking works in the road reserve, detailed design drawings must be provided to and approved by the NZ Transport Agency that demonstrate any proposed changes to the existing kerb and channel.

4. Prior to the issuing of a certificate pursuant to Section 224(c) of the Resource Management Act 1991, the consent holder shall provide to Council confirmation that the New Zealand Transport Agency has been advised of relevant similar documentation (such as: draft LT (Land Transfer) plan, ML plan (for Māori Land), SO (Survey Office) plan), to facilitate the registration of any new Crossing Place (CP) Notices against those new titles, under Section 91 of the Government Roading Powers Act 1989.

Please consider the above and, if your client agrees, please amend your resource consent application to include the above conditions and provide a copy of this revised consent application to NZTA; or volunteer these conditions to council requesting that the conditions are included in the application as an addendum to the application and provide a copy of this request to NZTA.

Upon receiving your revised application or email confirming that you have volunteered the above conditions to council; NZTA will continue to process the application with a view to providing S95E approval (subject to delegated authority).

If you have any queries regarding the above, please feel free to contact me via the details below.

Ngā mihi

Tessa Robins

Consultant Planner

Te Toki, System Design, Transport Services

Email: Tessa.Robins1@nzta.govt.nz

Mobile: 022 377 8812

From: Tessa Robins <Tessa.Robins1@nzta.govt.nz>
Sent: Thursday, June 11, 2026 8:34 AM
To: Lynley Newport <lynley@tsurvey.co.nz>
Subject: 2052 State Highway 10, Waipapa - Application-2026-0692 CRM:0503000537

Kia ora Lynley,

Thank you for sending through your client's proposed subdivision for NZTA comment.

I have had an initial review and have no immediate questions. I have sent the proposal to the relevant specialists and will be in touch if they have any questions in the first instance.

Ngā mihi

Tessa Robins
Consultant Planner
Te Toki, System Design, Transport Services
Email: Tessa.Robins1@nzta.govt.nz

Appendix 9

Fire Report

Fire Engineering Report

JOB NUMBER: 26-0605

WAIPAPA DEVELOPMENT – LOTS 1-6

PROJECT

2052 SH10 WAIPAPA LTD

CLIENT

BUILDING CONSENT – Rev 2

25 June 2026

Fire Engineering Report

Waipapa Development – Lots 1-6 **2052 State Highway 10, Waipapa**

Prepared for: 2052 SH10 Waipapa Ltd
Project status: Building Consent

Date: 25/06/26
Project no: 26-0605

Revision: 2

Prepared by:

Jeff Cai
Fire Engineer
BE(Hons), MEngSt(Fire)
BCD Group Ltd

Reviewed and approved for release by:

Cameron Johnson
Fire Engineer
CPEng, CMEngNZ
BE(Hons), MEngSt(Fire)
BCD Group Ltd

CONTENTS

Revision	Date	Authors	Status / Comments
1	24/06/26	JC / CJ	Building Consent
2	25/06/26	JC / CJ	Amendment following coordination. Building Consent

1. EXECUTIVE SUMMARY

BCD Group Limited has been engaged to provide fire engineering design services for the commercial unit development at 2052 State Highway 10, Waipapa.

The fire engineering design documentation details the requirements to the extent required by Sections 17 & 112 of the Building Act. The documentation includes assessing existing building features / systems, as required by Section 112 on an 'as nearly as is reasonably practicable (ANARP) basis.

This executive summary details key required works resulting from the fire engineering design documentation. It is the readers' responsibility to ensure that the documentation is reviewed in its entirety to avoid the omission of any fire safety requirements detailed in this report.

Project scope

- The proposal for the development involves alterations to an existing building (Block 1) and the construction of two new buildings (Blocks 2 and 3) to be used as commercial units. This fire report covers the Block 1 building. Blocks 2 and 3 are addressed under a separate fire report.
- The scope of work for Block 1 includes the subdivision of the existing building portion through the construction of property-rated fire separations and an extension to the northeast to provide additional units. Upon completion of the proposed building work, the development will become separately titled (Lots 1–6). Lot 1 will contain three retail units, while Lots 2–6 will each comprise a single commercial unit.
- In alignment with the current building use, Lots 2-4 are designed for commercial use that will not contain storage exceeding 3 m in height. The building extension, Lots 5 & 6, are also designed for commercial use, though this design futureproofs Lot 5 & 6 to accommodate storage above 3 m high at a later date.

Building use, risk group, and occupant load

- Building use: WL & CS.
- Risk group: CA & WB.
- The occupant load of the entire building is 108.

Fire safety systems

- Install a **Type 3** automatic fire alarm system in each lot to NZS 4512:2021 and be certified as a compliant system by an accredited inspection body.
- As each lot will be separately titled, the Type 3 system in each lot (Lots 1-6) shall be a standalone system with individual control panels.
- The fire alarm control panels shall be in a position close to the FENZ attendance point (C/AS2: 6.2.1). The location of the panels is to be in agreement with FENZ. The approval form must be submitted by the nominated fire alarm agent as part of their fire alarm standards requirements.
- No direct connection to a remote receiving centre (i.e. FENZ) is required.

Means of escape and access into and within the building

- A single independent means of escape is provided from each Lot on the ground level via the entrance door to the outside.
- The retail unit of Lot 1 on the first floor is provided with a single means of escape via the safe path stairwell leading directly to the outside.
- All egress routes and doors along them are to comply with Part 3 of this report.
- Install illuminated EXIT signs in the building to comply with NZBC F8.

Internal fire separations

- The building is to be subdivided into six separate Lots (Lots 1 to 6). Each lot will be under a separate title and separated from adjoining Lots by property-rated fire rated construction.
- Lot 1 comprises three firecells, the ground-floor units, the first-floor unit, and the safe path stairwell. Existing fire separations within Lot 1 achieve a 60-minute life rating. All other Lots are designed as single firecells.
- Fire separations between Lots 1-4 are to achieve a 120/120/120 FRR, and between Lots 4-6 are to achieve a 180/180/180 FRR. These fire separations shall be a two-way system and extend to 450 mm above the roof, forming a parapet. Refer to the Fire Plans in Appendix A for details.
- Per historic documentation, the existing safe path stairwell serving the first-floor unit is fire separated from the rest of the building on both floor levels by concrete walls, which achieve a 60-minute FRR. These existing fire separations will not be altered as part of the proposed building work and shall be maintained.
- All new surface finishes and floor coverings are to comply with Section 4.12 of this report.

External fire separations

- The southeast boundary wall of the existing building portion (Lots 1-4) is a precast concrete construction and achieves a FRR of 120 minutes.
- The southeast boundary wall of the extension (Lots 7-8) is required to achieve a two-way 180/180/180 FRR for property protection.
- The southwest elevation of Lot 1 faces State Highway 10 and achieves separation by distance. No external fire rating is required for property protection.
- The northwest elevation of the entire building facing Lot 17 (common property) is permitted to be non-fire rated given a sufficient setback distance is provided from the relevant boundary. For a common property, the relevant boundary is considered on the far side of the common property under C/AS2 definitions.
- The northeast elevation of the building being on the boundary, shall be fire rated to achieve a two-way 180/180/180 FRR for property protection.
- Primary and secondary elements required to be fire rated shall provide sufficient structural stability to avoid premature failure under design dead loads, design live loads and any additional load caused by fire.
- The southeast boundary wall of the extension (Lots 5-6) is to extend 450 mm above the roof to form a parapet.
- The existing southeast boundary wall of the building (Lots 1-4) which has a >450 mm high parapet complies with the provisions of horizontal fire spread from roofs.

Firefighting

- Fire appliance access is provided from State Highway 10 to within 20 m of the front of the building for firefighting purposes.

Lighting for emergency

- Due to changes in levels and lengths of escape exceeding 20 m, engage the services of a suitably qualified person to design and install an emergency lighting system throughout the entire building to comply with NZBC F6 Visibility in Escape Routes.

2. REGULATORY AND COMPLIANCE FRAMEWORK

The Building Act
The purpose of this report is to demonstrate that the new building will comply with New Zealand Building Code clauses C2 to C6 for Protection from Fire as required by the following provisions of the Building Act 2004 and Amendments.

> ***Section 17: All building work to comply with the building code***
> *All building work must comply with the building code to the extent required by this Act, whether or not a building consent is required in respect of that building work.*
>
> ***Section 112: Alterations to existing buildings***
> *(1) A building consent authority must not grant a building consent for the alteration of an existing building, or part of an existing building, unless the building consent authority is satisfied that, after the alteration, -*
> *(a) the building will comply, as nearly as is reasonably practicable, with the provisions of the building code that relate to –*
> *(i) means of escape from fire; and*
> *(ii) access and facilities for persons with disabilities (if this is a requirement in terms of section 118); and*
> *(b) the building will, -*
> *(i) if it complied with the other provisions of the building code immediately before the building work began, continue to comply with those provisions; or*
> *(ii) if it did not comply with the other provisions of the building code immediately before the building work began, continue to comply at least to the same extent as it did then comply.*
> *(2) Despite subsection (1), a territorial authority may, by written notice to the owner of a building, allow the alteration of an existing building, or part of an existing building, without the building complying with provisions of the building code specified by the territorial authority if the territorial authority is satisfied that, -*
> *(a) If the building were required to comply with the relevant provisions of the building code, the alteration would not take place; and*
> *(b) the alteration will result in improvements to attributes of the building that relate to –*
> *(i) means of escape from fire; or*
> *(ii) access and facilities for persons with disabilities; and*
> *(c) the improvements referred to in paragraph (b) outweigh any detriment that is likely to arise as a result of the building not complying with the relevant provisions of the building code.*

This report demonstrates compliance with The New Zealand Building Code Fire Safety Clauses by using the following Acceptable Solutions:

- C/AS2 Buildings other than Risk Group SH (2nd Edition, 28 July 2025)
- D1/AS1 Access routes (Amendment 6, 1 January 2017) – for means of escape from fire only
- F6/AS1 Visibility in escape routes (Amendment 4, 1 January 2017)
- F7/AS1 Warning Systems (2 November 2023)
- F8/AS1 Signs (Amendment 4, 1 January 2017)

Matters concerning an evacuation scheme, under the Fire Safety and Evacuation of Buildings Regulations 2018, should be discussed directly with Fire and Emergency New Zealand.

Matters concerning any storage and use of petroleum products at this site fall under the Health and Safety at Work Act (HSWA). This report does not address anything in this regard. If the site contains these products, it is recommended that the services of a suitably qualified HSWA expert be engaged.

Compliance Schedule
There are specified systems identified in this report that are required to be recorded on a Compliance Schedule. Please refer to page 19 of this report.

Fire and Emergency New Zealand (FENZ)
In accordance with Section 46(1) of the Building Act 2004 certain applications for Building Consent must be provided to FENZ for review.

- The building work being carried out fits within the criteria under Clauses 1 and 2 as listed in the DBH Gazette Notice No. 49 effective 7 May 2012; the Building Consent Authority is required to forward a copy of this application to FENZ for comment on matters relating to means of escape from fire, and the requirements for firefighting.
- Please refer to page 21 of this report.

3. DOCUMENTATION

The fire design issues detailed in this report are the minimum required to satisfy the requirements of the Building Code. Unless specifically stated, this report does not address matters in addition to the Building Act such as owners' and / or tenants' property and contents protection. The owner is advised to check the acceptability of the provisions of this report with the property insurer.

This report deals specifically with the requirements of this project and this client. It is not intended for any other purpose or to be used by any other parties.

This report is a performance document intended to be used by the Architects / Designers and other consultants in implementing their detailed designs and preparing their working drawings and specifications. The consultants whose documentation is required to incorporate the requirements of this report are expected to have read this report, understood the implications as it affects their scope of work, and have incorporated the relevant fire safety requirements, including incorporating Fire Engineering Design plans into their drawings and specifications.

The following drawings / documentation have been reviewed in the compiling of this fire engineering design report. To ensure that the specific fire safety requirements are clearly identified, it is recommended that "Fire Engineering Design" drawings be included in the building consent submission set.

Author	Title	Sheets	Revision	Date
Archiology Limited	Architectural Drawings	27 sheets	-	29/04/26
Thomson Survey Limited	Proposed Subdivision of Lots 1 & 2 DP 2-3824 & Lot 2 DP 205437	1 sheet	-	22/05/26

4. BUILDING / PROJECT SCOPE

Building location

The site is located at 2052 State Highway 10, Waipapa (see Figure 1).

Figure 1: Site location from GRIP Map.

Building use / risk group

Under Schedule 2 of the Building (Specified Systems, Change of Use, and Earthquake-prone Buildings) Regulations 2005, the existing building is designed as a commercial CS & WL Building Use. Following the alterations the uses will remain unchanged, though this design has made futureproofing provisions for WH Building Use in Lots 5 & 6.

The applicable Risk Groups are as follows (C/AS2, Table 1.1):

- CA Public use and educational facilities
- WB Business, commercial and low-level storage

In accordance with NZBC Clause A3, this building is classified as **Importance Level 2:**

- Buildings that pose a normal risk to human life or the environment, or a normal economic cost, should the building fail.

Proposed works

The proposal involves alterations to an existing building (Block 1) and the construction of two new buildings (Blocks 2 and 3) to be used as commerical units. This fire report covers the Block 1 building. Blocks 2 and 3 are addressed under a separate fire report.

The scope of work for Block 1 includes the subdivision of the existing building portion through the construction of property-rated fire separations and an extension to the northeast to provide additional units. Upon completion of the proposed building work, the development will comprise six separate unit titles (Lots 1–6). Lot 1 will contain three retail tenancies, while Lots 2–6 will each comprise a single commercial unit.

In alignment with the current building use, Units 4-6 are designed on the basis that storage will not exceed 3 m in height. The decision not to accommodate higher storage is due to it not being feasible to fire stop the existing roof purlins where they will penetrate the inter-unit walls. There are no tested fire stopping products in NZ for such penetrations through 180-minute fire separations. The new Units 7-8 will be designed to accommodate storage above 3 m high.

5. BUILDING SCORE SHEET

Guidance for BCAs when requesting information about means of escape from fire for existing buildings.

BUILDING SCORE SHEET			
	Key Factors	**Points**	**Score**
Likelihood of existing building complying	**Building Age**		
	Approved from 1 June 2001 onwards	0	
	Approved between 1 January 1993 and 31 May 2001	1	1
	Approved on or before 31 December 1992	3	
	Information held on the building by the BCA or TA (Score one of these only and choose the most comprehensive assessment)		
	For buildings approved from 1 June 2001: no consents made	0	
	Full building assessment on file dated 1 June 2001 or later	2	
	Full building assessment on file dated on or before 31 May 2001	4	
	One or more partial building assessments on file	6	
	No assessment on file for building additions or alterations	8	
	Unable to determine history of building	8	8
Extent of proposed work	**Extent of the proposed building work**		
	Minor	0	
	Moderate	3	
	Significant	6	6
Potential consequences of not complying	**Building importance level**		
	Level 1	0	
	Level 2	4	4
	Level 3	8	
	Level 4 and Level 5	12	
	Additional points for building Level 1, 2 or 3 with sleeping facilities	4	
	TOTAL SCORE TO USE WITH TABLE 1		**19**

6. SECTION 112 ASSESSMENT

Where compliance with the requirements of the Building Act for alterations is not fully demonstrated through using this Acceptable Solution, the level of assessment required shall be agreed upon with the building consent authority or territorial authority.

To assist the relevant authority, we have referred to "Guidance requesting information about means of escape from fire for existing buildings" [1]Dec 2013.

Although this report has determined the building score to be 13, we have designed the building to achieve full compliance with Acceptable Solution C/AS2. Therefore, a gap assessment is not required.

7. PART 1 GENERAL

1.4 Calculating occupant loads

Table 3: Occupant load

Lot	Activity	Area (m^2)	m^2 / person	Occ. Load
1	Retail (Unit 1)	36	3.5	10
1	Retail (Unit 2)	36	3.5	10
1	Retail (Unit 3)	73	3.5	21
2	Commercial (Unit 4)	170	10	17
3	Commercial (Unit 5)	170	10	17
4	Commercial (Unit 6)	172	10	17
5	Commercial (Unit 7)	84	10	8
6	Commercial (Unit 8)	84	10	8
Building Total[1]				**108**

Note:

1. As per C/AS2 1.4.3, duplication has been avoided by taking occupant load as zero in intermittently occupied areas. Refer to the Occupant Load Plan in Appendix A for an illustration of the intermittently occupied spaces.
2. The occupant load is assessed in accordance with Acceptable Solution C/AS2 to demonstrate compliance with NZBC C1-C6. These numbers should not be used for the purpose of design to NZBC G1, 2 and 3, for which a separate method of calculation is applicable.

[1] Ministry of Business, Innovation & Employment. December 2013, Version 1

8. PART 2 FIRECELLS, FIRE SAFETY SYSTEMS & FIRE RESISTANCE RATINGS

2.2 Fire safety systems

Table 4: Required fire alarm system

Activity	CA (Lot 1)	WB (Lots 2-6)
Escape height	<4 m	0 m
Storage height	n/a	≤3 m
Apex height	n/a	6 m
Occupant load	<50 - see Table 3	<50 - see Table 3
Alarm type	Type 3 - see note[1]	Type 3 - see note[1]
Other precautions	See note[2]	See note[2]

Notes:

1. **Fire alarm system**
   Install a **Type 3** automatic fire alarm system in each lot to NZS 4512:2021 and be certified as a compliant system by an accredited inspection body.
   - As each Lot will be separately titled, the Type 3 system in each Lot (Lots 1-6) shall be a standalone system with individual control panels.
   - The fire alarm control panels shall be in a position close to the FENZ attendance point (C/AS2: 6.2.1). The location of the panel is to be in agreement with FENZ. The approval form must be submitted by the nominated fire alarm agent as part of their fire alarm standards requirements.
   - Install encapsulated heat detectors in locations where nuisance alarms may occur due to moisture and / or condensation.
   - No direct connection to a remote receiving centre (i.e. FENZ) is required.
   - This will also satisfy the requirements of the Fire Safety and Evacuation of Buildings Regulations 2018 as an evacuation warning signal.

2. **Fire hydrant system (Type 18)**
   A fire hydrant system is not required as the hose run distance from a parked appliance is <75 m.

2.3 Fire resistance ratings (FRR)

Life Rating = 60 minutes	**Applies to this building consent**
Property Rating = 120 minutes (Lots 1-4)	**Applies to this building consent**
Property Rating = 180 minutes (Lots 5-6)	**Applies to this building consent**

9. PART 3 MEANS OF ESCAPE

3.1 General principles

Escape routes shall comply with the building code, Clause D1. All stairs, ladders, landings, handrails, doors and openings shall comply with Acceptable Solution D1/AS1.

3.1.1.7 Signs

Install illuminated EXIT signs to cover the escape routes and over the final exit doors in all units.
The design and installation of the illuminated signs is to be in accordance with AS 2293.1:2005.
Exit signs are to be sized to comply with 16, 24, or 32 m viewing distances (F8/AS1, Table 4 & 5).

Doors designated as fire doors shall have signs on both sides of the leaf adjacent to the handles or push plates stating, “Fire Door, Please Keep Closed”.

Indicative locations of EXIT signs are shown on the attached Fire Plans. These do not consider existing signage and possible obscuration due to partitioning, furniture, and therefore should not be assumed to depict all required signage.

3.1.2 Number of escape routes

A single independent means of escape is provided from each Lot on the ground level via the entrance door to the outside.

The retail unit of Lot 1 on the first floor is provided with a single means of escape via the safe path stairwell leading directly to the outside.

3.2 Height and width of escape routes

Height requirements for escape routes are to be:

- 2100 mm across the full width.
- Isolated ceiling fittings are permitted if they do not exceed 200 mm in diameter or project downwards >100 mm.
- Doors into or within an escape route shall have a minimum clear height of 1955 mm.

The width of escape routes shall be per Table 5. The clear width and height may include minor projections as defined by Acceptable Solution D/AS1. Examples may include, but are not limited to:

- Handrails, signs, or other fixtures projecting no more than 100 mm, and
- Door assemblies that reduce the width to no more than 125 mm when fully open.

Table 5: Minimum clear width of escape routes

Risk Group	Element	Open path		Exitway	
		Horizontal	Vertical	Horizontal	Vertical
CA, WB	Escape route	850 mm[1]	n/a	1000 mm	1000 mm
	Door	760 mm	n/a	n/a	n/a

Notes:

1. In areas where a single escape route is permitted, its width can be reduced to a minimum of 700 mm.

3.3 Length of escape routes

Table 6: Lengths of open path travel

Area	Risk Group	Dead End Open Path[1]		Total Open Path[1]	
		Permitted	Actual[2]	Permitted	Actual[2]
Lot 1 (Unit 1)	CA	20 m	10 m	50 m	n/a
Lot 1 (Unit 2)	CA	20 m	10 m	50 m	n/a
Lot 1 (Unit 3)	CA	20 m	19 m	50 m	n/a
Lot 2 (Unit 4)	WB	35 m	23 m	75 m	n/a
Lot 3 (Unit 5)	WB	35 m	23 m	75 m	n/a
Lot 4 (Unit 6)	WB	35 m	23 m	75 m	n/a
Lot 5 (Unit 7)	WB	35 m	18 m	75 m	n/a
Lot 6 (Unit 8)	WB	35 m	18 m	75 m	n/a

Notes:

1. The lengths of the escape routes are shown permitted increase where a Type 3 fire alarm system is installed.
2. The distances of travel are the worst case from each area to a safe place outside or a safe path.

3.5 Exitways

Refer to Section 4.7 of this report regarding fire separation requirements on exitways (safe path).

3.5.4 Control of exitway activities

The existing safe path stairwell serving Unit 3 shall not be used for any storage of goods, combustibles, solid waste, or solid waste containers.

3.6 External escape routes

Once exiting the final exits, all escape routes diverge directly away from the building and/or there is two directions of escape available. Therefore, the protection of external escape routes need not be considered.

3.8 Single escape routes

A single means of escape is acceptable from each unit as the occupant load is <50 people, the dead-end travel distance is within the permitted limits, and the escape height is <10 m.

3.9 Doors subdividing escape routes

3.9.1 Door closers and latching

All doors located along designated escape routes shall be:

- Hinged or pivoted on one vertical edge. An exception applies to the manual sliding doors where they are permitted for use on escape routes in spaces occupied by <20 people.
- If doors are required to be secure, they shall be fitted with simple fastenings that can be readily operated from the direction approached by people making an escape.

3.9.2 Locking devices

Doors subdividing escape routes are to be fitted with simple fastenings that can be readily operated from the direction of escape and are not capable of being locked from the inside with a key or other security device preventing escape.

If doors are proposed to be fitted with an electromechanical lockset, they shall be fitted with a failsafe device, so in the event of a power failure or door malfunction, the lockset will automatically fail to the unlock position. Doors shall be provided with a fail-safe emergency door release (e.g. a push-to-exit button and emergency break-glass) which allows unobstructed escape.

3.9.3 Direction of opening

Doors subdividing escape routes used by ≤50 people may swing in either direction.

3.9.4 Degree and width of opening

All doors must swing at least 90° in plan and include no change in floor level on either side of the door unless permitted by Acceptable Solution D1/AS1.

10. PART 4 CONTROL OF INTERNAL FIRE & SMOKE SPREAD

4.1 Firecells

The building is to be subdivided into six separate Lots (Lots 1 to 6). Each lot will be under a separate title and separated from adjoining lots by property-rated fire rated construction.

Lot 1 comprises three firecells, the ground-floor units, the first-floor unit, and the safe path stairwell. Existing fire separations within Lot 1 achieve a 60-minute life rating. All other lots are designed as single firecells.

Fire separations between Lots 1-4 are to achieve a 120/120/120 FRR and between Lots 4-6 are to achieve a 180/180/180 FRR. These fire separations shall be a two-way system and extend to 450 mm above the roof, forming a parapet. Refer to the Fire Plans in Appendix A for details.

4.2 Internal structural stability during fire

4.2.1 Stability of primary building elements requiring an FRR

The structural stability of primary building elements required to achieve an FRR shall be retained for the duration of the FRR specified.

Structural engineering calculations may be required to verify that the walls required to provide a fire rating are designed for stability under fire conditions for the specified period (i.e. 60, 120 or 180 minutes).

4.2.3 Providing vertical stability

Primary elements in a vertical orientation, e.g., walls and columns, that provide support to building elements requiring an FRR in a horizontal orientation, e.g., floors and beams, shall be rated for structural adequacy for the duration of the FRR specified.

4.2.4 Providing horizontal stability

Building elements required to achieve an FRR shall have horizontal stability provided via:

- A free-standing cantilever from a structural base with an equivalent FRR, or
- Be appropriately supported by primary elements within a firecell, or
- Be supported by primary elements outside of the firecell (such as the adjacent household unit).

Primary elements within the firecell

Primary elements located entirely within a firecell shall consider exposure to fire from multiple sides simultaneously. If primary elements are proposed to be protected with fire rated lining systems, take care to ensure an appropriate 'one-way' system is specified to each relevant side of the primary supporting element.

Supporting steel

Should primary elements be supported by steel columns, beams, or portals exposed to the effects of fire, they shall be encased appropriately using a tested lining system or protected by intumescent paint. The intumescent application shall follow the FPA New Zealand Code of Practice for the Specification and Application of Intumescent Coatings for the Fire Protection of Structural Steel.

If located within a fire separation, supporting steel shall be protected via intumescent paint or where typical GIB linings are used, ensure an appropriate 'one-way' or 'two-sided exposure' linings are specified to each relevant side of a wall.

4.3 Firecell construction

4.3.2 Fire stopping

Existing identified or new penetrations compromising the effectiveness of FRR's are to have fire stops installed such that they satisfy the following:

- Materials or products shall have an equivalent FRR of the system when tested in accordance with AS 1530.4:2005, NZS/BS 476.21 – 22, or AS 4072.1:2005.
- Passive fire stops and the methods of installation must represent those of the prototype used in tests to establish the FRR.
- Ventilation ducts penetrating FRR separations systems must have FRR or Sm dampers complying with AS 1682.1 and AS 1682.2. Dampers must be readily accessible for inspection and servicing.

Fire stops are to be labelled to include information such as the name and contact details of the installer and manufacturer, the FRR, the installation date, and a unique reference number for the installation. It's best practice to compile a schedule including location plans, identifying the unique reference numbers, the separation, the product used, and the FRR. A copy of the schedule should be kept on-site in a location accessible to the IQP.

4.3.3 Junctions of fire separations

Where fire separations meet other fire separations or fire rated parts of external walls, they shall either be bonded together or have the junction fire stopped over its full length. The external cladding cavity gap should be fire stopped in line with the horizontal or vertical fire separations.

Where one fire separation is a wall and the other a floor, the wall / floor junction shall be constructed with the FRR required for the higher rated element.

4.3.6: Sealing of gaps

To avoid the passage of smoke through fire separations and smoke separations, gaps shall be sealed with fire resistant materials complying with AS 1530.4 in their intended application if they are located:

- In smoke separations, and between fire separations and smoke separations,
- Around glazing in smoke separations,
- Between fire separations and unrated parts of external walls, or
- Between smoke separations and unrated parts of external walls.

4.4 Closures in fire and smoke separations

4.4.1 Fire rating and smoke rating of closures

Per historic documentation, the existing exit door opening into the safe path stairwell from the first floor unit is a fire door achieving a -/60/60sm. This fire door, not being affected by the proposed building work, will remain compliant and is to be maintained.

4.7 Escape route separations

4.7.1 Exitways

Per historic documentation, the existing safe path stairwell serving the first-floor unit is fire separated from the rest of the building on both floor levels by concrete walls, which achieve a 60-minute FRR. These existing fire separations will not be altered as part of the proposed building work and shall be maintained.

4.10 Floors

4.10.1 Fire resistance rating of floors

The midfloor of the first-floor unit is of 150 mm concrete floor construction, achieving a 60-minute FRR. No alterations are proposed to this existing midfloor.

4.12 Interior surface finishes, floor coverings and suspended flexible fabrics

4.12.1 Surface finishes for walls and ceilings

Existing surface finishes unaffected by the proposed building work will remain compliant on an ANARP basis.

All new surface finishes are to comply with the group numbers prescribed below (G/N stated or lower).

Table 8: Surface finishes

Space	Surface[1]	Group No[2]
Exitway (safe path stairs)	Wall & ceiling linings	1S
All occupied spaces	Wall & ceiling linings	3

Note:

1. Product group numbers shall be confirmed via material data sheets submitted as part of the building consent information.

4.12.2 Foamed plastic and exposed combustible insulating materials

Where foamed plastics form part of the walls / ceilings, the complete system shall achieve a group number 3 and shall comply with the flame propagation criteria as specified in AS 1366.

4.12.3 Flooring

Existing floor coverings unaffected by the proposed building work will remain compliant on an ANARP basis.

All new floor coverings are to comply with the critical radiant flux rating as prescribed below (C.R.F as stated or greater).

Table 9: Critical radiant flux requirements for flooring

Space	Minimum Critical Radiant Flux[1]
Exitway (safe path stairs)	≥2.2 kW/m^2
All occupied spaces	≥1.2 kW/m^2

Note:

1. Shall be confirmed via material data sheets submitted as part of the building consent information.

4.12.4 Exceptions to surface finish requirements

Surface finish requirements do not apply to:

- Small areas of non-conforming product within a firecell with a total aggregate surface area no > 5.0 m^2
- Electrical switches, outlets, cover plates and similar small discontinuous areas.
- Pipes and cables used to distribute power or services.
- Handrails and general decorative trim of any material such as architraves, skirtings and window components, including reveals, provided these do not exceed 5% of the surface area of the wall or ceiling they are part of.
- Damp-proof courses, seals, caulking, flashings, thermal breaks and ground moisture barriers.
- Timber joinery and structural timber building elements constructed from solid wood, glulam or laminated veneer lumber. This includes heavy timber columns, beams, portals and shear walls not more than 3.0m wide.
- Individual doorsets.

4.12.5 Suspended flexible fabrics

When tested to AS 1530 Part 2:

- Suspended flexible fabrics shall have a flammability index of no greater than 12.
- When used as underlay to roofing or exterior cladding that is exposed to view the flammability index shall be no greater than 5.

11. PART 5 CONTROL OF EXTERNAL FIRE SPREAD

5.2 Horizontal fire spread from external walls

5.2.2 Fire rating of external walls

- The southeast boundary wall of the existing building portion (Lots 1-4) is a precast concrete construction and achieves a FRR of 120 minutes.
- The southeast boundary wall of the extension (Lots 7-8) is required to achieve a two-way 180/180/180 FRR for property protection.
- The southwest elevation of Lot 1 faces State Highway 10 and achieves separation by distance. No external fire rating is required for property protection.
- The northwest elevation of the entire building facing Lot 17 (common property) is permitted to be non-fire rated given a sufficient setback distance is provided from the relevant boundary. For a common property, the relevant boundary is considered on the far side of the common property under C/AS2 definitions.
- The northeast elevation of the building being on the boundary, shall be fire rated to achieve a two-way 180/180/180 FRR for property protection.

Primary and secondary elements required to be fire rated shall provide sufficient structural stability to avoid premature failure under design dead loads, design live loads and any additional load caused by fire.

Refer to Tables 10 and 11 for the external fire spread assessment for the existing building portion (Lots 1-4) and the proposed extension (Lots 5-6), respectively.

5.2.4 Unprotected areas and separation distance

Table 10: Maximum percentage of unprotected area for external walls (Lots 1-4)

Wall	Width of firecell (m)	Angle	Distance to Boundary (m)	Total UPA (%)		Max UPA (m^2)	
				Permitted	Actual	Permitted	Actual
Northwest	>10 & ≤10	≤45°	>12	100%	100%	n/a	n/a
Southwest	>10 & <10	≤45°	>12	100%	100%	n/a	n/a
Northeast	>10	≤45°	0	0%	0%	0	0
Southeast	>10	≤45°	0	0%	0%	0	0

Table 11: Maximum percentage of unprotected area for external walls (Lots 5-6)

Wall	Width of firecell (m)	Angle	Distance to Boundary (m)	Total UPA (%)		Max UPA (m^2)	
				Permitted	Actual	Permitted	Actual
Northeast	Any width	≤45°	0	0%	0%	0	0
Southeast	Any width	≤45°	0	0%	0%	0	0
Northwest	Any width	≤45°	>16	100%	100%	n/a	n/a

5.3 Horizontal fire spread from roofs and open sided buildings

5.3.1 Roofs

To futureproof the building for different future uses, horizontal fire spread shall be resisted by extending the fire rated Lot boundary walls to no less than 450 mm above the roof to form a parapet.

- The southeast boundary wall of the extension (Lots 5-6) is to extend 450 mm above the roof to form a parapet.
- The new intertenancy boundary walls between Lots are to extend 450 mm above the roof to form a parapet.
- The existing southeast boundary wall of the building (Lots 1-4) which has a >450 mm high parapet complies with the provisions of horizontal fire spread from roofs.

5.5 Exterior surface finishes

5.5.1 External wall cladding materials

Walls <1 m from the boundary

Cladding materials shall be:

a) Non-combustible or limited combustible materials; or
b) Tested in accordance with the relevant standard test in the Building Product Specifications and achieve a Type A classification.

The cladding tests shall be confirmed via material data sheet.

Walls ≥1 m from the boundary & <10 m building height

There are no requirements for exterior surface finishes as the proposed external walls are ≥1 m from the boundary and <10 m in height.

12. PART 6 FIREFIGHTING

6.1 FENZ vehicular access

Fire appliance access is provided from State Highway 10 to within 20 m of the front of the building for firefighting purposes.

6.2 Information for firefighters

6.2.1 The independent fire alarm control panel for each lot shall be in a position close to the FENZ attendance point (C/AS2: 6.2.1), in accordance with NZS 4512. The location of the panel is to be in agreement with FENZ. The approval form must be submitted by the nominated fire alarm agent as part of their fire alarm standards requirements.

If hazardous substances are present in the building, warning signage in accordance with NZBC F8 shall be displayed.

13. PART 7 PREVENTION OF FIRE OCCURRING

7.4 Electrical fire safety

Electrical installations in buildings must be installed in accordance with NZBC Clause G9.

14. F6 / AS1 VISIBILITY IN ESCAPE ROUTES

Lighting for emergency

Due to changes in levels and lengths of escape exceeding 20 m, engage the services of a suitably qualified person to design and install an emergency lighting system throughout the entire building to comply with NZBC F6 Visibility in Escape Routes.

15. CONSTRUCTION MONITORING

We have reviewed the requirements for construction monitoring. Construction monitoring ensures that the building work is correctly interpreted and implemented in accordance with the design documentation.

Documentation to be provided by the contractors relating to the fire design includes:

- Exit signage: Producer Statement PS3 Construction – Electrical.
- Visibility in Escape Routes (Emergency Lighting): Producer Statement PS3 Construction – Electrical.
- Fire Alarm: Producer Statement PS3 Construction.
- Fire Alarm: Fire Alarm System Certificate of Completion – from an accredited inspection body.
- Fire Rated Separations: Producer Statement PS3 Construction – for installed Fire Rated Construction.

BCD Group Limited is not currently engaged to carry out fire engineering construction monitoring of the proposed works.

16. FIRE COMPLIANCE SCHEDULE ITEMS

As there are Specified Systems in the building, compliance schedule details are required to be supplied to Council as part of the building consent application. **It is the responsibility of the person lodging the building consent to complete the relevant Council forms relating to Specified Systems**.

BCD Group Limited has provided information below only to assist in the completing of the relevant Council forms. The information below only covers Specified Systems that are affected by this Fire Engineering Design. This information is superseded by the completed Council forms. If assistance is required in completing the relevant Council forms, please contact the system provider or IQP.

SS	Specified System	Performance Standard	IRM Procedure	Frequency	Status
2/1	**Automatic or manual emergency warning systems for fire** **Type: 3** **Location**: As shown on approved plan by the Fire Alarm agent.	NZS 4512:2021 – Fire detection and alarm systems in buildings	NZS 4512:2021 - Fire detection and alarm systems in buildings (Part 6)	Monthly and annual inspections by IQP	New
4	**Emergency lighting** **Type**: **Emergency lighting systems including Illuminated EXIT signage** **Location:** As shown on emergency lighting plan.	Acceptable Solution F6/AS1 (Amendment 4: 1 January 2017) (Paragraphs 1.3.1, 1.5.1 & 1.6.1) AS 2293.1:2005 – Emergency evacuation lighting for buildings – Part 1 System design, installation, and operation.	AS/NZS 2293.2:1995 – Emergency evacuation lighting for buildings – (Part 2 Inspection and maintenance).	Six monthly and annual inspections by IQP	New
14/2	**Emergency power systems for, or signs relating to, a specified system in any of specified systems 1-13** **Type: Signs relating to specified systems 1-13** **Location:** As shown on approved plan accepted by BCA.	Generally Acceptable Solution F8/AS1 Amendment 4 (effective 1 January 2017). However individual standards such as NZS 4541: 2020 may have additional signage requirements not shown in F8/AS1 where the below is not an exhaustive list – • SS 2/1: Sign showing how to operate a fire alarm call point (F8/AS1 Paragraph 5.1)	Illuminated signs. A) Continued effectiveness B) Of the correct type C) Present and in the right locations D) Legible and illuminated. Non-illuminated signs A) Of the correct type B) Present and in the right locations C) Legible.	Monthly and annual inspections by IQP Annual inspections by IQP	Modified

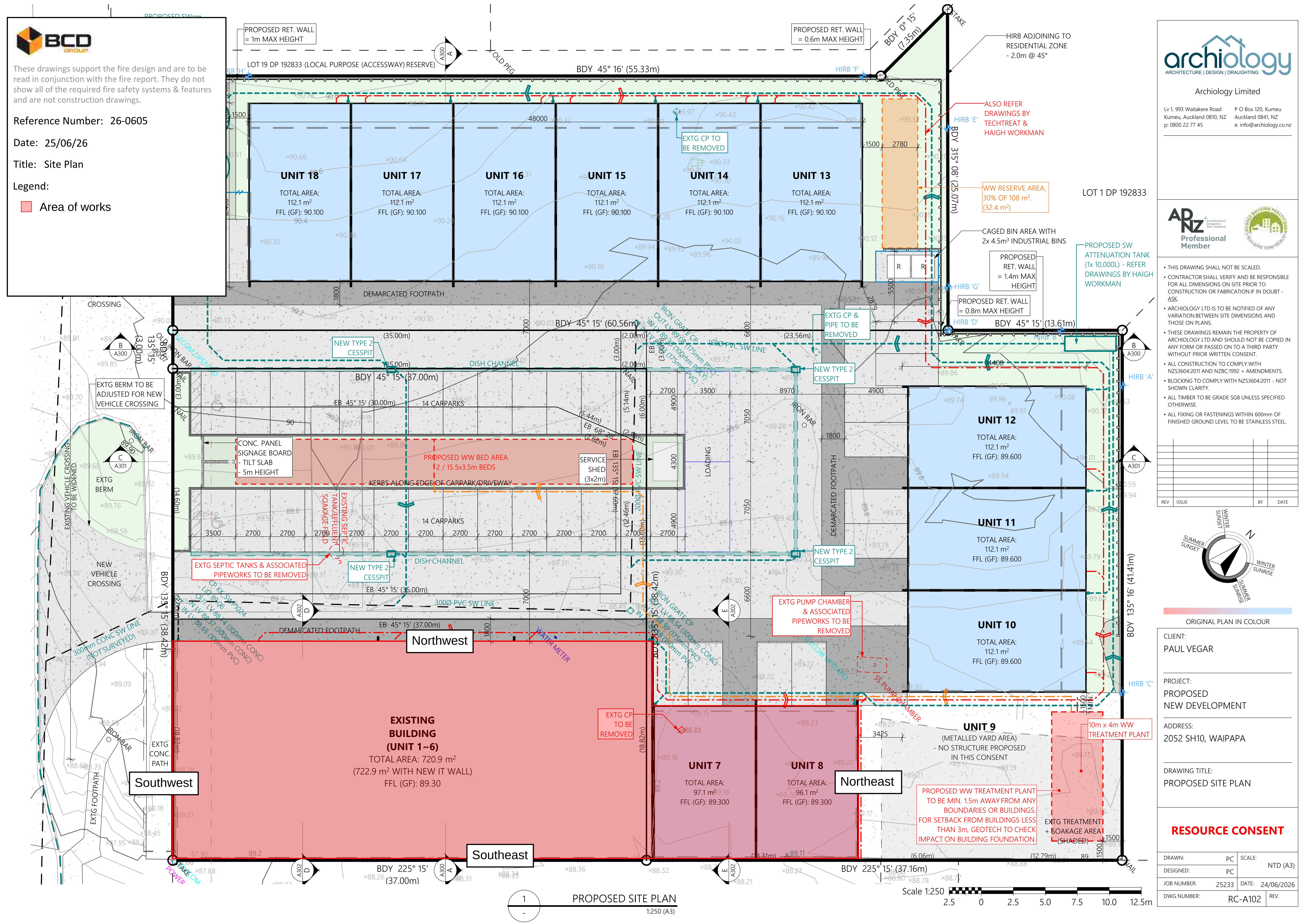
SS	Specified System	Performance Standard	IRM Procedure	Frequency	Status
15/2	**Other Fire Safety Systems or Features** **Type: Final Exits** **Location:** Refer to Fire Plans	C/AS2 - Acceptable Solution for Buildings other than Risk Group SH, 2nd Edition, 28 July 2025, Sections 3.7 & 3.9.	Final exits should be inspected to ensure they can be opened and are not: A) Locked B) Barred C) Blocked And that door locking devices: A) Are clearly visible B) Are easily operated without a key or other security device C) Do not prevent or override the direct operation of panic bolts fitted to any door	Monthly inspections by owner or IQP Annual inspections by IQP	Modified
15/3	**Other Fire Safety Systems or Features** **Type: Fire Separations** **Location:** Refer to fire Plans	For walls, floors and ceilings: Structural adequacy/ Integrity/ Insulation (for example 60/60/60) Fire Resistance Rating as defined by C/AS2 - Acceptable Solution for Buildings other than Risk Group SH, 2nd Edition, 28 July 2025, Sections 4.7.1 & 2.3. For fire doors: Integrity/ Insulation (for example -/60/60) & NZS 4520:2010 Fire resistant door sets.	For walls, floors and ceilings: A) Separations are not damaged or deteriorated in a way that could adversely affect their fire resistance function. B) Separations do not have new penetrations without suitable fire stopping. For Fire Doors: NZS 4520:2010 Fire resistant door sets (Section 7)	Monthly inspections by owner or IQP Annual inspections by IQP	Existing
15/4	**Other Fire Safety Systems or Features** **Type: Evacuation Signs** **Location:** Refer to Fire Plans	Solution F8/AS1 Amendment 4 (effective 1 January 2017) (Section 4). Illuminated Signs - F8/AS1 (January 2017) Section 4	Illuminated Exit Signs should be inspected to ensure they are – A) Of the correct type B) Present and in the right locations C) Legible D) Illuminated	Monthly inspections by owner or IQP Annual inspections by IQP	Modified

17. FIRE AND EMERGENCY NEW ZEALAND

In accordance with Section 46(1) of the Building Act 2004 certain applications for Building Consent must be provided to Fire and Emergency NZ for review.

1	Section 75 of Fire and Emergency New Zealand Act 2017	Yes	No		
	1(a) 100 or more people present?	✓			
	1(b) Employment facilities for >10 people?	✓			
	1(c) Accommodation for >5 people?		✓		
	1(d) Storage or processing of hazardous materials?		✓		
	1(e) Early childcare facilities?		✓		
	1(f) Nursing, medical or geriatric care provided?		✓		
	1(g) Specialised care for people with disabilities?		✓		
	1(h) Accommodation for people in lawful detention?		✓		
	Evacuation Scheme required in terms of FENZ Act (Section 1 triggered)				Yes
2	**Building Act 2004**	**Yes**	**No**		
	(a) Compliance by means other than clauses				
	(i) C1 – C6		✓		
	(ii) D1/AS1		✓		
	(iii) F6/AS1		✓		
	(iv) F8/AS1		✓		
	Section (a) triggered?			No	
	(b) Modification or waiver of clauses				
	(i) C1 – C6		✓		
	(ii) D1/AS1		✓		
	(iii) F6/AS1		✓		
	(iv) F8/AS1		✓		
	Section (b) triggered?			No	
	(c) Fire safety system affected (except minor)	✓			
	Section (c) triggered?			Yes	
	Section 46 Building Act triggered?				Yes
DBH Gazette Notice No 49 dated 3 May 2012					
Are there at least two triggers (must include Section 1)					Yes
Is the Building Consent Authority required to forward a copy of this application to FENZ for comment on matters relating to *means of escape from fire, and the requirements for firefighting?*					**Yes**

APPENDIX A – Fire Engineering Plan(s)

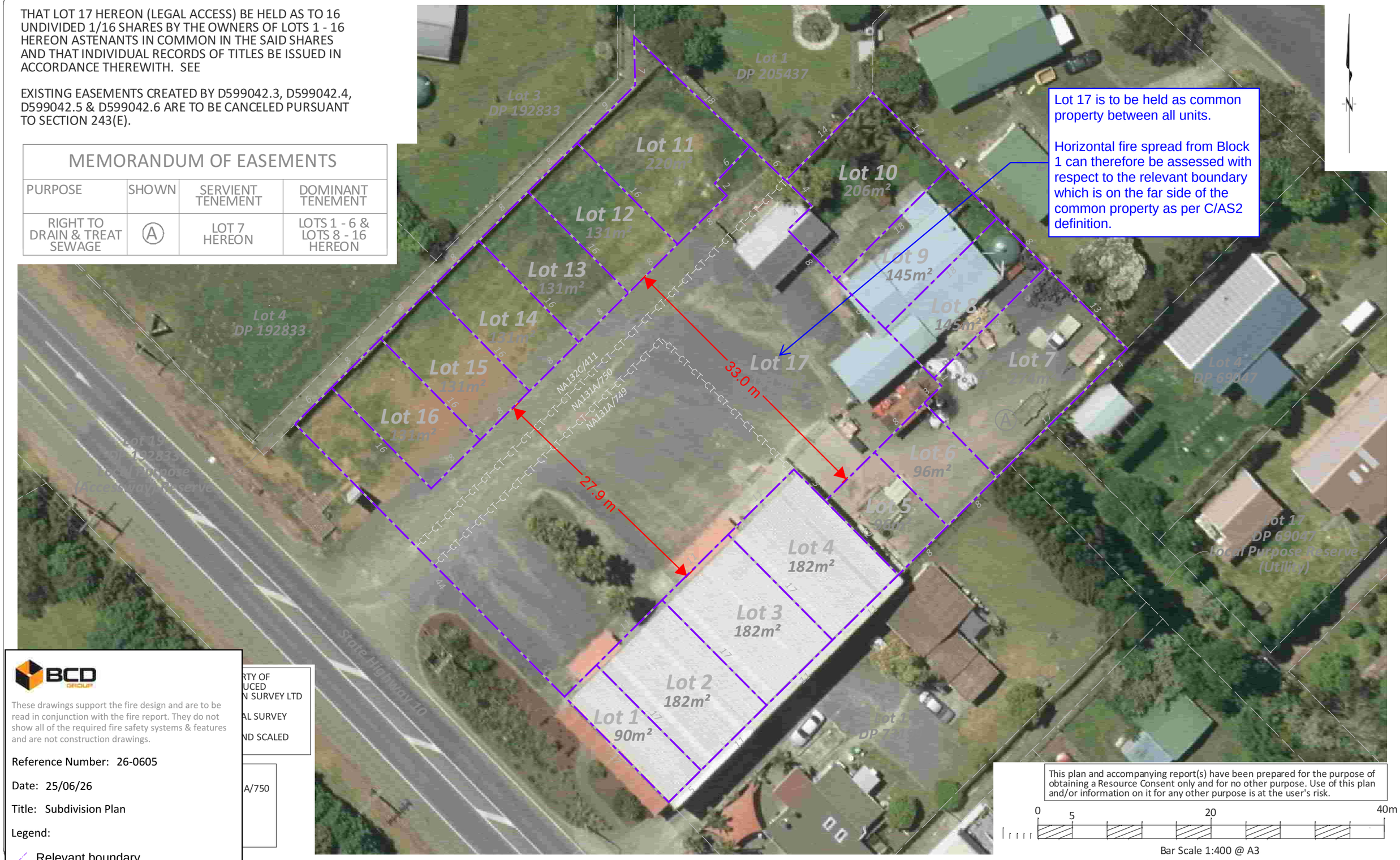


BCD GROUP
These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.
Reference Number: 26-0605
Date: 25/06/26
Title: Site Plan
Legend:
Area of works
PROPOSED RET. WALL = 1m MAX HEIGHT
PROPOSED RET. WALL = 0.6m MAX HEIGHT
LOT 19 DP 192833 (LOCAL PURPOSE (ACCESSWAY) RESERVE)
BDY 45° 16' (55.33m)
BDY 0° 15' (7.35m)
HIRB ADJOINING TO RESIDENTIAL ZONE - 2.0m @ 45°
ALSO REFER DRAWINGS BY TECHTREAT & HAIGH WORKMAN
WW RESERVE AREA, 30% OF 108 m². (32.4 m²)
CAGED BIN AREA WITH 2x 4.5m³ INDUSTRIAL BINS
PROPOSED SW ATTENUATION TANK (1x 10,000L) - REFER DRAWINGS BY HAIGH WORKMAN
PROPOSED RET. WALL = 1.4m MAX HEIGHT
PROPOSED RET. WALL = 0.8m MAX HEIGHT
LOT 1 DP 192833
BDY 315° 08' (25.07m)
UNIT 18 TOTAL AREA: 112.1 m² FFL (GF): 90.100
UNIT 17 TOTAL AREA: 112.1 m² FFL (GF): 90.100
UNIT 16 TOTAL AREA: 112.1 m² FFL (GF): 90.100
UNIT 15 TOTAL AREA: 112.1 m² FFL (GF): 90.100
UNIT 14 TOTAL AREA: 112.1 m² FFL (GF): 90.100
UNIT 13 TOTAL AREA: 112.1 m² FFL (GF): 90.100
EXTG CP TO BE REMOVED
DEMARCATED FOOTPATH
BDY 45° 15' (60.56m)
BDY 45° 15' (13.61m)
EXTG CP & PIPE TO BE REMOVED
NEW TYPE 2 CESSPIT
BDY 45° 15' (37.00m)
DISH CHANNEL
14 CARPARKS
EXTG BERM TO BE ADJUSTED FOR NEW VEHICLE CROSSING
CONC. PANEL SIGNAGE BOARD - TILT SLAB - 5m HEIGHT
PROPOSED WW BED AREA 2 / 15.5x3.5m BEDS
SERVICE SHED (3x2m)
KERBS ALONG EDGE OF CARPARK/DRIVEWAY
LOADING
DEMARCATED FOOTPATH
UNIT 12 TOTAL AREA: 112.1 m² FFL (GF): 89.600
UNIT 11 TOTAL AREA: 112.1 m² FFL (GF): 89.600
UNIT 10 TOTAL AREA: 112.1 m² FFL (GF): 89.600
EXTG BERM
EXISTING VEHICLE CROSSING TO BE WIDENED.
NEW VEHICLE CROSSING
EXTG SEPTIC TANKS & ASSOCIATED PIPEWORKS TO BE REMOVED
EXTG PUMP CHAMBER & ASSOCIATED PIPEWORKS TO BE REMOVED
300Ø PVC SW LINE
Northwest
WATER METER
EXISTING BUILDING (UNIT 1~6) TOTAL AREA: 720.9 m² (722.9 m² WITH NEW IT WALL) FFL (GF): 89.30
EXTG CP TO BE REMOVED
UNIT 7 TOTAL AREA: 97.1 m² FFL (GF): 89.300
UNIT 8 TOTAL AREA: 96.1 m² FFL (GF): 89.300
UNIT 9 (METALLED YARD AREA) - NO STRUCTURE PROPOSED IN THIS CONSENT
10m x 4m WW TREATMENT PLANT
PROPOSED WW TREATMENT PLANT TO BE MIN. 1.5m AWAY FROM ANY BOUNDARIES OR BUILDINGS. FOR SETBACK FROM BUILDINGS LESS THAN 3m, GEOTECH TO CHECK IMPACT ON BUILDING FOUNDATION.
EXTG TREATMENT + SOAKAGE AREA (SHADED)
Southwest
Northeast
Southeast
EXTG CONC. PATH
EXTG FOOTPATH
300mm CONC SW LINE (NOT SURVEYED)
BDY 135° 15' (38.42m)
BDY 135° 16' (41.41m)
BDY 225° 15' (37.00m)
BDY 225° 15' (37.16m)
1 PROPOSED SITE PLAN 1:250 (A3)
Scale 1:250
2.5 0 2.5 5.0 7.5 10.0 12.5m
archiology ARCHITECTURE | DESIGN | DRAUGHTING
Archiology Limited
Lv 1, 993 Waitakere Road Kumeu, Auckland 0810, NZ p: 0800 22 77 45
P O Box 120, Kumeu Auckland 0841, NZ e: info@archiology.co.nz
ADNZ Professional Member
• THIS DRAWING SHALL NOT BE SCALED.
• CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION OR FABRICATION IF IN DOUBT - ASK.
• ARCHIOLOGY LTD IS TO BE NOTIFIED OF ANY VARIATION BETWEEN SITE DIMENSIONS AND THOSE ON PLANS.
• THESE DRAWINGS REMAIN THE PROPERTY OF ARCHIOLOGY LTD AND SHOULD NOT BE COPIED IN ANY FORM OR PASSED ON TO A THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT.
• ALL CONSTRUCTION TO COMPLY WITH NZS3604:2011 AND NZBC:1992 + AMENDMENTS.
• BLOCKING TO COMPLY WITH NZS3604:2011 - NOT SHOWN CLARITY.
• ALL TIMBER TO BE GRADE SG8 UNLESS SPECIFIED OTHERWISE.
• ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.
REV ISSUE BY DATE
WINTER SUNSET
SUMMER SUNSET
N
WINTER SUNRISE
SUMMER SUNRISE
ORIGINAL PLAN IN COLOUR
CLIENT: PAUL VEGAR
PROJECT: PROPOSED NEW DEVELOPMENT
ADDRESS: 2052 SH10, WAIPAPA
DRAWING TITLE: PROPOSED SITE PLAN
RESOURCE CONSENT
DRAWN: PC
DESIGNED: PC
SCALE: NTD (A3)
JOB NUMBER: 25233
DATE: 24/06/2026
DWG NUMBER: RC-A102
REV.

THAT LOT 17 HEREON (LEGAL ACCESS) BE HELD AS TO 16 UNDIVIDED 1/16 SHARES BY THE OWNERS OF LOTS 1 - 16 HEREON ASTENANTS IN COMMON IN THE SAID SHARES AND THAT INDIVIDUAL RECORDS OF TITLES BE ISSUED IN ACCORDANCE THEREWITH. SEE

EXISTING EASEMENTS CREATED BY D599042.3, D599042.4, D599042.5 & D599042.6 ARE TO BE CANCELED PURSUANT TO SECTION 243(E).

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT TO DRAIN & TREAT SEWAGE	Ⓐ	LOT 7 HEREON	LOTS 1 - 6 & LOTS 8 - 16 HEREON



BCD GROUP

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Reference Number: 26-0605

Date: 25/06/26

Title: Subdivision Plan

Legend:

Relevant boundary

RTY OF
UCED
N SURVEY LTD

AL SURVEY

ND SCALED

A/750

0 5 20 40m

Bar Scale 1:400 @ A3

Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOTS 1 & 2 DP 203824 & LOT 2 DP 205437

2052 STATE HIGHWAY 10, WAIPAPA

PREPARED FOR: P. VEGAR

	Name	Date
Survey		
Design		
Drawn	KY	22.05.26
Rev		
Rev	KY	04.06.26

ORIGINAL

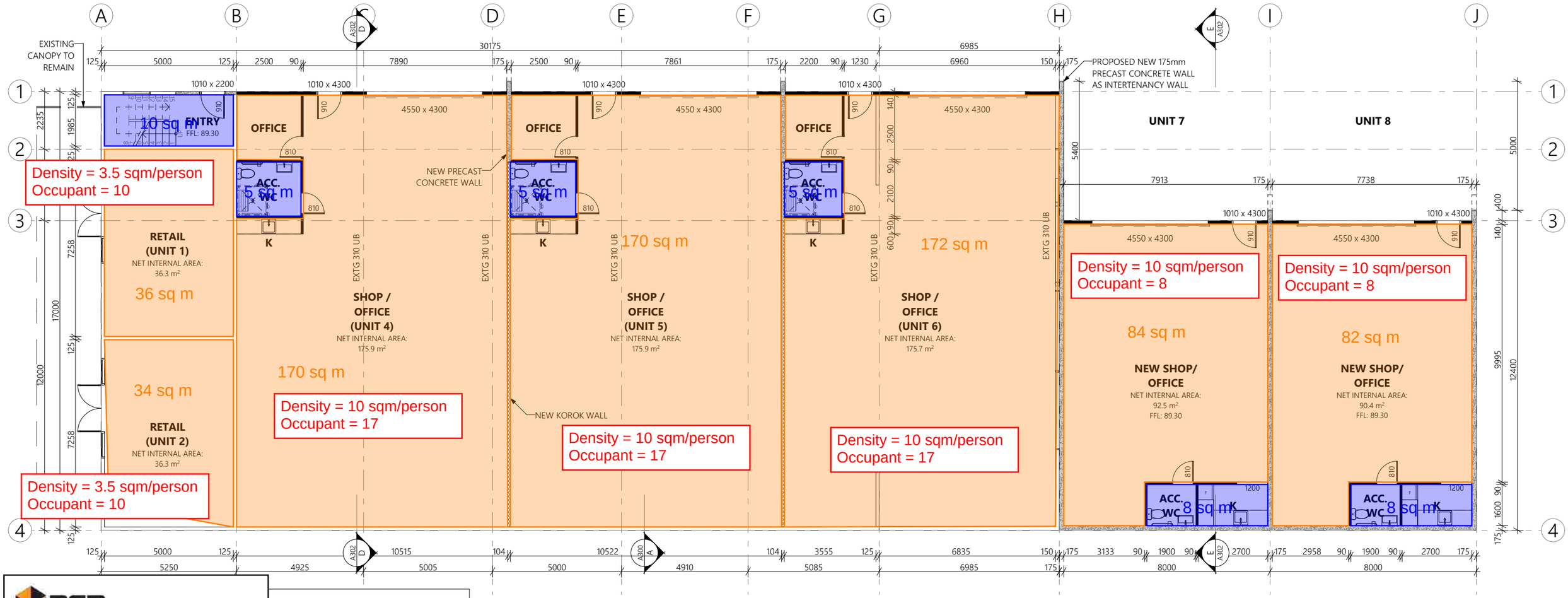
SCALE 1:400

SHEET SIZE A3

10886 Scheme 20260604

Surveyors Ref. No: 10886

Sheet 1 of 1



BCD GROUP

These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.

Reference Number: 26-0605

Date: 25/06/26

Title: Occupant Load Plan

Legend:

- Intermittently occupied area
- Occupied area

7

UND FLOOR (O/A SLAB): 97.1 m²

8

UND FLOOR (O/A SLAB): 96.1 m²

INTERTENANCY WALL

UND FLOOR (O/A SLAB): 2.2 m²

AL AREA (ADDITION): 195.4 m²

EA SHOWN IS GROSS FLOOR AREA
CLUDES COVERED DECK / PORCHES

IN COLOUR

ADNZ Architectural Designers New Zealand
Professional Member

- THIS DRAWING SHALL NOT BE SCALED.
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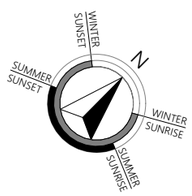
- BLOCKING TO COMPLY WITH NZS3604:2011 - NOT SHOWN CLARITY.
- ALL TIMBER TO BE GRADE SG8 UNLESS SPECIFIED OTHERWISE.
- ALL FIXING OR FASTENINGS WITHIN 600mm OF FINISHED GROUND LEVEL TO BE STAINLESS STEEL.



1 / - GROUND FLOOR PLAN - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

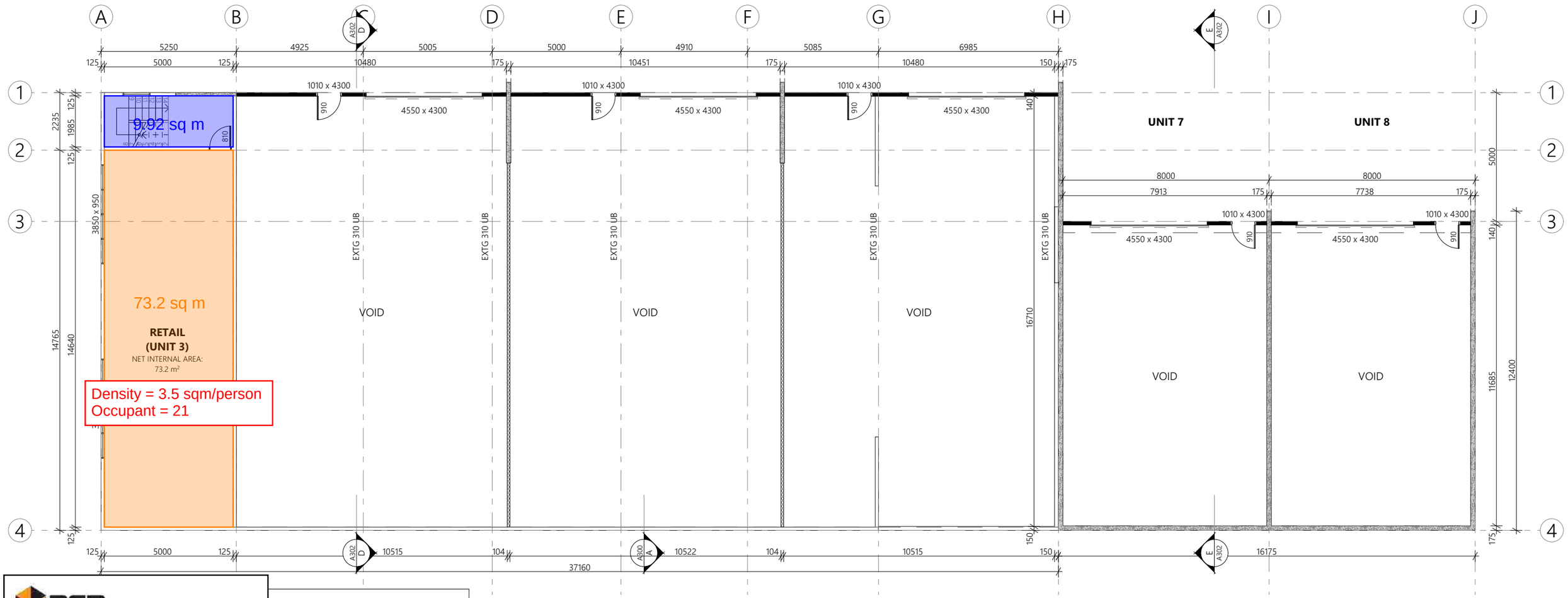
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: GROUND FLOOR PLAN - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A113	REV.	



7
UND FLOOR (O/A SLAB): 97.1 m²

8
UND FLOOR (O/A SLAB): 96.1 m²

INTERTENANCY WALL
UND FLOOR (O/A SLAB): 2.2 m²

AL AREA (ADDITION): 195.4 m²

EA SHOWN IS GROSS FLOOR AREA
CLUDES COVERED DECK / PORCHES

BCD GROUP

These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.

Reference Number: 26-0605

Date: 25/06/26

Title: Occupant Load Plan

Legend:

- Intermittently occupied area
- Occupied area

IN COLOUR

ADNZ Professional Member

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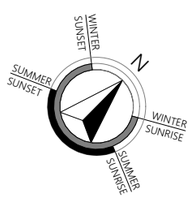


1 - FIRST FLOOR PLAN - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: FIRST FLOOR PLAN - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

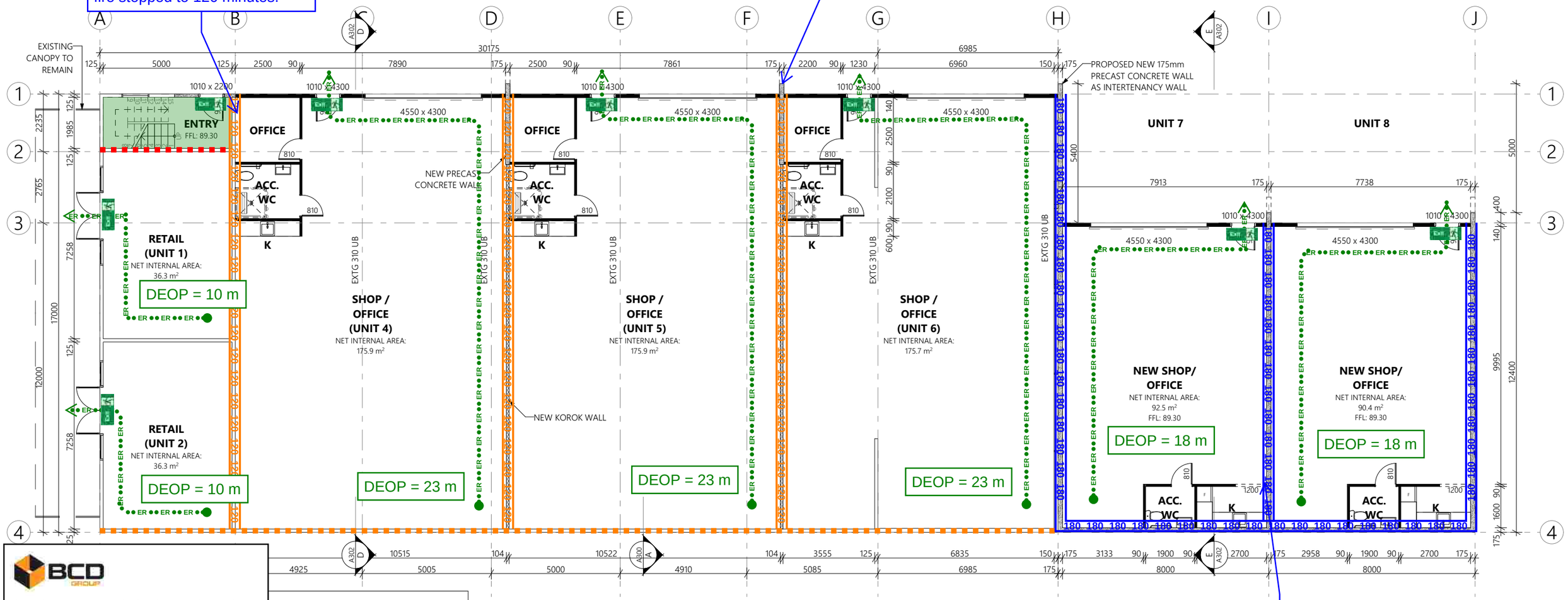
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A114	REV.	

Existing internal wall is of 150mm precast concrete panel construction which achieves a 120-minute FRR.

If any unprotected openings exist they shall be appropriately fire stopped to 120 minutes.

Each lot is proposed to be designed as separately titled and shall be separated from adjacent lots by a 120/120/120 FRR (two-way).



The new building portion (Lots 5-6) is designed to furture-proof possible future uses with a property rating of 180 minutes.

1 - GROUND FLOOR PLAN - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

BCD GROUP

These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.

Reference Number: 26-0605

Date: 25/06/26

Title: Egress & FRR Plan

Legend:

- 120/120/120 FRR (two-way)
- 180/180/180 FRR (two-way)
- Dead end open path
- Existing 60-minute FRR wall
- Existing 120-minute FRR wall
- Illuminated EXIT sign
- Safe path

7
UND FLOOR (O/A SLAB): 97.1 m²

8
UND FLOOR (O/A SLAB): 96.1 m²

INTERTENANCY WALL
UND FLOOR (O/A SLAB): 2.2 m²

L AREA (ADDITION): 195.4 m²

A SHOWN IS GROSS FLOOR AREA
LUDES COVERED DECK / PORCHES

N COLOUR

ADNZ Professional Member

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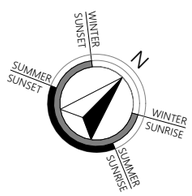


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: GROUND FLOOR PLAN - BLOCK 1 - PROPOSED

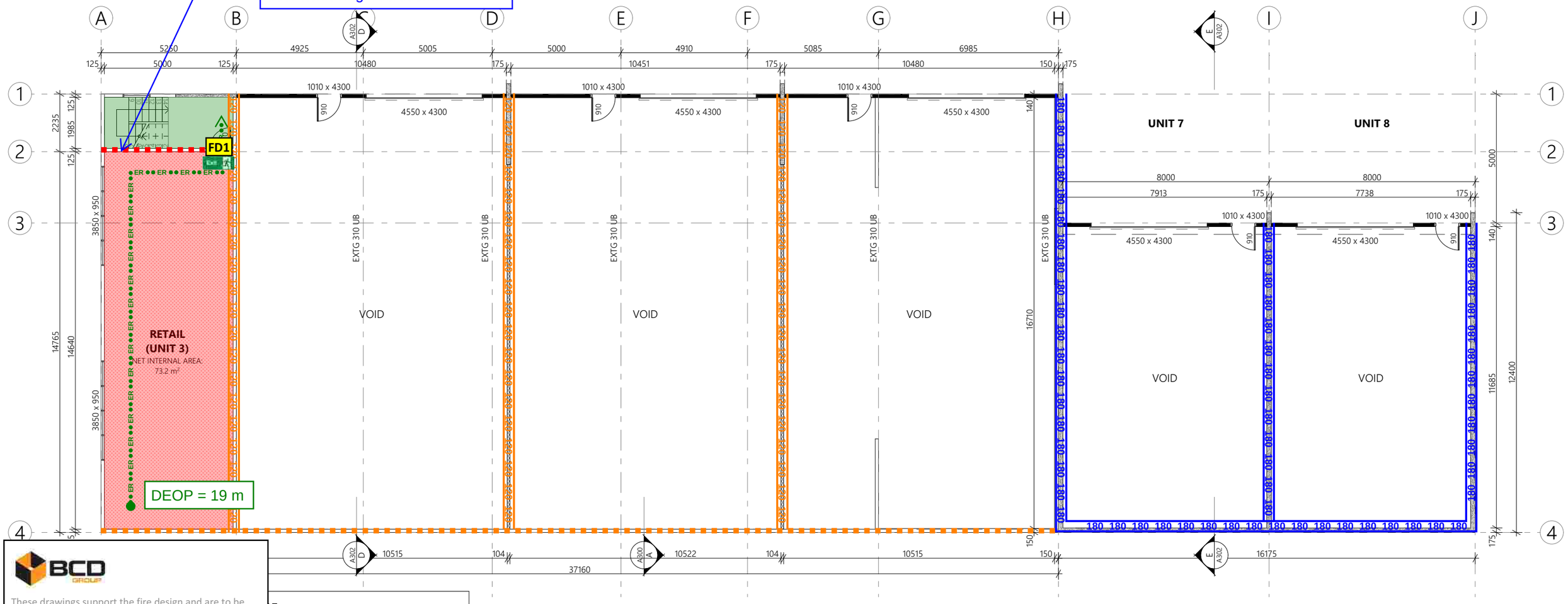
ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A113	REV.	

Existing stairwell serving the upper floor is designed as a safe path fire separated from the remainder of the building by a at least 60-minute FRR.

Per historic drawings, the existing exit door into the stairwell is a fire door achieving -/60/60sm.



1 - FIRST FLOOR PLAN - BLOCK 1 - PROPOSED
1:150 (A3)

Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

BCD GROUP

These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.

Reference Number: 26-0605

Date: 25/06/26

Title: Egress & FRR Plan

Legend:

- 120/120/120 FRR (two-way)
- 180/180/180 FRR (two-way)
- Dead end open path
- Existing 60-minute fire door
- Existing 60-minute FRR floor
- Existing 60-minute FRR wall
- Existing 120-minute FRR wall
- Illuminated EXIT sign
- Safe path

7
UND FLOOR (O/A SLAB): 97.1 m²

8
UND FLOOR (O/A SLAB): 96.1 m²

INTERTENANCY WALL
UND FLOOR (O/A SLAB): 2.2 m²

AL AREA (ADDITION): 195.4 m²

EA SHOWN IS GROSS FLOOR AREA
CLUDES COVERED DECK / PORCHES

IN COLOUR

ADNZ Professional Member

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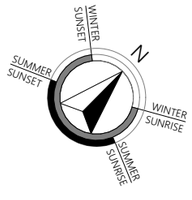


REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: FIRST FLOOR PLAN - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

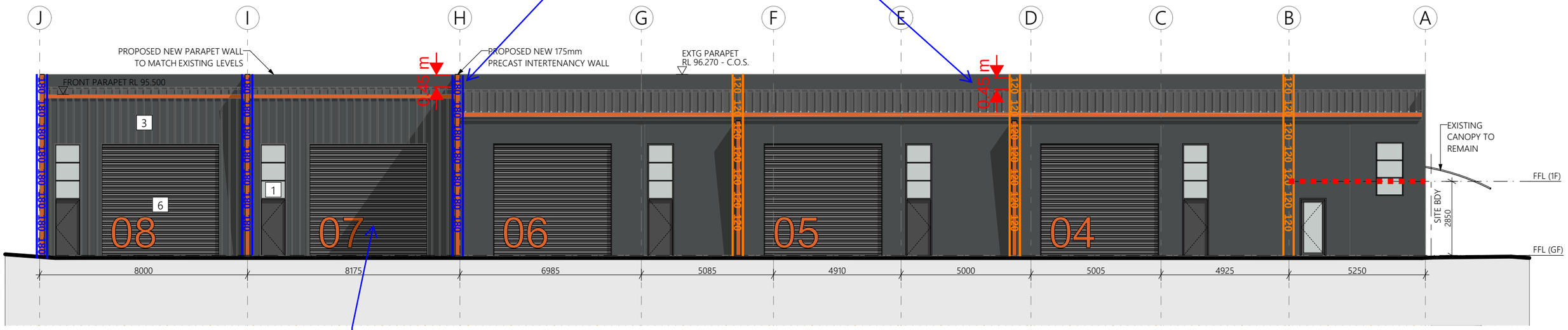
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A114	REV.	

ELEVATION MATERIALS

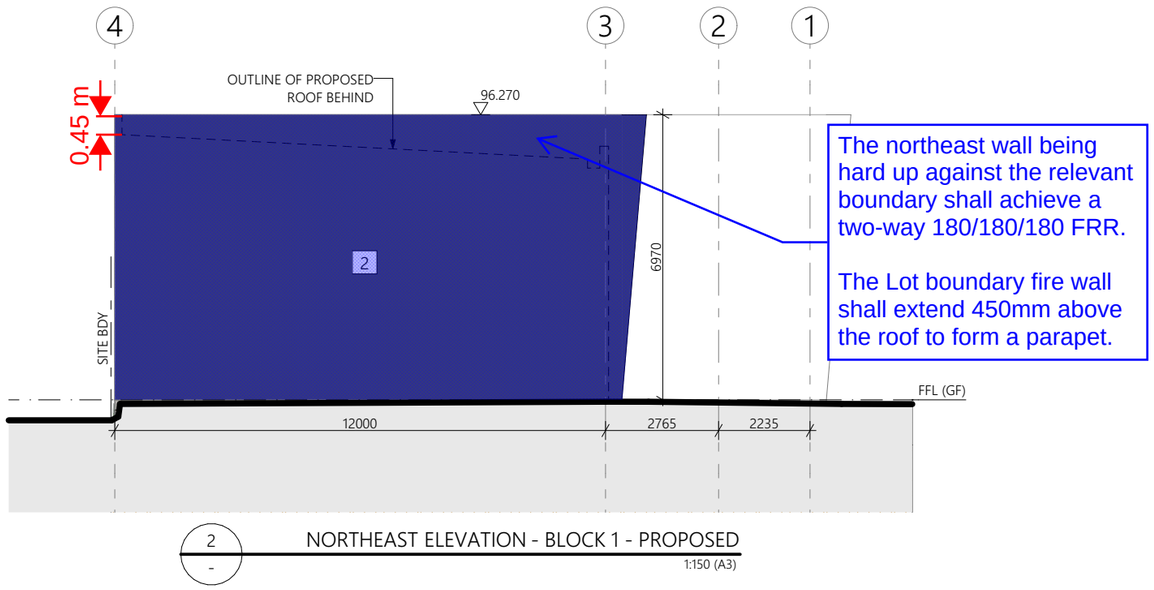
1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR

To futureproof the building, Lot boundary fire walls shall extend 450mm above the roof to form a parapet.



1 / - NORTHWEST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)

The northwest elevation has sufficient setback from the relevant boundary where no external fire rating is required for property protection.



2 / - NORTHEAST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)

The northeast wall being hard up against the relevant boundary shall achieve a two-way 180/180/180 FRR.

The Lot boundary fire wall shall extend 450mm above the roof to form a parapet.

BCD GROUP

These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.

Reference Number: 26-0605

Date: 25/06/26

Title: Elevation

Legend:

- 120/120/120 FRR (two-way)
- 180/180/180 FRR (two-way)
- 180/180/180 FRR (two-way)
- Existing 60-minute FRR floor

IN COLOUR

ADNZ Professional Member

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Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: NW & NE ELEVATION - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A203	REV.	

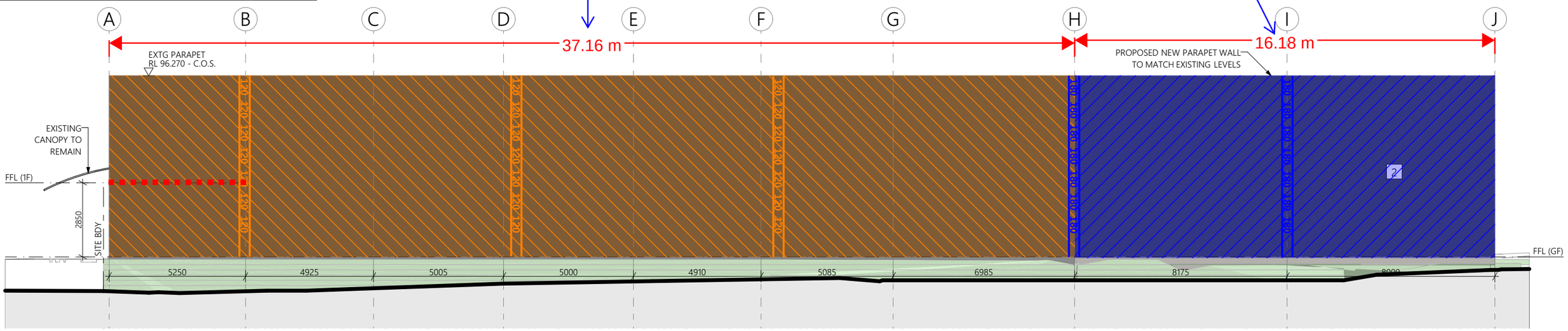
ELEVATION MATERIALS

1 ALUMINIUM POWDERCOATED DOUBLE GLAZED JOINERY
2 175mm THICK PRECAST CONCRETE WALL
3 PROPOSED NEW RIBBED METAL CLADDING TO MATCH EXISTING
4 PROPOSED NEW COLORSTEEL RIBBED METAL ROOFING TO MATCH EXISTING
5 PROPOSED NEW TIMBER FASCIA AND uPVC GUTTER SYSTEM SIMILAR TO EXISTING
6 PROPOSED NEW ROLLER DOOR

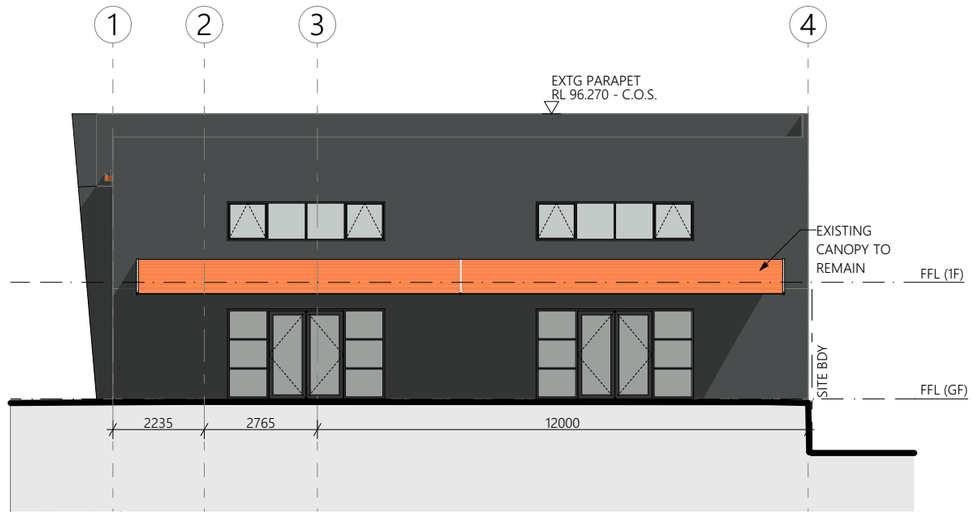
Existing boundary wall is constructed of 150mm precast concrete panels and considered to achieve a 120-minute FRR.

New boundary wall shall achieve a two-way 180/180/180 FRR for property protection.

The Lot boundary fire wall shall extend 450mm above the roof to form a parapet.



1 - SOUTHEAST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)



2 - SOUTHWEST ELEVATION - BLOCK 1 - PROPOSED
1:150 (A3)

BCD GROUP

These drawings support the fire design and are to be read in conjunction with the fire report. They do not show all of the required fire safety systems & features and are not construction drawings.

Reference Number: 26-0605

Date: 25/06/26

Title: Elevation

Legend:

- 120/120/120 FRR (two-way)
- 180/180/180 FRR (two-way)
- 180/180/180 FRR (two-way)
- Existing 60-minute FRR floor
- Existing 120-minute FRR wall

IN COLOUR

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Scale 1:150
1.5 0 1.5 3.0 4.5 6.0 7.5m

REV	ISSUE	BY	DATE

CLIENT: PAUL VEGAR

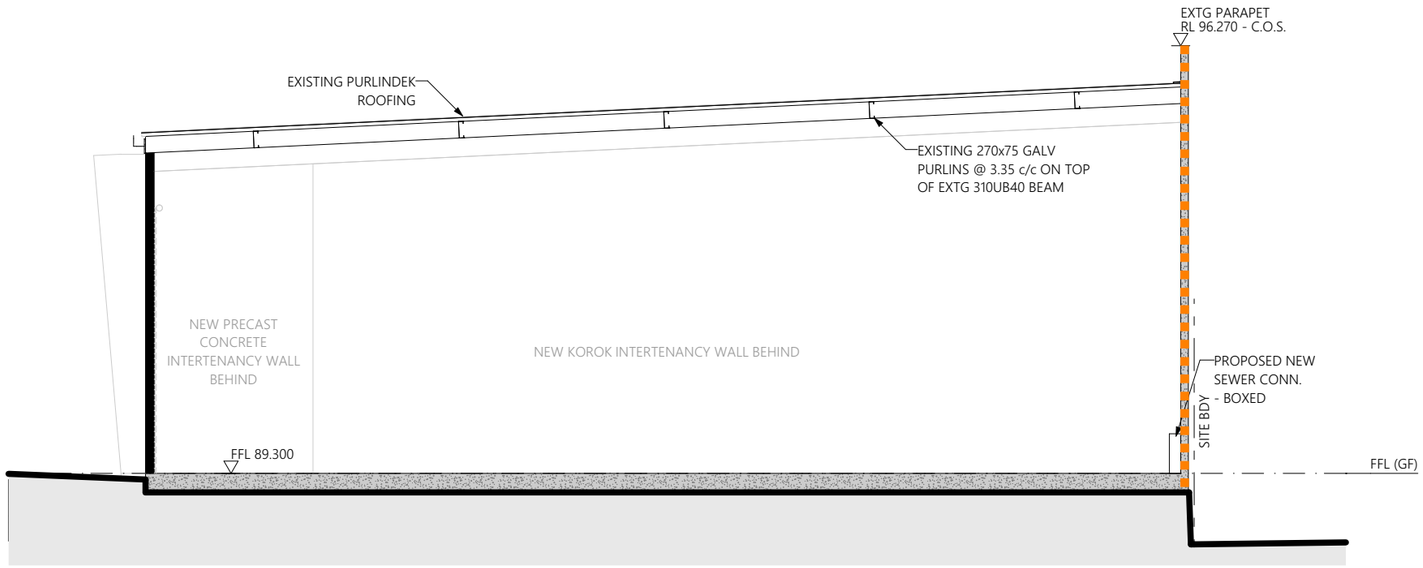
PROJECT: PROPOSED NEW DEVELOPMENT

DRAWING TITLE: SE & SW ELEVATION - BLOCK 1 - PROPOSED

ADDRESS: 2052 SH10, WAIPAPA

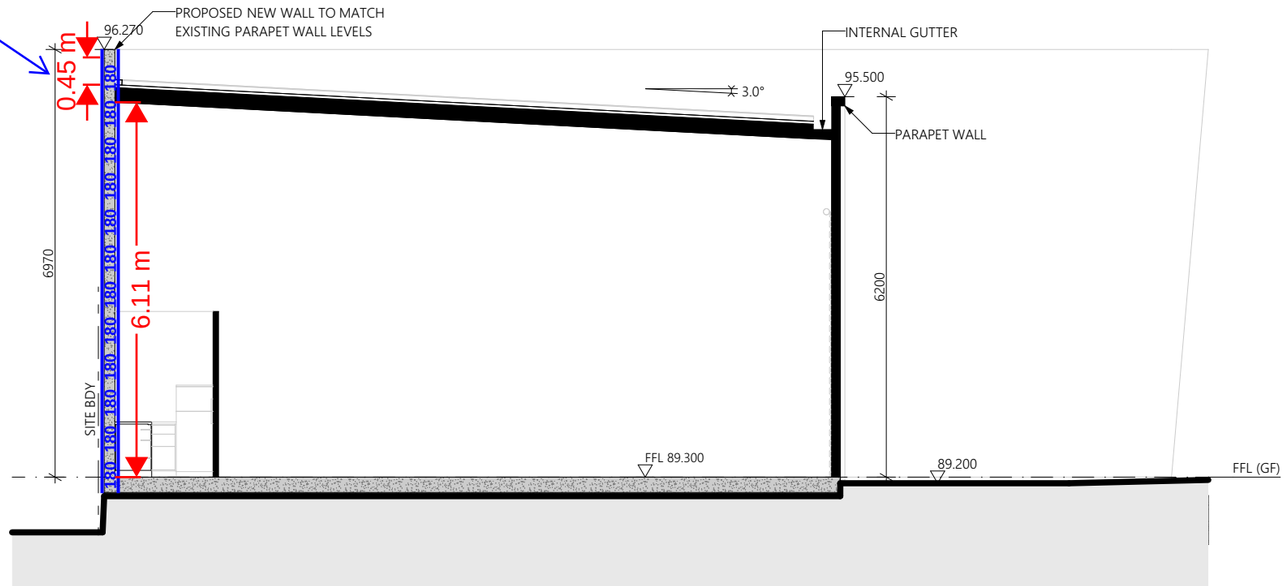
RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A204	REV.	



D — SECTION D
1:100 (A3)

The Lot boundary fire wall shall extend 450mm above the roof to form a parapet.



E — SECTION E
1:100 (A3)

BCD GROUP

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Reference Number: 26-0605

Date: 25/06/26

Title: Sections

Legend:

- 180/180/180 FRR (two-way)
- Existing 120-minute FRR wall

Scale 1:100
1 0 1 2 3 4 5m

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ARCHITECTURE | DESIGN | DRAUGHTING

Archiology Limited

Lv 1, 993 Waitakere Road
Kumeu, Auckland 0810, NZ
p: 0800 22 77 45

P O Box 120, Kumeu
Auckland 0841, NZ
e: info@archiology.co.nz

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REV	ISSUE	BY	DATE

ORIGINAL PLAN IN COLOUR

CLIENT:
PAUL VEGAR

PROJECT:
PROPOSED
NEW DEVELOPMENT

ADDRESS:
2052 SH10, WAIPAPA

DRAWING TITLE:
CROSS SECTION D & E

RESOURCE CONSENT

DRAWN:	PC	SCALE:	NTD (A3)
DESIGNED:	PC		
JOB NUMBER:	25233	DATE:	24/06/2026
DWG NUMBER:	RC-A302	REV.	