

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 | ☒ Discharge: Total volume = <input type="text" value=""/> m ³ |
| ☐ Fast Track Land Use* | <i>Note; volumes >3m³ requires NRC Consent.</i> |
| ☐ Change of Consent Notice (s.221(3)) | ☐ Subdivision |
| ☐ Certificate of Compliance (s.139) | ☐ Existing Use Certificate (s.139A) |
| ☐ Extension of time (s.125) | ☐ Consent under National Environmental Standard
(e.g. Assessing and Managing Contaminants in Soil) |
| ☐ Other (please specify) <input type="text" value=""/> | |

**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:

Shaun & Fiona Kehely

Email:

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:

Logiplan Limited (Attn: Nina Pivac)

Email:

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:

KFCS Farms Limited

Property address/
location:

4238K Far North Road Houhora

8. Application site details

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

Name/s:

KFCS Farms Limited

Site address/
location:

4238K Far North Road Houhora

Postcode

Legal description:

Lot 5 DP 107403

Val Number:

Certificate of title:

NA59D/893

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.

Please contact applicant to arrange site visit.

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.

Landuse to consent to authorise existing container cafe operation, and consent to construct and operate a new laundromat. See AEE for full description of proposal.

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

☐ Regional Council Consent (ref # if known)

☐ National Environmental Standard Consent

☐ Other (please specify)

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

☐ Disturbing, removing or sampling soil

☐ Changing the use of a piece of land

☐ 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

☐ Active Faults

☐ Landslips

☐ Liquefaction

☐ Coastal Erosion

☐ Tsunami

☐ Coastal Inundation

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)

Shaun & Fiona Kehely

Email:

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)

Shaun & Fiona Kehely

Signature:

(signature of bill payer)

Date 14-Jul-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)

Nina Pivac

Signature

Date 14-Jul-2026

A signature is not required if 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.*



LANDUSE RESOURCE CONSENT APPLICATION
TO CONSTRUCT AND OPERATE A SELF-SERVICE LAUNDROMAT

4238K FAR NORTH ROAD (SH1) PUKENUI
LOT 5 DP 107403

ASSESSMENT OF ENVIRONMENTAL EFFECTS

PREPARED FOR:
SHAUN AND FIONA KEHELY

Rev A
14 July 2026

Table of Contents

1.0	THE APPLICANT AND PROPERTY DETAILS	2
2.0	PROPOSAL.....	3
3.0	SITE CONTEXT	3
4.0	OPERATIVE FAR NORTH DISTRICT PLAN (ODP) ASSESSMENT	4
5.0	PROPOSED FAR NORTH DISTRICT PLAN DECISIONS VERSION (PDP-DV) ASSESSMENT	9
6.0	PROPOSED NORTHLAND REGIONAL PLAN (PRP) ASSESSMENT	10
7.0	NES CONTAMINATED SOILS (NESCS)	10
8.0	NES FRESHWATER (NESFW)	10
9.0	NPS INDIGENOUS BIODIVERSITY (NPS-IB).....	10
10.0	NPS HIGHLY PRODUCTIVE LAND (NPSHPL)	11
11.0	NOTIFICATION	11
12.0	ASSESSMENT OF ENVIRONMENTAL EFFECTS	13
13.0	SECTION 104 ASSESSMENT	17
14.0	PART 2 ASSESSMENT	22
15.0	OVERALL CONCLUSION	22

APPENDICES:

Appendix A – Site, Floor and Elevation Plans
Appendix B – Certificate of Title
Appendix C – Stormwater Management Report
Appendix D – Traffic Impact Assessment
Appendix E – NZTA Correspondence
Appendix F – TP58 Report
Appendix G – Approved Form 4 Letter (EBC/2026-300-00)

1.0 THE APPLICANT AND PROPERTY DETAILS

To:	Far North District Council
Site address:	4238K Far North Road (SH1) Pukenui
Applicant's name:	Shaun and Fiona Kehely
Address for service:	Tohu Consulting Limited Attn: Nina Pivac 50-64 Commerce Street Kaitaia 0410
Legal description:	Lot 5 DP 107403
Site area:	4.0194ha
Site owner/s:	KFCS Farms Limited
Operative District Plan:	Far North District Plan
Operative zoning:	Coastal Residential Zone
Overlays/resource areas:	Partial NRC Coastal Environment
Proposed zoning/overlays:	Settlement Zone Treaty Settlement Area of Interest Coastal Environment
Brief description of proposal:	To construct and operate a self-service laundromat. The application also seeks to formalise existing activities on site which include a café/hospitality facility (Honeybees). Overall, resource consent is required under the following rules: • 10.8.5.1.3 Scale of Activities • 10.8.5.1.6 Stormwater Management • 10.8.5.1.12 Hours of Operation – Non-Residential Activities • 15.1.6A.2.1 Traffic Intensity • 12.8.6.1.1 Hazardous Substances – Consent Status Indices for Permitted Activities A discharge consent is also required under Rule C.6.1.3 of the Northland Regional Plan, due to wastewater/greywater discharge exceeding 2m³ per day.
Summary of reasons for consent:	Overall, resource consent is required as a Discretionary Activity under the Far North District Plan.

AUTHOR



Nina Pivac

Director | BAppSC | PGDipPlan | Assoc. NZPI

Date: 14 July 2026

Land-Use Resource Consent Application:
S & F Kehely – 4238K Far North Road

2.0 PROPOSAL

The applicants, Fiona and Shaun Kehely, propose to establish and operate a self-service laundromat, along with formalising the existing café/takeaway activity currently operating from the site (Honeybees). The subject site is located at 4238K Far North Road (SH1) within the Coastal Residential Zone. Under the Operative District Plan (ODP), resource consent is required under the following provisions:

- 10.8.5.1.3 Scale of Activities
- 10.8.5.1.6 Stormwater Management
- 10.8.5.1.12 Hours of Operation – Non-Residential Activities
- 15.1.6A.2.1 Traffic Intensity
- 12.8.6.1.1 Hazardous Substances – Consent Status Indices for Permitted Activities

Under the Proposed Northland Regional Plan (PRP), a discharge consent is also required under *Rule C.6.1.3 Other Onsite Treated Domestic Wastewater Discharge*, due to wastewater/greywater discharge exceeding 2m³ per day.

A comprehensive district plan assessment has been provided in Section 4.0 below.

A Stormwater Management Report and Traffic Impact Assessment have been prepared in support of the proposed development, as attached as **Appendix C and D** respectively.

Consultation has been undertaken with NZTA Waka Kotahi, as per **Appendix E**.

Overall, the application has been assessed as a **Discretionary Activity** under the ODP.

It should be noted that this application has been prepared in response to a Form 4 Letter issued in relation to EBC/2026-300-0, attached as **Appendix G**.

The following Assessment of Environmental Effects (AEE) has been prepared in accordance with the requirements of Section 88 of and Schedule 4 of the Resource Management Act 1991 (the Act) and is intended to provide the information necessary for a full understanding of the activity for which consent is sought and any actual or potential effects the proposal may have on the environment.

3.0 SITE CONTEXT

The subject site is located at 4238K Far North Road (SH1) Pukenui, on the outskirts of the Pukenui township. The site is legally described as Lot 5 DP 107403. A copy of the relevant Certificate of Title (CT) is attached as **Appendix B**.



Figure 2: Map showing subject site (Premise)

In terms of existing built development, the subject site currently contains an existing dwelling in the north-eastern portion of the site, and a café/takeaway activity situated near the western boundary of the site. The remainder of the site is in pasture.

The immediate surrounding environment is characterised by a mix of activities including a range of boutique accommodation facilities, and extensive residential development.

There are no significant areas of indigenous vegetation or habitats of indigenous fauna.

Access to the subject site is currently provided via two existing vehicle crossings off SH1. While the proposal will not alter the existing access arrangements, consultation with NZTA has identified the need for mitigation measures to address the additional traffic movements associated with the proposed activity (see **Appendix E**). As per NZTA's recommendations, the applicant accepts that both vehicle crossings will need to be upgraded to Access Type E standards - this upgrade is due to the substandard sight distances from the vehicle crossings.

4.0 OPERATIVE FAR NORTH DISTRICT PLAN (ODP) ASSESSMENT

Table 2 – ODP Assessment Coastal Residential Zone and District-Wide provisions

Coastal Residential Zone	Permitted Standards	Compliance
Rule 10.6.5.1.1 RELOCATED BUILDINGS	Permitted provided that they comply with all the standards for permitted activities in the Plan, and further provided that where the building is a relocated building all work required to reinstate the exterior including painting and repair of joinery	n/a

Coastal Residential Zone	Permitted Standards	Compliance
	shall be completed within six months of the building being delivered to the site. Reinstatement work is to include connections to all infrastructure services and closing in and ventilation of the foundations.	
Rule 10.6.5.1.2 RESIDENTIAL INTENSITY	Sewered sites: one unit per 800m ² Unsewered sites: one unit per 3,000m ²	The site contains one existing dwelling as per previous Council approvals. No additional dwellings are proposed as part of this application. Permitted
Rule 10.6.5.1.3 SCALE OF ACTIVITIES	The total number of people engaged at any one period of time in activities on a site, including employees and persons making use of any facilities, but excluding people who normally reside on the site or are members of the household shall not exceed: 2 persons per 800m² (sewered) 2 persons per 3,000m² (unsewered) Provided that: (a) this number may be exceeded for a period totalling not more than 60 days in any 12 month period where the increased number of persons is a direct result of activities ancillary to the primary activity on the site; and (b) this number may be exceeded where persons are engaged in constructing or establishing an activity (including environmental enhancement) on the site; and (c) this number may be exceeded where persons are visiting marae. In determining the total number of people engaged at	Based on an unsewered site with a land area of 4.0194ha, the number of people permitted on this site is 26.79 or 27 people, excluding people who normally reside on the site or are members of the household. Based on The Fire Safety Compliance Report for KFCS Farms Ltd at 4238 Far North Road, Pukenui, prepared by Formable Fire Safety Design has calculated maximum occupancy for the proposed laundromat as 46-person occupancy, and this exceeds the permitted 2 persons per 3,000m² threshold for this site. This is considered to be an overconservative estimate, given the laundromat only has 9 washing machines and 9 dryers. So in reality, maximum occupancy may only be from 9 – 18 people. Nonetheless, the applicant seeks consent for a maximum occupancy of 46-persons at any one time (excluding residents). Restricted Discretionary Activity

Coastal Residential Zone	Permitted Standards	Compliance
	any one period to time, the Council will consider the maximum capacity of the facility (for instance, the number of beds in visitors accommodation, the number of seats in a restaurant or theatre), the number of staff needed to cater for the maximum number of guests, and the number and nature of the vehicles that are to be accommodated on site to cater for those engaged in the activity.	
Rule 10.6.5.1.4 BUILDING HEIGHT	The maximum height of any building shall be 8m.	All existing and proposed development have a maximum building height of less than 8m. Permitted
Rule 10.6.5.1.5 SUNLIGHT	2m + 45-degree recession plane	No part of all existing and proposed buildings will encroach the recession plane. Permitted
Rule 10.6.5.1.6 STORMWATER MANAGEMENT	The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 50% or 1,000m ² , whichever is the lesser.	Total impermeable surfaces total area of 3,469.2m ² which exceeds the permitted and restricted discretionary threshold of 1,000m ² threshold for this site. Discretionary Activity
Rule 10.6.5.1.7 SETBACK FROM BOUNDARIES	(a) the minimum building setback from road boundaries shall be 3m; and (b) the minimum setback from any boundary apart from a road boundary is 1.2m except that no set-back is required for a maximum total length of 10m along any one such boundary; and (c) not less than 50% of that part of the site between the road boundary and a parallel line 2m therefrom shall be landscaped.	All existing and proposed development will be located at least 10m from all boundaries. More than 50% of the road boundary is landscaped. Permitted

Coastal Residential Zone	Permitted Standards	Compliance
Rule 10.6.5.1.8 SCREENING FOR NEIGHBOURS NON-RESIDENTIAL ACTIVITIES	n/a	n/a
10.8.5.1.9 OUTDOOR ACTIVITIES	n/a	n/a
10.8.5.1.10 TRANSPORTATION	TIF = 20	The proposed laundromat activity, combined with the existing container café and residential activities will exceed the permitted 20 daily one-way vehicle movements for this site. Discretionary Activity
10.8.5.1.11 SITE INTENSITY - NON RESIDENTIAL ACTIVITIES	The maximum net site area of any site for activities other than residential units shall be 1,000m ² for sewered sites, and 5,000m ² for unsewered sites, except that this area may be exceeded for public reserves without buildings.	The net site area of all non-residential activities on site will be less than 5000m². Permitted
10.8.5.1.12 HOURS OF OPERATION - NON-RESIDENTIAL ACTIVITIES	(a) The maximum number of hours the activity shall be open to visitors, clients or deliveries shall be 50 hours per week; and (b) Hours of operation shall be limited to between the hours: 0700 - 2000 Monday to Friday 0800 - 2000 Saturday, Sunday and Public Holidays Provided that this rule does not apply: (i) where the entire activity is located within a building; and (ii) where each person engaged in the activity outside the above hours resides permanently on the site; and (iii) where there are no visitors, clients or deliveries to or from the site	The proposed hours of operation for the café/takeaways activity are: Monday to Sunday 6am – 7pm The proposed hours of operation for the proposed laundromat activity are: 7 days a week 7am – 7pm While the entire proposed laundromat activity, and cooking, will take place entirely within buildings, visitors to the café/takeaway activity may eat their food outside on the tables provided. Discretionary Activity

Coastal Residential Zone	Permitted Standards	Compliance
	outside the above hours.	
10.8.5.1.14 NOISE	All activities shall be conducted so as to ensure that noise from the site shall not exceed the following noise limits as measured at or within the boundary of any other site in this zone or the Residential or Russell Township Zones, or at or within the notional boundary of any dwelling in a rural or coastal zone: 0700 to 2200 hours 2200 to 0700 hours 55 dBA L10 45 dBA L10 and 70 dBA Lmax	All noise will remain within these permitted thresholds. Permitted
10.8.5.1.16 BUILDING COVERAGE	Any new building or alteration/addition to an existing building is a permitted activity if the total Building Coverage of a site does not exceed 45% or 900m ² , whichever is the lesser, of the gross site area.	Total building coverage equates to 886m ² which falls within the permitted threshold. Permitted
12.8.6.1.1 HAZARDOUS SUBSTANCES - CONSENT STATUS INDICES FOR PERMITTED ACTIVITIES	Indices <0.02	The proposed LPG storage tank quantity 2,000L (1 tonne) exceeds the relevant adjusted threshold for above-ground storage of hazardous substances in this zone. Discretionary Activity

Overall, the proposal requires resource consent as a **Discretionary Activity** under the operative Far North District Plan.

5.0 PROPOSED FAR NORTH DISTRICT PLAN DECISIONS VERSION (PDP-DV) ASSESSMENT

Table 2 – PDP Assessment Settlement Zone and District-Wide provisions

Provision	Requirement	Assessment	Compliance / Activity Status
RSZ-R1 New buildings or structures, relocated buildings, or extensions/alterations	Permitted where the building accommodates a permitted, controlled or restricted discretionary activity and complies with RSZ-S1–S8 as applicable.	Discretionary Activity under RSZ-R8.	Discretionary Activity
RSZ-R2 Impermeable surface coverage	Maximum 35% of the site or 600m ² , whichever is the lesser.	Total impermeable surfaces will exceed 600m ² .	Restricted Discretionary Activity
RSZ-R3 – RSZ-R8	n/a	n/a	n/a
RSZ-R8 Commercial activity	Commercial activities are permitted. Specific GFA thresholds apply to retail activities, supermarkets and offices. The activity must also comply with RSZ-S5 and RSZ-S6.	The total area of all commercial activities, including the existing container café and proposed laundromat and office space, will exceed 300m ² .	Discretionary Activity
RSZ-R9 – RSZ-R15	n/a	n/a	n/a
RSZ-S1 Maximum height	Maximum building/structure height of 8m.	All existing and proposed buildings are less than 8m in height.	Permitted Activity
RSZ-S2 Height in relation to boundary	55 degrees at 2m above ground level at the northern boundary of the site; 45 degrees at 2m above ground level at the eastern and western boundaries of the site; and 35 degrees at 2m above ground level at the southern boundary of the site.	As per the site plan, all buildings are clear of the recession plane.	Permitted Activity
RSZ-S3 Setback	Minimum 1.2m from site boundaries, 3m from a road boundary, and 3m from the KHR rail designation boundary, where relevant.	As per the site plan, all buildings setback at least 30m from the nearest boundary.	Permitted Activity
RSZ-S4 Outdoor living space	Not applicable	Not applicable	Not applicable
RSZ-S5 Outdoor storage	Outdoor storage must be screened by a solid fence or	Any bins, supplies, equipment or other	Permitted Activity

Provision	Requirement	Assessment	Compliance / Activity Status
	wall at least 1.8m high so it is not visible from adjoining sites or public land.	outdoor storage associated with the café or laundromat will be appropriately screened.	
RSZ-S6 -RSZ-S8	n/a	n/a	n/a

Overall, the proposal has been assessed as a **Discretionary Activity** under the proposed Far North District Plan.

6.0 PROPOSED NORTHLAND REGIONAL PLAN (PRP) ASSESSMENT

Under the Proposed Northland Regional Plan (PRP), a discharge consent is also required under *Rule C.6.1.3 Other Onsite Treated Domestic Wastewater Discharge*, due to wastewater/greywater discharge exceeding 2m³ per day.

7.0 NES CONTAMINATED SOILS (NESCS)

All applications that involve subdivision, or an activity that changes the use of a piece of land, or earthworks are subject to the provisions of the NES Contaminated Soils. The regulation sets out the requirements for considering the potential for soil contamination, based on the HAIL (Hazardous Activities and Industries List) and the risk that this may pose to human health as a result of the proposed land use.

It is noted that the subject site contains a small hobby orchard within the eastern portion of the property. Based on discussions with the applicant, it is understood that herbicides and pesticides have not historically been applied within this area. Furthermore, the proposed development is located well outside the extent of the orchard. Accordingly, it is considered that the NESCS does not apply in this instance.

8.0 NES FRESHWATER (NESFW)

A review of aerial images, including NRC's wetland maps, reveal no evidence to suggest that there are any wet areas that may be subject to the NES Freshwater provisions. Therefore, no further assessment is required under the NES Freshwater.

9.0 NPS INDIGENOUS BIODIVERSITY (NPS-IB)

As discussed earlier in the report, the subject site does not contain any significant areas of indigenous vegetation or habitats of indigenous fauna.

10.0 NPS HIGHLY PRODUCTIVE LAND (NPSHPL)

As shown on Far North LUC Maps, the site contains LUC 3 soils which are classified as 'highly productive' under the NPSHPL. However, given the subject site is located in the Coastal Residential Zone, the NPSHPL is not applicable in this instance.

11.0 NOTIFICATION

Public Notification

Section 95A specifies the steps the council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

Step 1: Mandatory public notification is required in certain circumstances

Under Section 95A(3) an application must be publicly notified if:

- a) the applicant has requested that the application be publicly notified;*
- b) public notification is required under Section 95C.*

The applicant is not requesting public notification under clause (a). Clause (b) provisions relate to where an applicant does not provide further information formally requested under Section 92, which is not applicable in this case.

Public notification is not required and therefore Step 2 must be considered.

Step 2: If not required by Step 1, public notification precluded in certain circumstances

Under Section 95A (4) an application must not be publicly notified if:

- a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification;*
- b) the application is for a resource consent for 1 or more of the following, but no other, activities:*
 - i. a controlled activity;*
 - ii. a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity;*

None of the above criteria apply, therefore public notification is not precluded in this instance. Step 3 must be considered.

Step 3: If not precluded by step 2, public notification required in certain circumstances

Under Section 95A(7), public notification is required if:

- a) the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification;*
- b) the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.*

Clause (a) does not apply in this situation.

An assessment of environmental effects in accordance with s95D has been undertaken in Section 8.0 below which concludes that any adverse effect arising as a result of the proposed development will be less than minor. Public notification is therefore not required in this instance.

Step 4: Public notification in special circumstances

Section 95A(9) sets out that the council is required to determine whether special circumstances exist that warrant it being publicly notified.

Special circumstances are those that are:

- *exceptional or unusual, but something less than extraordinary; or*
- *outside of the common run of applications of this nature; or*
- *circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.*

There are no special circumstances that apply to the subject site.

Public Notification Conclusion

Based on the above, it is considered that this application can be processed without public notification.

Limited Notification

Under Section 95B, if an application is not publicly notified, the Council must decide if there are any 'affected persons' and undertake limited notification to those persons. Under Section 95E(1) a person is considered 'affected' if the adverse effects of the activity on that person are 'minor or more than minor'. If the application is not publicly notified, the consent authority must follow the following steps to determine whether to give limited notification of an application.

Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups, or affected persons under a statutory acknowledgement affecting the land.

The above does not apply to this land.

Step 2: If not required by step 1, limited notification precluded in certain circumstances

Step 2 describes that limited notification is precluded where all applicable rules and NES preclude limited notification; or the application is for a controlled activity (other than the subdivision of land) or a prescribed activity under section 360H(1)(a)(ii).

None of the above apply in this instance.

Step 3: if not precluded by step 2, certain other affected persons must be notified

In the case of a boundary activity, Council shall determine in accordance with section 95E whether an owner of an allotment with an infringing boundary is an affected person.

In the case of any other activity, Council shall determine whether a person is an affected person in accordance with section 95E.

If yes to any of the above, Council shall notify each affected person identified under subsections (7) and (8) of the application.

As concluded in the the assessment of effects, it is considered that any adverse effects will be less than minor. Further, written approval has been provided by NZTA.

Step 4: Further notification in special circumstances

In addition to the findings of the previous steps, the council is also required to determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined as eligible for limited notification.

As previously discussed, special circumstances are not considered to apply to this proposal.

Limited Notification Conclusion

Having undertaken the s95B limited notification tests, it is considered that this application can be processed without limited notification.

12.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

In accordance with Section 88(2)(b) of the Act and Clause 1(d) of Schedule 4, this assessment of environmental effects of the proposed activity has been prepared in such detail as corresponds with the scale and significance of the effects it may have on the environment.

Scale of Activities

The existing container café and proposed laundromat are concentrated within the south-western portion of the approximately 4ha site, adjoining the Far North Road frontage, with the wider balance of the property remaining largely undeveloped. The buildings associated with the activities are relatively small-scale and low-rise and, having regard to their siting and the substantial separation available from surrounding properties, are not anticipated to result in visual domination or any material loss of privacy or sunlight. The activities are accessed directly from Far North Road, with sufficient space available within the activity area to accommodate onsite access, parking and manoeuvring. As per the attached Traffic Impact Assessment, any potential adverse traffic effects will be appropriately managed. Potential noise will principally arise from laundry equipment, customer vehicle movements and general activity; however, the equipment will be contained within an enclosed building and, given the scale of the activity and separation from surrounding properties, noise effects are anticipated to be minor and capable of complying with the applicable District Plan standards.

The approximately 4ha site provides substantial physical capacity for onsite servicing. The site plan identifies existing and proposed water storage, including two 25,000-litre water storage tanks, supplemented by roof catchment and bore supply, with sufficient water supply to be confirmed having regard to the additional demand generated by the laundromat. Appropriate wastewater treatment and disposal arrangements will similarly be required given the nature and potential volume of wastewater generated; however, the site plan and TP58 report identifies a reserve disposal field and substantial undeveloped land, indicating that there is sufficient physical capacity for onsite servicing. As per the stormwater report, stormwater can also be managed onsite given the large site area and relatively low overall level of development.

The commercial activity area is not identified as immediately adjoining a public reserve and is concentrated near the Far North Road frontage, physically separated from the wider eastern portion of the property and Houhora Harbour margin. Accordingly, no material effects on the public use or enjoyment of any reserve are anticipated. Overall, the proposal is considered to be of an appropriate scale and intensity for the site and surrounding environment and, subject to confirmation of

adequate servicing and compliance with applicable noise and transport requirements, any adverse effects associated with the scale of the activities are considered capable of being appropriately avoided or mitigated.

Stormwater Management

A Stormwater Management Report has been prepared by Wilton Joubert in support of the proposed development (see **Appendix C**). In summary, the report concludes that any adverse effect in relation to stormwater management will be less than minor subject to the implementation of those recommendations outlined in their report. These include (but are not limited to):

- A proprietary guttering system is required to be installed to collect roof runoff from the existing shed and direct runoff via sealed pipes to the existing open drain to the northeast of the existing shed.
- It is recommended to shape the proposed metal parking area to shed runoff to two minimum 200mm deep x 500mm wide grassed v-channel swales (minimum 0.5% grade) along the southern and eastern side of the proposed parking area. Each swale is to have a silt trap with a scruffy dome or grated inlet at a low point. Each silt trap is to be fitted with a 150mmØ outlet pipe (minimum 1% grade) directed runoff to the discharge point.
- Alternatively, the metal parking area can be shaped to shed to the existing overland flow path via even sheet flow, if unconcentrated flows are achievable and won't affect any structures.
- If the parking area is sealed, runoff shall be collected by appropriately positioned catchpits and conveyed via sealed pipes. The piped drainage shall discharge to a dispersal trench or similar device, allowing initial flows to be dispersed and partially treated prior to overflow as sheet flow across pasture. This provides passive mitigation and treatment before runoff enters the existing overland flow path. Catchpits shall include suitable sumps for sediment capture and shall be designed and installed in accordance with NZBC E1 Surface Water.

The client accepts that these recommendations may be imposed as consent conditions.

Hours of Operation (Non-Residential Activities)

The proposed hours of operation are considered compatible with the existing and anticipated activities in the surrounding environment. The laundromat will operate between **7.00am and 7.00pm**, falling only slightly outside the permitted hours of operation and representing a relatively minor extension into an otherwise reasonable daytime and early evening operating period. Commercial activities have operated from the subject site for an extended period, with no known sensitivity issues, complaints or adverse effects understood to have arisen in relation to neighbouring properties. The laundromat is expected to largely serve the same customer base as the existing café, with customers anticipated to use the café while waiting for washing and drying cycles to be completed. Accordingly, the proposal is not expected to generate entirely separate or sustained streams of activity, with a degree of overlap and shared patronage anticipated between

the two activities. The majority of commercial activity will also occur indoors, which will assist in containing operational noise and activity. Given the nature and scale of the activities, their established presence on the site and the limited extent of the infringement, the proposed hours are not anticipated to result in unreasonable noise, disturbance, loss of privacy or reduced security for neighbouring properties.

While the laundromat may generate some additional vehicle movements, these are expected to be relatively low and intermittent, with customers generally arriving to load or unload washing before spending the intervening period at the café or otherwise remaining on the site. As confirmed in the traffic assessment, traffic associated with the proposal can be appropriately accommodated and managed within the site and surrounding transport network. The proposed **7.00am to 7.00pm** operating hours will also limit the potential for adverse effects associated with vehicle headlights, noise and vibration during more sensitive late-night periods. Potential effects on neighbouring properties will be further mitigated by the predominantly indoor nature of the activities and proposed planting along the southern boundary of the subject site, which will provide additional visual screening and separation from adjoining properties. Overall, having regard to the **minor extent of the infringement beyond the permitted operating hours**, the established commercial use of the site, the absence of known sensitivity issues or adverse effects arising from its operation to date, the complementary nature and likely shared patronage of the café and laundromat, the findings of the traffic assessment and the proposed mitigation measures, the proposed hours of operation are considered appropriate and any associated adverse effects on neighbouring properties are anticipated to be **less than minor**.

Traffic Intensity

A Traffic Impact Assessment (TIA) has been prepared by Dean Scanlen (E-Outcomes) in support of the proposed development (see **Appendix D**). Consultation was undertaken with NZTA as part of this process (see **Appendix E**). In summary, the report concludes that any adverse effect in relation to traffic intensity will be less than minor subject to the implementation of those recommendations outlined in their report. These include the upgrading of both existing vehicle crossings to Type E standards, as recommended by NZTA.

The client accepts that these recommendations may be imposed as consent conditions.

Hazardous Substances

The LPG required for the operation of the laundromat will be stored in purpose-designed tanks within a dedicated and appropriately managed area of the site. LPG is flammable and, if released, can accumulate in low-lying or poorly ventilated areas and present a fire or explosion risk; however, the probability of such an event is considered low where the tanks, associated pipework and appliances are correctly designed, installed, inspected and maintained. The tanks will be positioned in a secure, well-ventilated external location with appropriate separation from buildings, site boundaries, ignition sources, vehicle movements and areas regularly occupied by customers. Protection from accidental vehicle impact, unauthorised access and tampering will be provided where necessary, together with clear warning signage and unobstructed access for servicing and emergency response. The activity is relatively small in scale and the LPG will be used solely to support the laundromat rather than for industrial-scale processing. Accordingly, the number of

people potentially exposed to risk will be limited principally to customers and staff temporarily present on the site, with the majority of the activity occurring indoors and away from the tank storage area. The proposed tank location and management measures will ensure that risks to adjoining properties, nearby activities and the wider natural and physical environment remain low. There are no known high-concentration sensitive activities immediately associated with the proposed storage area, and the tanks can be located with sufficient separation from any waterbody, wetland, drainage feature or other sensitive receiving environment. LPG does not generate a liquid contaminant discharge during normal storage and use; however, the tanks will not be located within stormwater flow paths, enclosed depressions or areas where escaping gas could accumulate or migrate into buildings, drains or underground services.

The storage, delivery and use of LPG will be managed through appropriate site procedures, including regular inspection and maintenance of the tanks, valves, regulators, pipework and connected appliances; prompt repair or isolation of any identified fault; controlled access to the storage area; and delivery and replacement by suitably qualified suppliers. LPG deliveries will be intermittent and involve relatively small volumes associated with the operation of the laundromat, such that cumulative effects arising from the storage, transport or use of hazardous substances are not expected to be significant. The site has direct access to Far North Road and is readily accessible from the wider roading network, avoiding the need for delivery vehicles to travel extensively through residential local roads. The site provides sufficient space for vehicles to enter, manoeuvre, service the tanks and exit safely without creating conflict with customers or the adjoining road, and the traffic assessment confirms that vehicle movements associated with the wider proposal can be appropriately accommodated and managed. Emergency procedures will address fire, suspected leaks, equipment failure and evacuation, including isolation of the gas supply, maintaining safe separation, contacting emergency services and preventing re-entry until the area has been confirmed safe. Tank quantities, deliveries, inspections, maintenance and any incidents will be appropriately recorded, with LPG cylinders or tanks removed, replaced or disposed of through an authorised supplier rather than being discarded onsite. The storage area will also be selected having regard to any identified natural hazards and will not be located where flooding, erosion, instability or other hazards could undermine the tanks or associated infrastructure. Given the confined scale of the storage, its location within an established commercial activity area and the proposed operational controls, no adverse effects on cultural or spiritual values are anticipated. Alternative energy methods are available in principle; however, they are not considered necessary to avoid significant environmental effects because the risks associated with LPG can be effectively managed through the proposed site layout, installation standards, monitoring, maintenance and emergency procedures. Overall, the proposed LPG storage is not expected to create an undue risk to human health, adjoining property or the environment, and any potential adverse effects will be appropriately avoided or mitigated.

Wastewater Disposal

A TP58 Report has been prepared by Eric Wagener (Effluent Drainlayers) in support of the proposed development (see **Appendix F**). Overall, the report concludes that any adverse effect in relation to wastewater disposal will be less than minor subject to the implementation of those recommendations outlined in the report.

Conclusion

Based on the above, it is considered that any adverse effects as a result of the proposal will be less than minor.

13.0 SECTION 104 ASSESSMENT

Assessment of Effects

Section 104(1)(a) requires consideration of any actual and potential effects on the environment of allowing the activity. This has been carried out in the assessment above. The conclusion reached overall is that the adverse effects of granting consent to the proposal are less than minor. Some positive effects will arise from the development, including:

- Improved access to essential services for local residents who may otherwise need to travel significant distances to Kaitia to access laundry facilities;
- Enhanced convenience and social wellbeing for the surrounding local community, particularly for lower-income households, elderly residents, seasonal workers, campers, and families without adequate onsite laundry infrastructure;
- Reduced travel demand to distant service centres, which may in turn reduce vehicle trips, fuel consumption, and associated emissions at a wider network scale;
- Support for community resilience and self-sufficiency by increasing the availability of basic day-to-day services within the local area;
- Positive economic effects through the establishment of a small-scale local business, including local employment opportunities during establishment and operation, and increased spending retention within the local community;
- Potential support for surrounding businesses and activities by encouraging people to remain within the locality while utilising the laundromat and associated services (such as nearby cafés, takeaways, or retail activities);
- Efficient use of existing infrastructure and an already developed commercial site, where the activity can operate without requiring substantial additional infrastructure upgrades; and
- Improved amenity and public hygiene outcomes for some residents and visitors who may otherwise have limited access to reliable laundry facilities.

Therefore, the effects are considered acceptable in the receiving environment.

National and Regional Planning Documents

Other than those discussed earlier, there are no other national or regional planning documents directly relevant to this application.

Operative Far North District Plan – Objectives and Policies

The relevant objectives and policies of the District Plan can be found in the Coastal Residential Zone Chapters.

Coastal Residential Zone - Objectives	
Objective	Comment
10.8.3.1 To enable the development of residential activity in and around existing coastal settlements.	The site contains existing residential development. The proposed development will enable the efficient use of surplus land in a manner that enables residential activities to continue, and does not give rise to reverse sensitivity effects.
10.8.3.2 To protect the coastline from inappropriate subdivision, use and development.	The proposed development is located at least 270m from the CMA, and is located outside of the NRC Coastal Environment.
10.8.3.3 To enable the development of coastal settlements where urban amenity and coastal environmental values are compatible.	The proposed development will result in activities that will complement existing urban amenity, in a manner that does not affect coastal environmental values.

Coastal Residential Zone - Policies	
Objective	Comment
10.8.4.1 That standards in the zone enable a range of housing types and forms of accommodation to be provided, recognising the diverse needs of the community and the coastal location of the zone.	The site contains existing residential development. The proposed development will enable the efficient use of surplus land in a manner that enables residential activities to continue, and does not give rise to reverse sensitivity effects.
10.8.4.2 Non-residential activities within the Coastal Residential Zone shall be designed, built, and located so that any effects that are more than minor on the existing character of the residential environment or the scale and intensity of residential activities, are avoided, remedied or mitigated.	As outlined in the AEE, appropriate mitigation measures will be implemented to ensure that any adverse effects on the existing residential character are appropriately avoided, remedied, or mitigated to a less than minor level.
10.8.4.3 That residential activities have sufficient land associated with each household unit to provide for outdoor space and sewage disposal	The site contains an existing dwelling and associated services including sewage disposal, as per previous Council approvals. These will remain unaffected by the proposed development.
10.8.4.4 That the portion of a site covered in buildings and other impermeable surfaces be limited to enable open space and landscaping around buildings and avoid or mitigate the effects of stormwater runoff on receiving environments	Based on a site area of over 4ha, only 2.1% of the site will be covered in buildings, and less than 9% in impermeable surfaces. A stormwater management report has been prepared in support of the application, which concludes that any adverse effect in relation to stormwater management will be less than minor subject to the implementation of those recommendations outlined in their report.
10.8.4.5. That provision be made for ensuring sites have adequate access to sunlight and daylight.	As noted earlier, all buildings will be setback at least 10m from all boundaries and no part of any building will encroach the 2m + 45 degree recession plane.
10.8.4.6 That activities with net effects greater than a single residential unit could be expected to have, be required to minimise adverse effects on the amenity values and general peaceful enjoyment of any adjacent residential activities.	Although the proposed activities are non-residential, it is considered that ample open space (over 3ha) will be maintained within the site so as to maintain existing amenity values and protect the peaceful enjoyment of any adjacent residential activities.

Coastal Residential Zone - Policies	
Objective	Comment
10.8.4.7 That provision be made to ensure a reasonable level of privacy and amenity for inhabitants of buildings.	As above. The proposed activity will be located at least 80m from the nearest dwelling which will help to ensure a reasonable level of privacy and amenity for inhabitants of neighbouring dwellings.

Proposed Far North District Plan – Objectives and Policies

Settlement Zone - Objectives	
Provision	Assessment
RSZ-01 – Rural and coastal settlements are used predominantly for residential activities and are sustained by a range of compatible activities and services.	The existing container café and proposed laundromat are small-scale commercial/service activities that complement the predominantly residential function of the Settlement Zone. Both activities provide services to the local community and are of the type of non-residential activity anticipated within rural and coastal settlements. In particular, the Zone overview expressly recognises that larger settlements may provide commercial services, including small-scale food outlets, to the surrounding community and travelling public.
RSZ-02 – Land use and subdivision is of a scale and intensity that is in keeping with the rural or coastal character and amenity values of each settlement.	The proposal involves an existing container café together with a laundromat. Assuming the activities remain relatively small in scale and are appropriately located, designed and serviced, they are unlikely to introduce an urban-scale commercial development that would be inconsistent with the character and amenity of the settlement. The use of container-based or modest-scale buildings may also assist in maintaining an informal, small-scale character, although visual amenity, traffic, parking, noise and hours of operation should be considered.
RSZ-03 – Land use and subdivision in the Settlement Zone is appropriate for the physical and environmental attributes of the site and any infrastructure constraints.	As confirmed by the attached traffic, stormwater and TP58 reports, the subject site has the ability to accommodate the proposed activities.
RSZ-04 – Land use and subdivision in the Settlement Zone is managed to control any reverse sensitivity issues that may occur within the zone or at the zone interface.	Neither the café nor laundromat is a sensitive activity. Accordingly, the proposal is not expected to create significant reverse sensitivity effects in relation to surrounding rural or productive activities. Any potential effects of the commercial activities themselves on neighbouring residential properties can be managed through appropriate hours of operation, noise management and site design.

Settlement Zone - Policies	
Provision	Assessment
RSZ-P1 – Enable residential and complementary non-residential activities	Both the café and laundromat are complementary non-residential activities that provide services to residents and

Settlement Zone - Policies	
Provision	Assessment
that support the role and function of the Settlement Zone.	visitors. Their relatively small scale supports, rather than undermines, the role and function of the settlement.
RSZ-P2 – Require land use and subdivision associated with non-residential activities to demonstrate the ability to provide for onsite infrastructure unless a reticulated service is available.	The proposal demonstrates that sufficient infrastructure is available for the activities.
RSZ-P3(a) – Non-residential activities are of a scale, intensity and character that complements residential activities and amenity values in the settlement.	The café and laundromat are relatively small-scale commercial/service activities and are considered capable of operating compatibly with surrounding residential activities. Potential effects such as noise, traffic, lighting and operating hours should remain appropriate to the receiving environment.
RSZ-P3(b) – Support the social and economic wellbeing of the community.	The activities provide local services, business activity and potentially employment opportunities. A laundromat may provide a particularly useful service in a settlement where residents do not otherwise have convenient access to such facilities.
RSZ-P3(c) – Do not adversely affect the viability and vitality of nearby urban centres.	Given the small scale and local-service nature of the activities, the proposal is not expected to undermine the viability or vitality of nearby urban centres. The activities are primarily intended to serve the immediate community and passing visitors.
RSZ-P3(d) – Demonstrate the ability to provide for onsite infrastructure.	The site is able to accommodate adequate water supply, wastewater and stormwater demands associated with both activities.
RSZ-P4 – Avoid land use and development that results in reverse sensitivity effects either within the zone or on activities in adjacent zones.	The proposal does not involve a sensitive activity and is therefore unlikely to constrain existing lawful activities on adjoining land.
RSZ-P5(a) – Scale, character and amenity values of the settlement, particularly impacts on existing residential activities.	The proposal is small-scale and service-oriented. Effects on nearby residential properties will be appropriately managed through the location of buildings and activity areas, operating hours, noise, lighting and landscaping where necessary.
RSZ-P5(b) – Siting and design.	The existing café and proposed laundromat are able to comply with the relevant height, height in relation to boundary and setback standards.
RSZ-P5(c) – Cultural and social wellbeing, including health and safety.	The activities provide useful services to the community and are not expected to adversely affect cultural or social wellbeing. Appropriate management of vehicle and pedestrian movements, wastewater and general site safety will be required.
RSZ-P5(d) – Potential reverse sensitivity effects within the settlement and on	No significant reverse sensitivity effects are anticipated.

Settlement Zone - Policies	
Provision	Assessment
adjacent zones and the rail designation boundary.	
RSZ-P5(e) – Location within or adjoining the settlement.	The site is located within the Settlement Zone, where appropriately scaled commercial and service activities are anticipated.
RSZ-P5(f) – Vitality and viability of nearby urban environments.	The scale and nature of the activities are unlikely to adversely affect nearby urban centres.
RSZ-P5(g) – Capacity of the site to cater for onsite infrastructure.	As above.
RSZ-P5(h) – Adequacy of roading infrastructure.	See TIA.
RSZ-P5(i) – Managing natural hazards.	n/a
RSZ-P5(j) – Effects on historic heritage, cultural values, natural features and landscapes, natural character and indigenous biodiversity.	n/a
RSZ-P5(k) – Historical, spiritual or cultural associations held by tangata whenua.	n/a

District Plan Weighting Summary

In accordance with section 104(1)(b) of the Resource Management Act 1991 (RMA), regard has been had to the relevant provisions of both the Far North Operative District Plan (ODP) and the Far North Proposed District Plan (PDP) Decisions Version.

The ODP remains the operative district plan. However, following the public notification of Council's decisions on submissions, all rules within the PDP Decisions Version have legal effect pursuant to section 86B(1) of the RMA. The PDP nevertheless remains subject to the statutory appeal process and will not become fully operative until those appeals have been resolved. Accordingly, both planning documents are relevant considerations for the purposes of section 104(1)(b).

In determining the appropriate weight to afford each planning document, consideration has been given to the advanced stage reached by the PDP through the Schedule 1 process, the extent to which the relevant provisions have been tested through submissions and hearings, whether the provisions remain subject to appeal, and the extent to which they give effect to higher-order statutory planning instruments.

The relevant PDP provisions have progressed through submissions, hearings and Council decisions, and therefore represent the Council's most recent policy position. Consequently, they are considered to attract significant weight in this assessment. However, as the relevant provisions remain capable of amendment through the appeal process, they are not considered determinative. The ODP continues to carry considerable weight as the operative district plan, particularly where corresponding PDP provisions remain subject to appeal.

Overall, while both the ODP and PDP have informed this assessment, greater weight has generally been afforded to the relevant provisions of the PDP Decisions Version where they represent the Council's contemporary planning framework and there is no indication that they are likely to be materially altered through the appeal process.

Other Matters

There are no other matters considered relevant to the proposal.

14.0 PART 2 ASSESSMENT

As per current case law, an assessment of matters under Part 2 is only required where there is invalidity, incomplete coverage or uncertainty in the planning provisions. The Operative District Plans contain provisions that are relevant to the proposal, and there is no evidence to suggest the relevant provisions are invalid, incomplete or present uncertainty in making any decision. No assessment of the Part 2 provisions is therefore required.

15.0 OVERALL CONCLUSION

The applicants, Fiona and Shaun Kehely, propose to establish and operate a self-service laundromat, along with formalising the existing café/takeaway activity currently operating from the site (Honeybees). The subject site is located at 4238K Far North Road (SH1) within the Coastal Residential Zone. Under the Operative District Plan (ODP), resource consent is required under the following provisions:

- 10.8.5.1.3 Scale of Activities
- 10.8.5.1.6 Stormwater Management
- 10.8.5.1.12 Hours of Operation – Non-Residential Activities
- 15.1.6A.2.1 Traffic Intensity
- 12.8.6.1.1 Hazardous Substances – Consent Status Indices for Permitted Activities

Under the Proposed Northland Regional Plan (PRP), a discharge consent is also required under *Rule C.6.1.3 Other Onsite Treated Domestic Wastewater Discharge*, due to wastewater/greywater discharge exceeding 2m³ per day.

Overall, the application has been assessed as a **Discretionary activity**.

A TIA and Stormwater Management Report, along with all relevant written approvals, have been provided in support of the proposal.

Based on the assessment of effects above, it is concluded that any potential adverse effects on the existing environment and potentially affected parties would be no more than minor and can be managed in terms of appropriate conditions of consent.

It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that the application for resource consent can be granted on a non-notified basis.

AUTHOR



Nina Pivac

Director | BAppSC | PGDipPlan | Assoc. NZPI

Date: 14 July 2026

APPENDICES:

Appendix A – Site, Floor and Elevation Plans

Appendix B – Certificate of Title

Appendix C – Stormwater Management Report

Appendix D – Traffic Impact Assessment

Appendix E – NZTA Correspondence

Appendix F – TP58 Report

Appendix G – Approved Form 4 Letter (EBC/2026-300-00)

Appendix A – Site, Floor and Elevation Plans

commercial & industrial development – structural design – residential design – new homes – alterations – extensions – garages

Proposed New Commercial Building

For KFCS Farms Ltd

4238 Far North Road Pukenui
Lot 5, DP 107403

SH1 Houhora

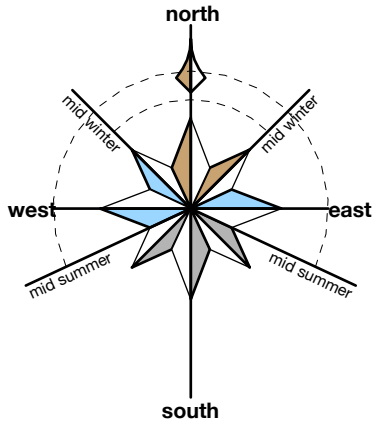
**As of 27 July 2022 The
Proposed District Plan requires
that this consent complies with
The Auckland Council Guidance
Document GD005 for Erosion
and Silt Control and Rule
EW-S3 Accidental Discovery
Protocol**



DRAWING SCHEDULE		
Sheet No.	Sheet Name	Rev. No.
1	SCHEDULE OF NOTES-1	None
2	SCHEDULE OF NOTES-2	None
3	SCHEDULE OF NOTES-3	None
A01	SITE PLAN	None
A02	ENLARGED SITE/PARKING PLAN	None
A03	FLOOR PLAN	None
A03.1	ACCESSIBLE WC-CLOSE UP	None
A03.2	ACCESSIBLE WC DETAILS	None
A03.3	ACCESSIBLE SIGNAGE	None
A04	WALL FRAMING PLAN	None
A05	FOUNDATION/SLAB PLAN	None
A05.1	ENGINEERS DRGS S01	None
A05.2	ENGINEERS DRGS S02	None
A05.3	ENGINEERS DRGS S03	None
A05.4	ENGINEERS DRGS S04	None
A05.5	ENGINEERS DRGS S05	None
A05.6	ENGINEERS DRGS S06	None
A05.7	ENGINEERS DRGS S07	None
A05.8	ENGINEERS DRGS S08	None
A05.9	ENGINEERS DRGS S09	None
A06	PLUMBING & DRAINAGE LAYOUT	None
A06.1	GREASE TRAP	None
A07	PLUMBING LAYOUT	None
A08	GULLY TRAP BEDDING DETAILS	None
A10	HANDBRAC DETAIL	None
A11	ROOF FRAMING PLAN	None
A12	LINTEL/STUD FIXINGS-CONCRETE	None
A13	TRUSS DESIGN	None
A14	TRUSS DESIGN	None
A15	TRUSS PS1	None
A47	TRUSS FIXING REPORT	None
A16	DESIGN IT	None
A17	DESIGN IT	None
A18	DESIGN IT	None
A19	DESIGN IT	None
A20	ROOF PLAN	None
A21	ELECTRICAL PLAN	None
A21.1	GENERAL LIGHTING PLAN	None
A21.2	LUMINAIRE SCHEDULE OF NOTES/TYPICAL DETAILS	None
A21.3	EMERGENCY LIGHTING PLAN	None
A21.4	PS1 EMERGENCY LIGHTING PLAN	None
A22	ELEVATIONS	None
A23	ELEVATIONS	None
A24	RISK MATRIX	None
A25	CROSS SECTION A-A	None
A26	ARCHITECTURAL DETAILS A-A	None
A27	CROSS SECTION B-B	None
A28	ARCHITECTURAL DETAILS B-B	None
A29	INTERTENACY WALL 60 FRR	None
A30	EXHAUST DUCTING - DRYERS	None
A31	LONG SECTION 1-1	None
A32	ARCHITECTURAL DETAILS 1-1	None
A33	GARAGE DOOR DETAIL	None
A34	CEILING HATCH DETAIL	None
A35	HEAD, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A36	SILL, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A37	JAMB, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A38	EXTERNAL CORNER, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A39	SOFFIT, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A40	BASE, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A41	METERBOX HEAD, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A42	METERBOX SILL, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A43	METERBOX JAMB, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A44	CLADDING PENETRATION DETAIL	None
A45	WINDOW SCHEDULE	None
A46	DOOR SCHEDULE	None
A48	GENERAL PAINT SPEC	None
A49	CEILING PAINT SPEC	None
A50	FIRE RATED PAINT SPEC	None
B03	BATHROOM TILED DETAILS	None
M02	BOWMAC BOTTOM PLATE FIXING	None
M04	BEDDING AND BACKFILLING	None
M05	WATER FILTRATION DEVICE	None
M07	PIPE PENETRATION UNDER SLAB	None
M12	BOWMAC STUD/TOP PLATE FIXING	None
M13	MITEK LINTEL/STUD FIXINGS	None
M12.1	MITEK-OPTIONAL STUDLOCK LINTEL FIXINGS	None
M12.2	MITEK-OPTIONAL STUDLOCK LINTEL FIXINGS	None
M14	DEKTTITE DETAIL	None



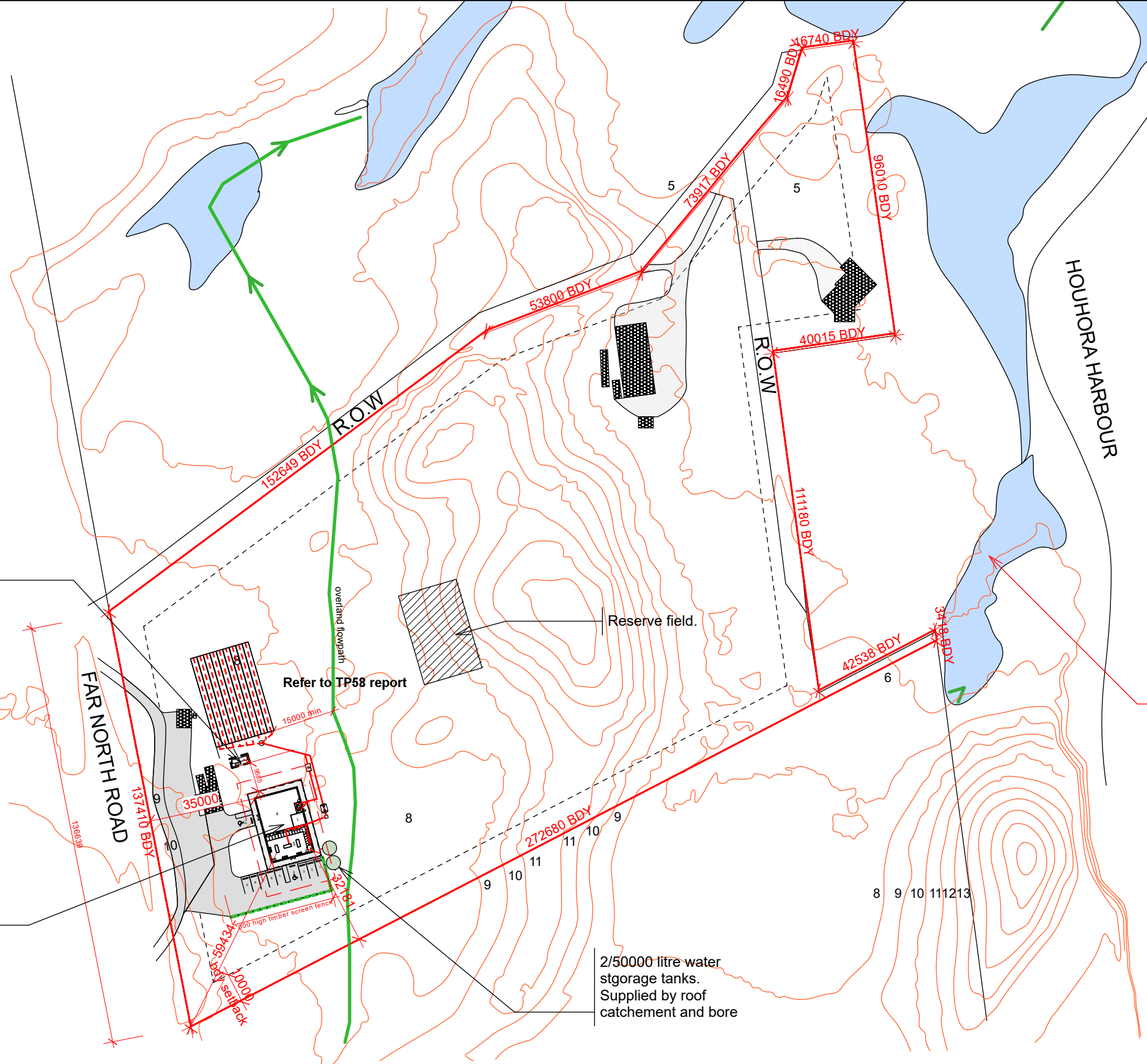
DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.



2000 LITRE LPG STORAGE TANK
(1000 KG)
with vaporiser rated $\geq 30\text{kg/hr}$.
Design/Installation to AS/NZS
5601. To be sited 3000 min from
any building.
2000 Anti Climb Security fence to
contain vessel

The base that will support the LPG
tank will be of reinforced concrete
with a continuous perimeter footing
200w x 600d reinforced with 2/D12
rebars with R10 ties @ 600 crs. The
soils in this area are well drained
sand. The final design of the tank
support will be supplied by the
installer to council along with any
other required producers statement
& this will be provide prior to any
installation work being carried out.

Proposed Building
Location.



SITE NOTES:
4238 FAR NORTH ROAD, PUKENUI

LEGAL DESCRIPTION
LOT 5
DP 107403
VALUATION NUMBER: 00011-50001
TOTAL LAND AREA: 40058.76 m2

SITE COVERAGE
EXISTING BUILDING FLOOR AREA: 586m2
EXISTING GRAVEL AREA: 1689m2
NEW IMPERMEABLE AREA-PARKING: 687m2
PROPOSED BUILDING FLOOR AREA: 299.6 m2
PROPOSED ROOF TOTAL AREA: 457.2 m2
EXISTING BUILDING FLOOR AREAS + PROPOSED
BUILDING FLOOR AREA: 886m2

TOTAL AREA OF IMPERMEABLE SURFACES: 3469.2
TOTAL % OF IMPERMEABLE SURFACES: <9%

FNDC ZONE GENERAL RESIDENTIAL
SETBACK TO BOUNDARIES 3 metres from road boundary
then 1.2 metres from any other boundary.

EARTHQUAKE ZONE 1
EXPOSURE **ZONE D**
CLIMATE ZONE 1
WIND REGION A
RAINFALL 90-100
WIND ZONE-**VERY HIGH**
SNOW ZONE NO
LEE ZONE NO

From NRC Flood
Maps.

**As of 27 July 2022 The
Proposed District Plan requires
that this consent complies with
The Auckland Council Guidance
Document GD005 for Erosion
and Silt Control and Rule
EW-S3 Accidental Discovery
Protocol**

All dimensions to be checked on site prior to commencement of work.
Work only to figured dimensions, in the event of a discrepancy contact the Designer.
Do not change any details without prior consent from the Designer.
Building Contractor to check all levels, dimensions, connections & manufacturers
specifications before beginning or manufacturing any work to ensure that all materials &
labour necessary to complete the project has been allowed for, whether inferred, drawn on
plans or not.
Liability will not be accepted by Designer for any materials or labour not shown on
drawings or required by council or during construction.

CLIENT:	FIONA & SHAUN KEHELY			PROJECT #	FSK-0725	
PROJECT:	SH10 PUKENUI			DATE #	22/09/2025	
DWG	SITE PLAN			SCALE @ A3	1:1500	
				DRAWN	KB/TB/DB	
				CHKD	KB/TB/DB	



REVISION AMENDMENTS	BY	DATE	REV
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DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

2.5 Explicit Compliance Statement – F8.2(c)
Compliance with NZBC F8.2(c) – Bulk LPG Tank
Hazchem / Flammable Signage
Signs are provided in accordance with F8/AS1 section 7.1 (hazardous substances), HSNO Code of Practice 2-1 09-04 and HSW (Hazardous Substances) Regulations 2017 for bulk LPG installations. A Hazchem 2YE LPG sign (UN 1075) and associated flammable gas / no-ignition signs are mounted on the LPG tank compound fence at 1.5–2.0 m mounting height, oriented toward normal approach paths, and sized to ensure legibility from at least 10 m. Additional Hazchem signage is provided at the main site entrance. The signage is clearly visible, readily understandable, and encountered before people reach the LPG tank or associated hazardous area, thereby satisfying NZBC F8.3.1 and F8.3.2 and demonstrating compliance with F8.2(c) for identification of potential hazards.

6000 x 3000 Loading Zone
for a light delivery van

CLIENT:	FIONA & SHAUN KEHELY			PROJECT #	FSK-0725	
PROJECT:	SH10 PUKENUI			DATE #	22/09/2025	
DWG	ENLARGED SITE/PARKING PLAN			SCALE @ A3	1:200	
				DRAWN	KB/TB/DB	
				CHKD	KB/TB/DB	



Single Chamber
Septic Tank.
Install FAI & Bio Filter

2000 LITRE LPG STORAGE TANK
(1000 KG)
with vaporiser rated ≥30kg/hr.
Design/Installation to AS/NZS
5601. To be sited 3000 min from
any building.
2000 Anti Climb Security fence to
contain vessel
The base that will support the LPG
tank will be of reinforced concrete
with a continuous perimeter footing
200w x 600d reinforced with 2/D12
rebars with R10 ties @ 600 crs. The
soils in this area are well drained
sand. The final design of the tank
support will be supplied by the
installer to council along with any
other required producers statements
& this will be provide prior to any
installation work being carried out.

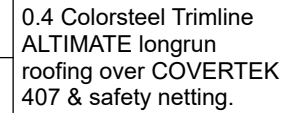
Grease Trap.
6000 litre HALGAN
MGTR series.
Install FAI & Bio Filter

Pump.

100ø pvc overflow to
3000 x 100ø spreader.
Drill 20ø holes @ 200
crs

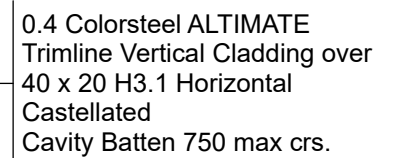
2/50000 litre water
storage tanks.
These will be charged by
bore

2000 high timber screen
fence



0.55 Colorsteel 175 box gutter with galv. external brackets @ 300 crs.

A	NORTH
WALL	ELEVATION

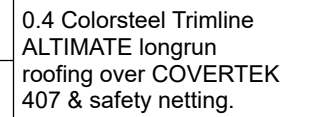


FFL 9.30

B	EAST
WALL	ELEVATION

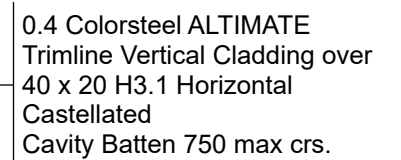
architecture
beard

architectural and structural designers
design_vision_strategy



0.55 Colorsteel 175 box gutter with galv. external brackets @ 300 crs.

C	SOUTH
WALL	ELEVATION

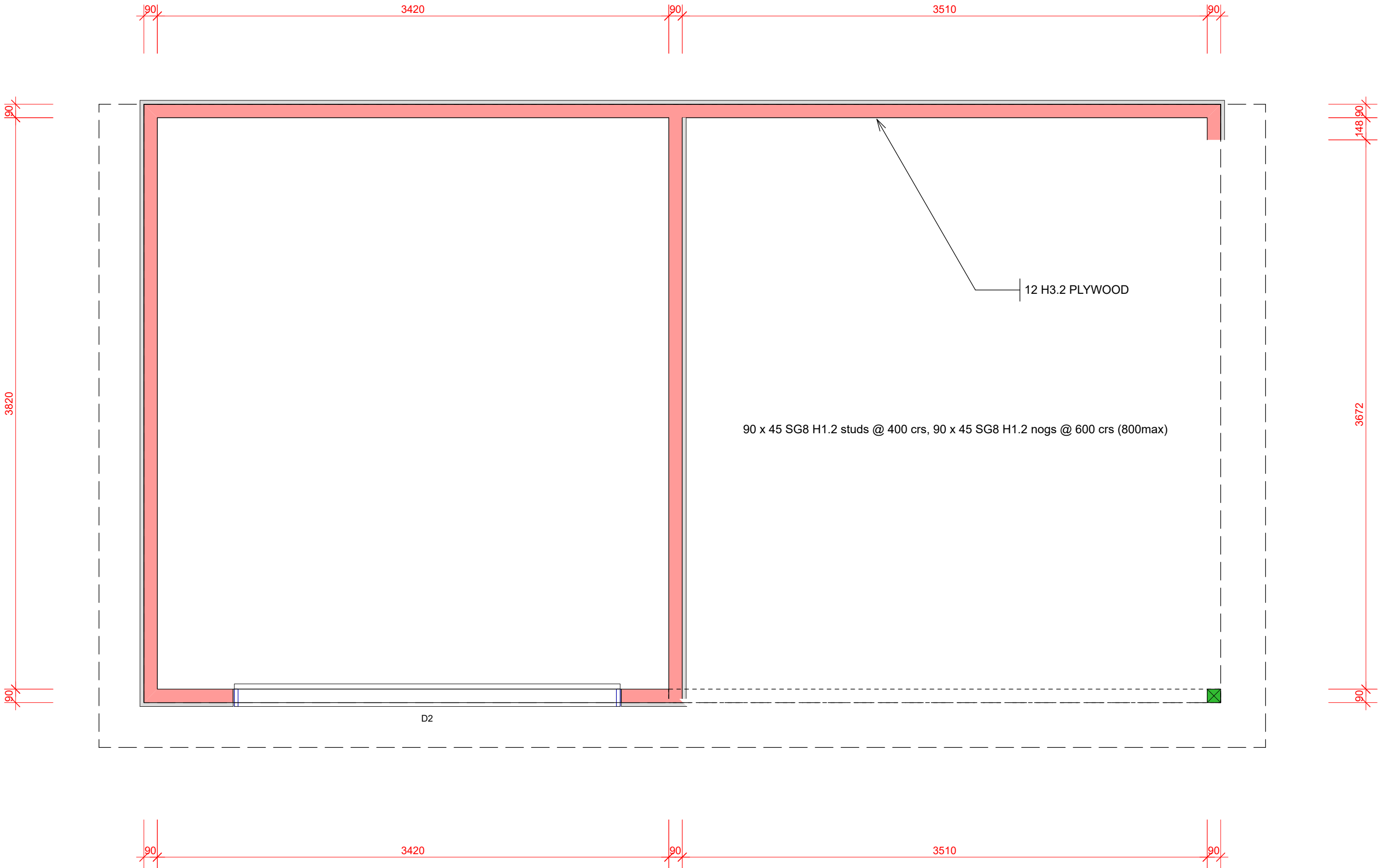


D	WEST
WALL	ELEVATION

architecture
beard

architectural and structural designers
design_vision_strategy

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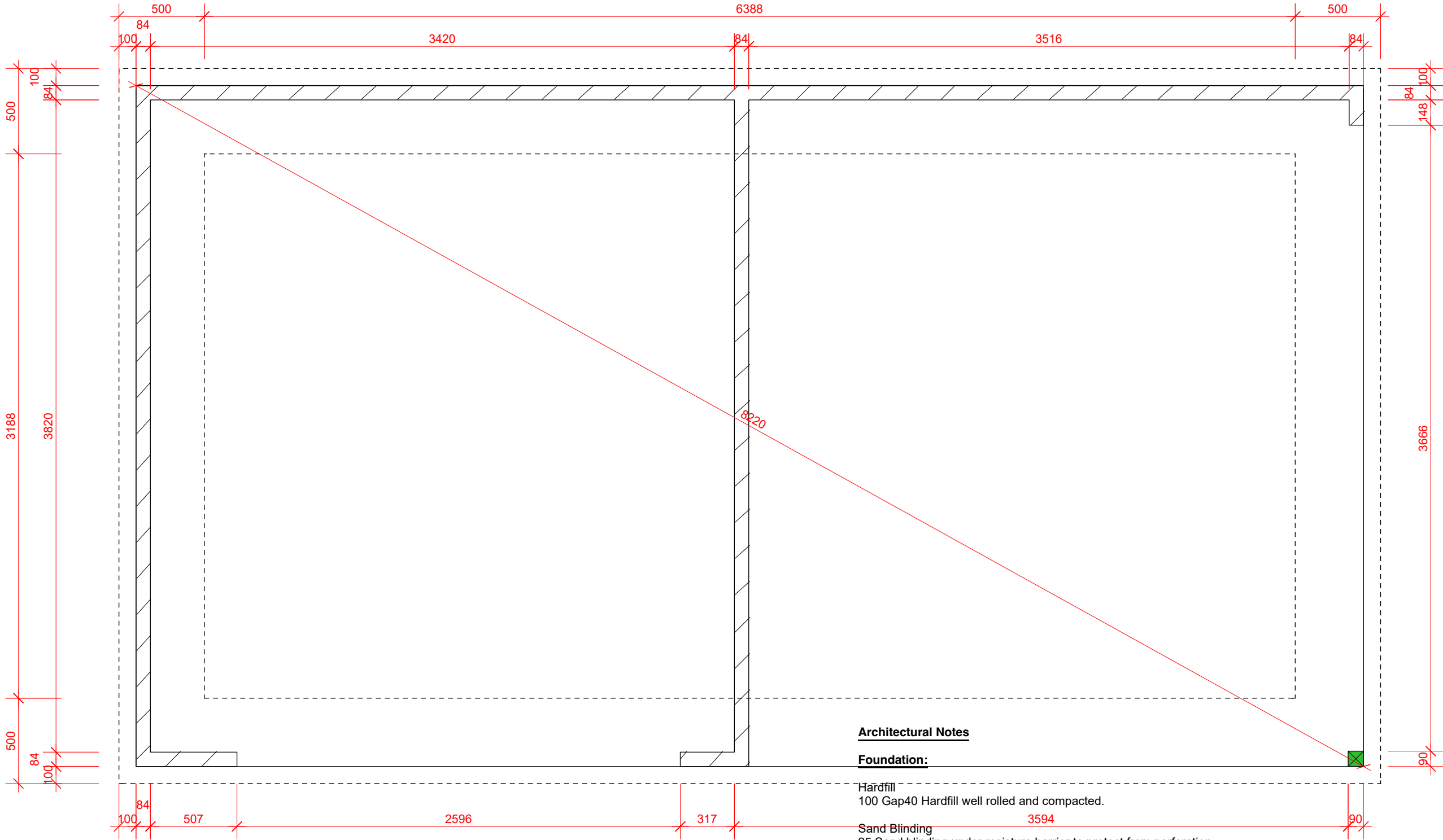
FLOOR PLAN NOTES
Contractor is to check all dimensions on site before commencing work.
Confirm kitchen layout with owner & kitchen manufacturer before commencing pipework.
All dimensions to timber framing not finished room sizes.
All framing & bottom plates to be H1.2 treated unless specified otherwise.
All structural timber has been designed using SG8 timber unless otherwise specified.
See foundation plan for loaded bearings walls.

CLIENT: KEHLEY		PROJECT # LPG-SHE D	
PROJECT: PUKENUI		DATE # 08/07/2025	DWG # A02
DWG FLOOR PLAN		SCALE @ A3 1:25	
		DRAWN KB/TB/DB	
		CHKD KB/TB/DB	



ISSUE NO.	DATE	DESCRIPTION	REVISION AMENDMENTS	BY	DATE	REV
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Architectural Notes

Foundation:

- Hardfill**
100 Gap40 Hardfill well rolled and compacted.
- Sand Blinding**
25 Sand blinding under moisture barrier to protect from perforation.
- Moisture Barrier**
0.25 polyethelene moisture barrier, lap 200 and tape seams continously with 50 polyethelene tape, tape all cuts and penetrations. Use THERMATHENE Black..
- Concrete/Mesh**
100 concrete floor slab with SE62 mesh. 30 top cover. Conc strength to be 25MPa.
- Saw Cuts**
25 x 3 deep saw cuts @ 5000 crs max.
- Connections**
50 x 50 x 3 Flat washers to all concealed timber faces, 50 x 50 x 3 SS flat washers to all exposed timber faces.

NOTE:
1. THE SITE SUITABILITY REPORT IS BASED OF A MAXIMUM OF 4 SCALA-PENETROMETER TEST SITES.
2. ALL PILE FOOTINGS/FOUNDATIONS ARE TO BE EXCAVATED TO THE DEPTHS AS DIMENSIONED OR NOTED ON THE FOUNDATION PLAN AND DETAILS.
3. THEY SHOULD BE AT LEAST 450mm INTO "GOOD GROUND" AS DETERMINED IN NZS3604:2011.
4. IF FOR ANY REASON DURING PILE/FOOTING EXCAVATION SOFT GROUND IS OBSERVED/ENCOUNTERED THEN THE DESIGNER SHOULD IMMEDIATELY BE CONTACTED PRIOR TO ANY FURTHER PILE EXCAVATION SO THAT FURTHER INVESTIGATION CAN BE CARRIED OUT AND THIS MAY MEAN THAT A REGISTERED STRUCTURAL ENGINEER WILL BE REQUIRED TO BECOME INVOLVED.
5. THE SITE SUITABILITY REPORT IS A GENERAL ASSESSMENT (BASED ON NZS3604:2011) OF THE EXPECTATIONS OF WHERE GOOD GROUND SHOULD BE ENCOUNTERED, HOWEVER THERE COULD BE PILE EXCAVATIONS THAT MAY NEED BE DEEPER TO ENCOUNTER GOOD GROUND AS PER NUMBER 4. ABOVE.

Beard Online Architecture 106 Arawhata Road Kaingaroa 0483 E: beardarc48@gmail.com
D M Beard Structural LTD Doug: 022 454 9863 Tyler: 021 247 7232 Kirsty: 022 167 9900

NOTE ALL DIMENSION MUST BE CONFIRMED ON SITE PRIOR TO SETTING OUT PILES

CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	FOUNDATION/SLAB	SCALE @ A3	1:25
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A03

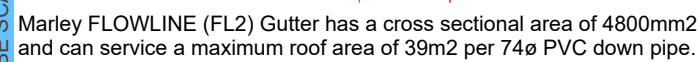


ISSUE NO.	DATE	DESCRIPTION	REVISION AMENDMENTS	BY	DATE	REV
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ISSUE NO.	DATE	DESCRIPTION	REVISION AMENDMENTS	BY	DATE	REV
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Trapezoidal Roof Cladding

0.4 Coloursteel MAXAM Trimline Roofing



Spouting Capacity:

Beard Online Architecture 106 Arawhata Road Kaingaroa 0483 E: beardarc48@gmail.com
D M Beard Structural LTD Doug: 022 454 9863 Tyler: 021 247 7232 Kirsty: 022 167 9900

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DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

Architectural Notes

Foundation:

Hardfill.
100 Gap40 Hardfill well rolled and compacted.

Sand Blinding.
25 Sand Blinding under Moisture Barrier to protect from perforation.

Moisture Barrier.
0.25 Polyethelene Moisture Barrier, Lap 200 and tape seams continuously with 50 Polyethelene Tape, tape all cuts and penetrations. Use Thermathene Black.

Concrete/Mesh.
100 Concrete Floor Slab with SE62 Mesh. 30 Top Cover. Concrete strength to be 25mpa.

Saw Cuts.
25 x 3 deep Saw Cuts @ 5000 crs max.

Walls:

Bottom Plate (Concrete).
90 x 45 SG8 H1.2 Bottom Plate On DPM, Bowmac Blue Head Screw Bolt (M10 X 140) Embedded 95 @ 600 crs Or
90 x 45 SG8 H1.2 Bottom Plate On DPM, (M12 x 120) Truebolts Embed 75, 55 from Slab Edge or Bowmac M12 X 150 Screw Bolts @ 600 crs, Embed 95, 55 from Slab Edge.

Studs/Nogs (Load Bearing)
90 x 45 SG8 H1.2 Studs @ 400 crs for Stud lengths up to 2400, 90 x 45 SG8 H1.2 Nogs @ 800 crs.

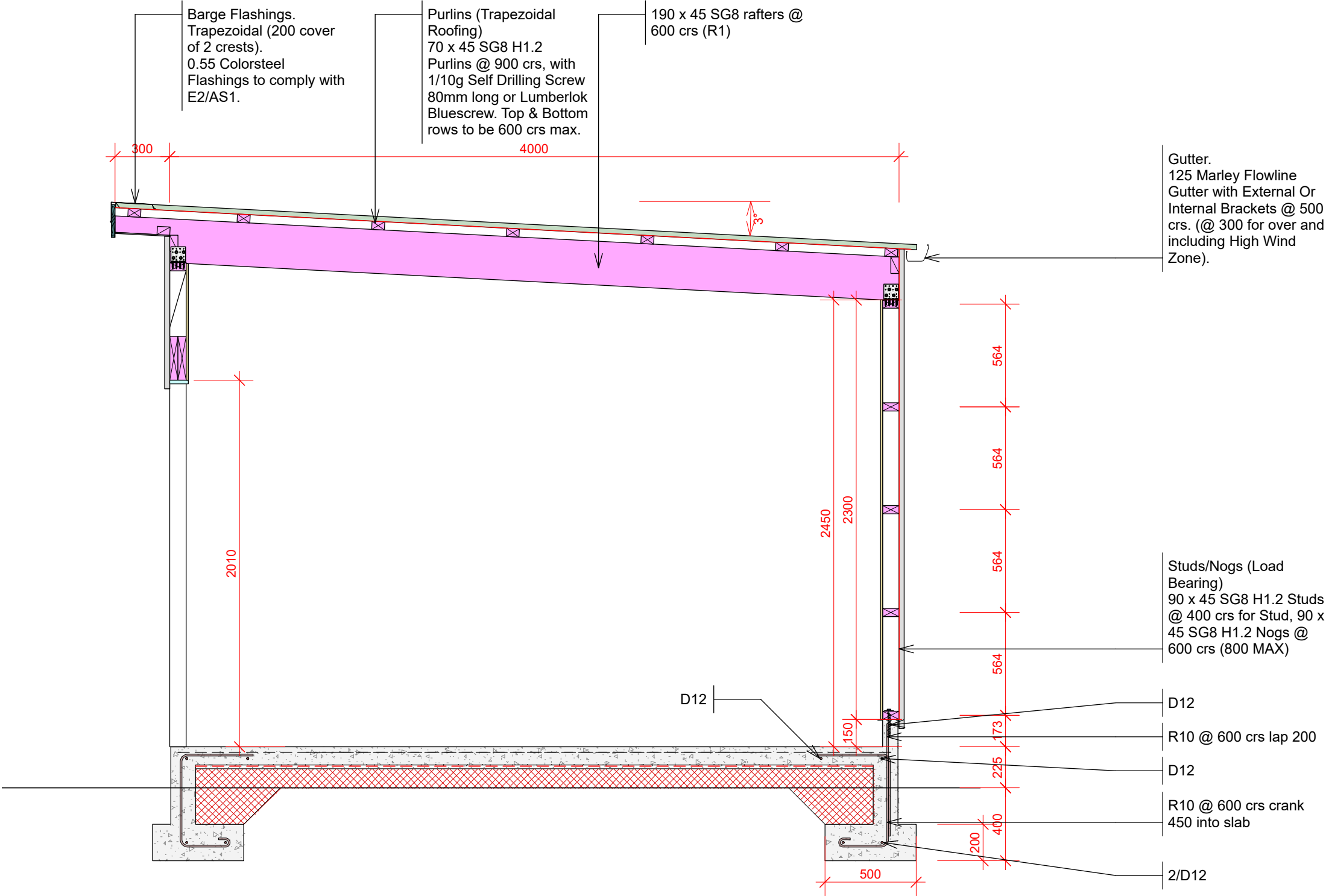
Building Underlay.
BAYOWRAP Building Wrap.

Roof:

Roofing Underlay
Covertek 407 Self Supporting Roof Underlay.

Roof Envelope:

Barge Flashings.
Trapezoidal (200 cover of 2 crests).
0.55 Colorsteel Flashings to comply with E2/AS1.



A-A Cross Section

000

CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	CROSS SECTION A-A	SCALE @ A3	1:5
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A09



REV

DATE

BY

REVISION AMENDMENTS

DESCRIPTION

DATE

ISSUE NO.

DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

Architectural Notes

Foundation:

Hardfill.
100 Gap40 Hardfill well rolled and compacted.

Sand Blinding.
25 Sand Blinding under Moisture Barrier to protect from perforation.

Moisture Barrier.
0.25 Polyethelene Moisture Barrier, Lap 200 and tape seams continuously with 50 Polyethelene Tape, tape all cuts and penetrations. Use Thermathene Black.

Concrete/Mesh.
100 Concrete Floor Slab with SE62 Mesh. 30 Top Cover. Concrete strength to be 25mpa.

Saw Cuts.
25 x 3 deep Saw Cuts @ 5000 crs max.

Walls:

Bottom Plate (Concrete).
90 x 45 SG8 H1.2 Bottom Plate On DPM, Bowmac Blue Head Screw Bolt (M10 X 140) Embedded 95 @ 600 crs Or
90 x 45 SG8 H1.2 Bottom Plate On DPM, (M12 x 120) Truebolts Embed 75, 55 from Slab Edge or Bowmac M12 X 150 Screw Bolts @ 600 crs, Embed 95, 55 from Slab Edge.

Studs/Nogs (Load Bearing)
90 x 45 SG8 H1.2 Studs @ 400 crs for Stud lengths up to 2400, 90 x 45 SG8 H1.2 Nogs @ 800 crs.

Building Underlay.
BAYOWRAP Building Wrap.

Roof:

Roofing Underlay
Covertek 407 Self Supporting Roof Underlay.

Roof Envelope:

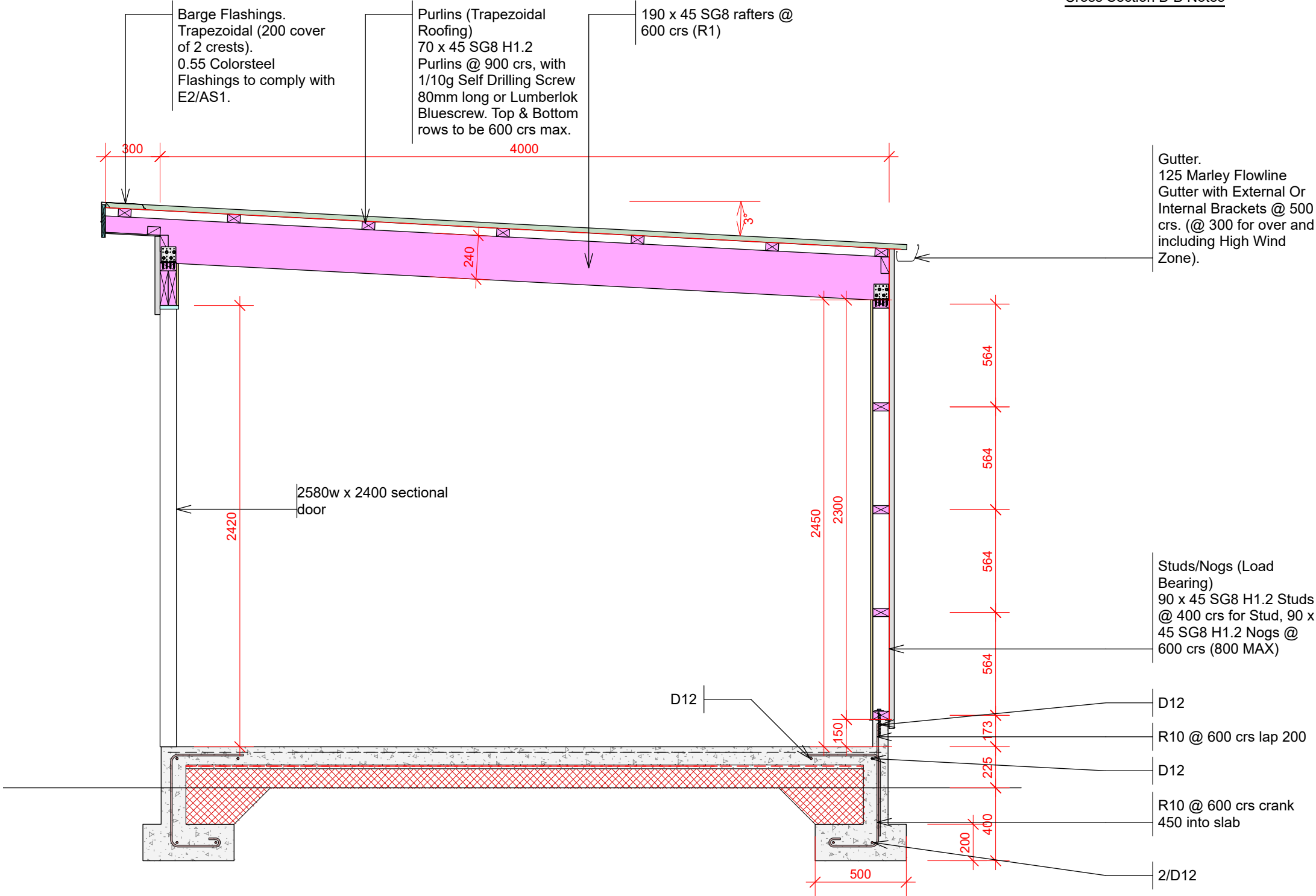
Barge Flashings.
Trapezoidal (200 cover of 2 crests).
0.55 Colorsteel Flashings to comply with E2/AS1.

FOR LOADED DIMENSIONS AFFECTING LINTELS, BEARERS & FLOOR JOISTS-REFER TO NZS3604:2011 SECTION 1

TYPICAL NOTE:

All piles are to go through existing fill and into good ground.

Cross Section B-B Notes



B-B Cross Section
000

CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	CROSS SECTION B-B	SCALE @ A3	1:5
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A10



REV
DATE
BY
REVISION AMENDMENTS

DESCRIPTION

DATE
ISSUE NO.

Appendix B – Certificate of Title



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD**

**Guaranteed Search Copy issued under Section 60 of the Land
Transfer Act 2017**




R.W. Muir
Registrar-General
of Land

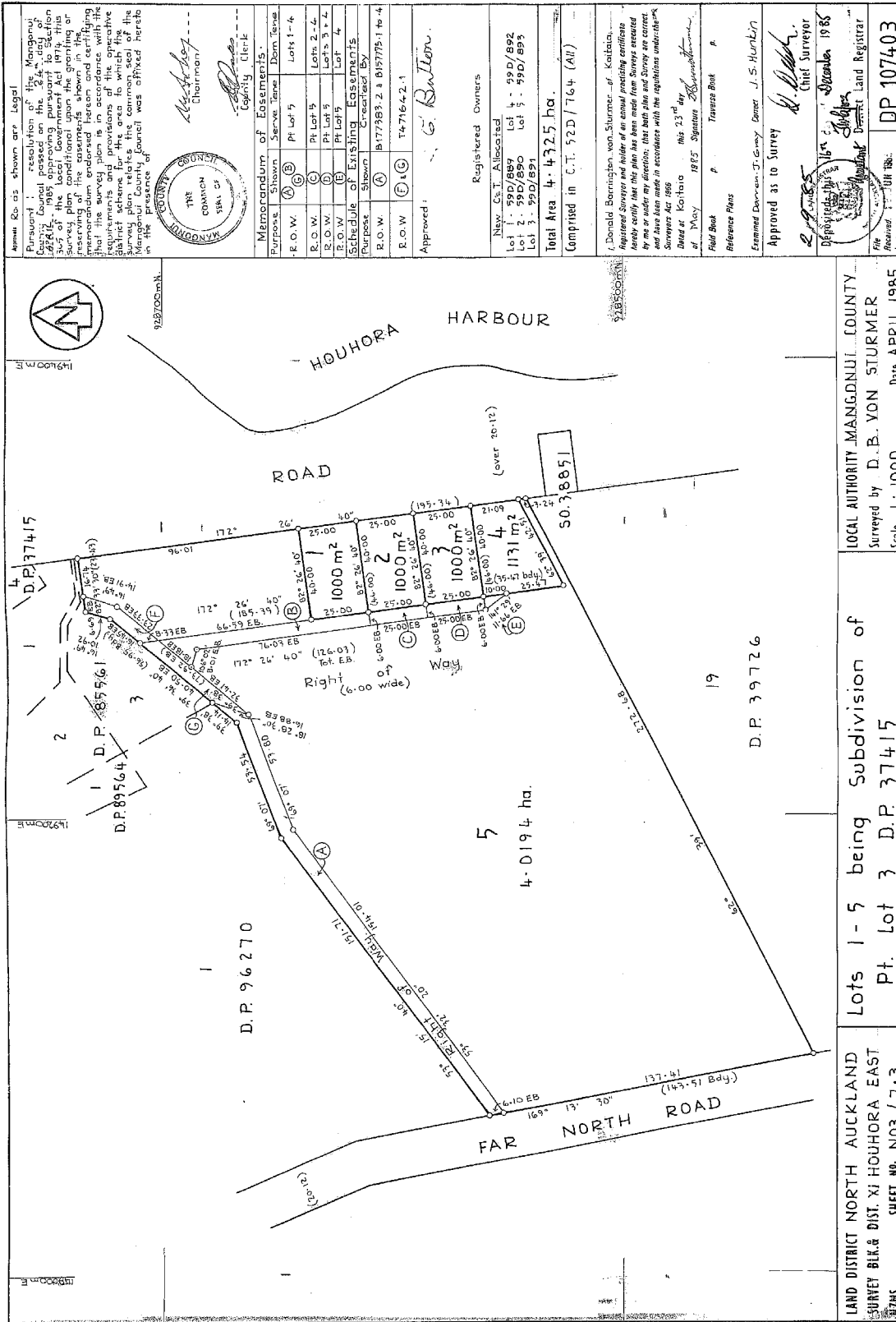
Identifier **NA59D/893**
Land Registration District **North Auckland**
Date Issued 16 December 1985

Prior References
NA52D/764

Estate Fee Simple
Area 4.0194 hectares more or less
Legal Description Lot 5 Deposited Plan 107403
Registered Owners
KFCS Farms Limited

Interests

Subject to rights of way over parts marked F and G on DP 107403 created by Transfer 471642.1
Subject to a right of way over parts marked F and G on DP 107403 created by Transfer 522807.1
Subject to rights of way over part marked A on DP 107403 specified in Easement Certificate B177383.1
The easements specified in Easement Certificate B177383.1 are subject to Section 309 (1) (a) Local Government Act 1974
Subject to rights of way over parts marked A, B, C, D, E and G on DP 107403 specified in Easement Certificate B492357.3 - 16.12.1985 at 11.23 am
The easements specified in Easement Certificate B492357.3 are subject to Section 309 (1) (a) Local Government Act 1974
D574558.1 Gazette Notice (N.Z Gazette No.46 page 1021) declaring the adjoining State Highway No.1F to be a limited access road - 25.1.2001 at 12.09 pm
D575052.1 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 25.1.2001 at 3.31 pm
Subject to a right to convey electricity easement (in gross) over part marked B on DP 426402 in favour of Top Energy Limited created by Easement Instrument 8467291.1 - 20.7.2010 at 4:01 pm



As shown as Legal

Pursuant to resolution of the Mangonui County Council passed on the 24th day of April 1985, the following plan is hereby approved for registration as a plan of subdivision under the provisions of the Land Transfer Act 1952, subject to the conditions of the survey plan conditional upon the granting or reserving of the easements shown in the plan, and subject to the provisions of the requirements and provisions of the operative district scheme for the area to which the survey plan relates, the commission of the survey plan in the presence of the Registrar.

THE COMMON SEAL OF THE COUNTY OF MANGONUI

Memorandum of Easements

Purpose	Shown	Dom. Time
R.O.W.	(A) Pt Lot 1	Lots 1-4
R.O.W.	(B) Pt Lot 1	Lots 2-4
R.O.W.	(C) Pt Lot 1	Lots 3-4
R.O.W.	(D) Pt Lot 1	Lots 4

Schedule of Existing Easements

Purpose	Shown	Created By
R.O.W.	(A) B177383.2 & B157775.1 to 4	
R.O.W.	(F) & (G) T471642.1	

Approved: *G. Butler*

Registered Owners

New Co. T. Allocated	Lot	Area
Lot 1	590/889	Lot 1 - 990/892
Lot 2	590/890	Lot 2 - 590/895
Lot 3	590/891	Lot 3 - 590/895
Total Area 4.4325 ha.		
Comprised in C.T. 520/764 (All)		

Donald Barrington von Sturmer, of Kaipara, hereby certify that this plan has been made from surveys executed by me or under my direction, that both plan and survey are correct and have been made in accordance with the regulations under the Surveyors Act 1968.

Dated at Kaipara this 23rd day of May 1985 Signature *Donald Barrington von Sturmer*

Field Book *Touarewa Book*

Reference Plans

Examined Doreen J. Gray, Deput. J.S. Huntin

Approved as to Survey *D. B. von Sturmer*

Deposited this 28th day of January 1986

LOCAL AUTHORITY MANGONUI COUNTY

Surveyed by D.B. VON STURMER

Scale 1:1000 Date APRIL 1985

LAND DISTRICT NORTH AUCKLAND

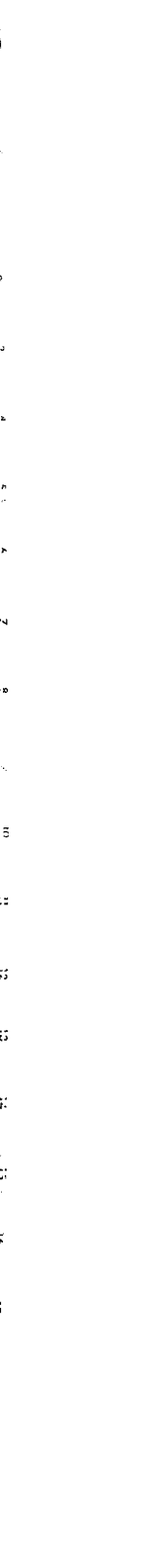
SURVEY BLK. 8 DIST. XI HOUGHORA EAST

LOTS 1-5 being Subdivision of Pt. Lot 3 D.P. 37415

SHEET NO. 003/7.3

DP 1074.03

Printed by the Government Printer, Wellington



Appendix C – Stormwater Management Report

SITE 4238 Far North Road, Pukenui
LEGAL DESCRIPTION Lot 5 DP 107403
PROJECT Proposed Building & Parking
CLIENT Fiona & Shaun Kehely
REFERENCE NO. 145652
DOCUMENT Stormwater Mitigation Report
STATUS/REVISION No. 01
DATE OF ISSUE 28th April 2026

Report Prepared For	Email
Fiona & Shaun Kehely	Houhorahoneybees@gmail.com

Authored by	G.Brant (BE(Hons) Civil)	Civil Engineer	Gustavo@wjl.co.nz	
Reviewed & Approved by	B. Steenkamp (CPEng, BEng Civil, CMEngNZ, BSc (Geology))	Senior Civil Engineer	BenS@wjl.co.nz	

1. EXECUTIVE SUMMARY

The following table is intended to be a concise summary which must be read in conjunction with the relevant report sections as referenced herein.

Legal Description:	Lot 5 DP 107403
Site Area:	40,059m ²
Development Type:	Proposed Laundromat Building & Parking Area
Development Proposals Supplied:	Plan Set by Beard Architecture Ltd (Ref No: FSK-0725, dated: 22.09.2025)
District Plan Zone:	Coastal Residential Zone
Permitted Activity Coverage:	<u>1000m²</u>
Impermeable Coverage:	Post-Development Impermeable Areas Post-Development Total = 3,469.2m ² or 8.7% of the site area Total Impermeable Area Increase = 1,144.2m ²
Activity Status:	<u>Discretionary Activity</u> Attenuation is to be provided in accordance with the requirements outlined in Section 5 via the dual-purpose rainwater tank.
Proposed Laundromat Roof Attenuation:	Proposed Tanks – 3 x 25,000 litre Rainwater Tank (or approved equivalent) Dimensions – 3600mmØ x 2600mm high (or greater) 1% AEP Control Orifice – 43mmØ orifice; <u>located >560mm below the overflow outlet</u> Overflow – 100mmØ at the top of the tank
Existing Shed Roof Mitigation:	A proprietary guttering system is required to be installed to collect roof runoff from the existing shed and direct runoff via sealed pipes to the existing open drain to the northeast of the existing shed.
Hardstand Mitigation:	It is recommended to shape the proposed metal parking area to shed runoff to two minimum 200mm deep x 500mm wide grassed v-channel swales (minimum 0.5% grade) along the southern and eastern side of the proposed parking area. Each swale is to have a silt trap with a scruffy dome or grated inlet at a low point. Each silt trap is to be fitted with a 150mmØ outlet pipe (minimum 1% grade) directed runoff to the discharge point. Alternatively, the metal parking area can be shaped to shed to the existing overland flow path via even sheet flow, if unconcentrated flows are achievable and won't affect any structures. If the parking area is sealed, runoff shall be collected by appropriately positioned catchpits and conveyed via sealed pipes. The piped drainage shall discharge to a dispersal trench or similar device, allowing initial flows to be dispersed and partially treated prior to overflow as sheet flow across pasture. This provides passive mitigation and treatment before runoff enters the existing overland flow path. Catchpits shall include suitable sumps for sediment capture and shall be designed and installed in accordance with NZBC E1 Surface Water.

2. SCOPE OF WORK

Wilton Joubert Ltd. (WJL) was engaged by the client to produce an on-site stormwater mitigation assessment at the above site.

At the time of report writing, we have been supplied the following documents:

- Plan Set by Beard Architecture Ltd (Ref No: FSK-0725, dated: 22.09.2025)

Should any changes be made to the provided plans with stormwater management implications, WJL must be contacted for review.

3. SITE DESCRIPTION

The proposed development will be constructed within the following property, which is located off the eastern side of Far North Road, accessed 100m north of the northern Far North Road and Harbour View Road intersection:

- Legally described as Lot 5 DP 107403.



Figure 1: Aerial view with the subject property highlighted in cyan (from FNDC Regulator Map)

The surface area of the subject site is 40,059m² and is accessed at the northwestern and southwestern corners via a metal ROW from Far North Road.

Existing container shops are present within the western end of the property. A dwelling and a large shed are located within the eastern third of the property. Aside from the existing structures and metalled areas, the remaining ground cover consists predominantly of pasture, with trees concentrated around the southern boundary and to the west of the avocado orchard which covers the eastern edge of the property.

Topographically speaking, the property generally falls at gentle grades to the east and west from a high point within the centre of the property.

The Far North District Council (FNDC) GIS Water Services Map indicates that the property is not serviced by public stormwater, wastewater or potable water reticulation.

4. DEVELOPMENT PROPOSALS

The development proposal, obtained from the client, is to construct a laundromat building and parking area on-site as depicted in the plan set by Beard Architecture Ltd (Ref No: FSK-0725, dated: 22.09.2025).

The principal objective of this assessment is to provide an indicative stormwater disposal design which will manage runoff generated from the increased impermeable areas associated with the proposed development.

5. ASSESSMENT CRITERIA

Impermeable Areas

The calculations for the stormwater system for the development are based on a gross site area of 40,059m² and the below areas *extracted from the supplied plans*:

The total amount of impermeable area on-site, post-development, equates to 3,469.2m² or 8.7% of the site area. The total increase in impermeable area on-site, post-development, equates to 1,144.2m². Should any changes be made to the current proposal, the on-site stormwater mitigation design must be reviewed.

District Plan Rules

The site is zoned Coastal Residential. The following rules apply under the FNDC District Plan:

10.8.5.1.6 – **Permitted Activities – Stormwater Management** - The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 50% or 1,000m², whichever is the lesser.

10.8.5.2.8 – **Restricted Discretionary Activities – Stormwater Management** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 60%, unless Low Impact Design has been used to reduce site impermeability and consent has been obtained from the Northland Regional Council for any stormwater discharge from any area of more than 1,000m².

The total proposed impermeable area exceeds 1,000m² and does not comply with Permitted Activity Rule (10.8.5.1.6) nor Restricted Discretionary Activity (10.8.5.2.8). Therefore, the proposal is considered a **Discretionary Activity**. Additional considerations for stormwater management as outlined in the FNDC District Plan Section 11.3 are required. A District Plan Assessment has been included in Section 8 of this report.

Design Requirements

The site is under the jurisdiction of the Far North District Council. The design has been completed in accordance with the recommendations and requirements contained within the Far North District Council Engineering Standards, the Far North District Council District Plan and Clause E1 of the New Zealand Building Code.

The northeastern portion of the site, including the existing dwelling and shed, is located immediately adjacent to Houhora Harbour within a coastal environment identified as being subject to coastal inundation (as mapped by the Northland Regional Council Natural Hazards Map). This part of the site is therefore effectively at the downstream extent of the contributing catchment, where receiving water levels are predominantly controlled by tidal influences rather than upstream runoff processes.

Given this context, attenuation of stormwater runoff from this portion of the site is not considered necessary. Any reduction or delay in peak flows achieved through on-site attenuation would have a negligible effect on downstream conditions, as discharge enters a tidally influenced receiving environment with substantial storage and conveyance capacity.

Furthermore, introducing attenuation in this location has the potential to alter the timing of runoff discharge relative to the wider catchment response. In a fully developed catchment, this could result in peak flows from the site coinciding with peak flows from upstream areas, thereby reducing any marginal benefit of attenuation and potentially contributing to localised increases in water levels.

On this basis, stormwater from the northeastern portion of the site can be appropriately managed via sheet flow or channel flow to the receiving coastal environment without attenuation, subject to appropriate erosion and sediment control measures. The existing channels and sheet flow will provide some pre-treatment prior to entering the tidal zone.

Given the above and in accordance with Table 4-1 of the Engineering Standards Flood Control will be provided for the proposed impermeable areas in excess of the permitted activity threshold, excluding the existing dwelling and shed roof areas.

Provided that the recommendations within this report are adhered to, the effects of stormwater runoff resulting from the unattenuated existing / proposed impermeable areas (1,636m² total) are considered to have less than minor effects on the receiving environment, equivalent to conditions that would result from development proposals falling within the Permitted Activity coverage threshold.

The Type IA storm profile was utilised for attenuation calculations in accordance with TR-55. HydroCAD® software has been utilised in design for a 1% AEP rainfall value of 241mm with a 24-hour duration. Rainfall data was obtained from HIRDS and increased by 20% to account for climate change.

6. STORMWATER MITIGATION ASSESSMENT

To meet the requirements outlined in Section 5, the following must be provided:

Potable Water Supply

It is recommended that a rainwater tank is utilised to provide the proposed laundromat with a potable water supply. The tank type is at the discretion of the client. A proprietary guttering system is required to collect roof runoff from the proposed laundromat's roof. A first flush diverter and/or leaf filters may be installed in-line between the gutters and the tank inlet. The tank inlet level should be at least 600mm below the gutter inlet and any in-line filters. Any filters will require regular inspection and cleaning to ensure the effective operation of the system. The frequency of cleaning will depend on current and future plantings around the proposed roof area. Provision should be made by the homeowner for top-up of the tank via water tankers in periods of low rainfall.

Due to inadequate water quality concerns, runoff from hardstand areas should not be allowed to drain to the potable water tanks.

The upper section of the potable water tank is to act as a detention volume to achieve stormwater neutrality for the proposed / future impermeable areas in excess of the permitted activity threshold. The tank is to be fitted with a 100mmØ overflow outlet with a flow attenuation outlet as specified below.

Potable Tanks Detention Volume

As per the attached design calculations, the design elements of the detention volume are as follows:

Proposed Tanks	3 x 25,000L litre Rainwater Tanks (or approved equivalent)
Tank dimensions	3600mmØ (or greater) x 2600mm high (or greater)
Outlet orifice (1% AEP Control)	43mm diameter orifice ; located <u>>560mm below the overflow outlet</u> - 554mm water elevation - 16.9m³ storage
Overflow Outlet	100mm diameter ; located at the top of the tank

Discharge from the potable water / detention tanks must be transported via sealed pipes to the dispersal trench specified below. Refer to the appended Proposed Laundromat & Parking Area Site Plan (145652-C200), Tank Detail (145652-C210) and calculation set for clarification.

The tank must be installed in accordance with the tank suppliers' details and specifications. Levels are to be confirmed by the contractor on-site prior to construction. Adequate fall (minimum 1% grade) from the tank's outlet to the discharge point is required. If this is not achievable, WJL must be contacted for review of the design.

Stormwater Mitigation – Hardstand

It is recommended to shape the proposed metal parking area to shed runoff to two **minimum** 200mm deep x 500mm wide grassed v-channel swales (minimum 0.5% grade) along the southern and eastern side of the proposed parking area. Each swale is to have a silt trap with a scruffy dome or grated inlet at a low point. Each silt trap is to be fitted with a 150mmØ outlet pipe (minimum 1% grade) directing runoff to the dispersal trench specified below. Refer to the appended Proposed Laundromat & Parking Area Site Plan (145652-C200) and calculation set for clarification.

The parking area must be shaped to direct stormwater away from all structures, thereby preventing ponding or nuisance effects adjacent to buildings. Any concentrated flows must be adequately piped and managed.

The drainage line to the discharge point must have a minimum 2% grade downslope of the joint with the tank outlet line. Where this is not achievable, WJL must be contacted for review of the design.

The proposed grassed swales and silt traps provide basic pre-treatment for sediment-laden runoff from the metalled parking area prior to discharge. These devices are not intended to manage chemical spills, washdown water or other contaminated flows. No contaminated washwater shall be discharged to the stormwater system.

As an alternative to the swale and silt trap arrangement, the metalled parking area may be shaped to discharge as even sheet flow toward the existing overland flow path, provided runoff remains unconcentrated, does not cause erosion or scour, and does not create ponding or nuisance effects around existing or proposed structures. This arrangement shall be confirmed on-site by the contractor / designer prior to construction.

If the parking area is sealed, runoff shall be collected by appropriately positioned catchpits and conveyed via sealed pipes. The piped drainage shall discharge to a dispersal trench or similar device, allowing initial flows to be dispersed and partially treated prior to overflow as sheet flow across pasture. This provides passive mitigation and treatment before runoff enters the existing overland flow path. Catchpits shall include suitable sumps for sediment capture and shall be designed and installed in accordance with NZBC E1 Surface Water.

Stormwater Mitigation – Dispersal Trench

It is recommended that discharge from the potable water / detention tanks and hardstand silt traps / catchpits be directed via sealed pipes to an underground spreader pipe in dispersal trench, as shown in the appended Site Plan (145652-C200) and Dispersal Trench Detail (145652-C211). The trench is recommended to be 10m long, with novacoil snaked inside the trench to provide a total 20m long underground spreader pipe. The dispersal device must be installed parallel to the property's topography.

Stormwater Mitigation – Existing Shed

A proprietary guttering system is required to be installed to collect roof runoff from the existing shed and direct runoff via sealed pipes to the existing open drain to the northeast of the existing shed. First flush diverters or other adequate pre-treatment measures may be installed in-line between the gutters and the proposed discharge point. It is recommended that a minimum 1m length of minimum 150mm aggregate riprap be installed in the open drain downslope of the discharge point. Refer to the appended Existing Shed Site Plan (145652-C201) for clarification.

7. STORMWATER RUNOFF SUMMARY

Refer to the appended HydroCAD Calculation output.

Maximum Permitted Peak Flows – 1% AEP Storm Events + CCF

Surface	Area	Runoff CN	1% AEP Peak Flow Rate
Maximum Permitted Impermeable Area (includes existing roof areas)	1,636 m ²	98	48.32ℓ/s
Remaining Greenfields Area	1,833.2 m ²	74	

Post-Development Scenario – 1% AEP Storm Events + CCF

Surface	Area	Runoff CN	1% AEP Peak Flow Rate
Proposed laundromat building roof area via potable water / detention tanks	457.2 m ²	98	48.31ℓ/s
Proposed parking area to be 'over-mitigated'	687 m ²	98	
Existing metal areas to be 'over-mitigated'	1,689 m ²	89	
Existing roof areas (passive mitigation)	636 m ²	98	

Given the design parameters, peak flows resulting from the proposed development will be attenuated back to permitted activity threshold peak flows for the 1% AEP storm events, adjusted for climate change.

8. DISTRICT PLAN ASSESSMENT

As the proposed development is not compliant with Permitted Activity Rule 10.8.5.1.6, nor Restricted Discretionary Activity Rule 10.8.5.2.8, it is therefore regarded as a Discretionary Activity.

In assessing an application under this provision, the Council will exercise its discretion to review the following matters below, (a) through (m) of FNDCCP Section 11.3.

In respect of matters (a) through (m), we provide the following comments:

<i>(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;</i>	Total post-development impermeable areas amount to 3,469.2m ² , with an impermeable area increase of 1,144.2m ² post-development. Through tank attenuation, runoff is to be attenuated back to the permitted activity peak flow for the 1% AEP storm event, adjusted for climate change. Part of the existing impermeable areas discharge directly to Houhora Harbour and are therefore excluded from the attenuation calculations. Given the site's proximity to the coastal receiving environment, which is tidally influenced and located at the downstream extent of the contributing catchment, it is considered that attenuation of runoff from these areas would provide negligible hydraulic benefit and is not necessary.
<i>(b) the extent to which Low Impact Design principles have been used to reduce site impermeability;</i>	The proposal incorporates Low Impact Design principles by minimising new impermeable surfaces, retaining existing pervious areas, and utilising dual-purpose rainwater tanks for both water reuse and stormwater detention. These measures reduce runoff volumes and attenuate peak flows to levels consistent with the permitted activity threshold, representing an appropriate LID response for the site.
<i>(c) any cumulative effects on total catchment impermeability;</i>	Total post-development impermeable areas amount to 3,469.2m ² , representing an increase of 1,144.2m ² compared with the pre-development scenario. The proposed mitigation measures are intended to manage this increase and limit peak flows to the permitted activity threshold, based on our recommendations.
<i>(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;</i>	Runoff resulting from the existing / proposed impermeable areas is to be collected and directed to stormwater management devices and then to the existing OLFPs / channels. This should not worsen the ability of natural ground to absorb water in normal conditions.
<i>(e) the physical qualities of the soil type;</i>	SILT – moderate drainage. Soakage testing was done and found not to be sufficient for stormwater soakage disposal.
<i>(f) any adverse effects on the life supporting capacity of soils;</i>	Runoff resulting from the existing / proposed impermeable areas is to be collected and directed to stormwater management devices and then to the existing OLFPs / channels, mitigating the potential for contamination of surrounding soils and harm to the life supporting capacity of soils.
<i>(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;</i>	Runoff resulting from the existing / proposed impermeable areas is to be collected and directed to stormwater management devices and then to the existing OLFPs / channels, mitigating the potential for contamination of surrounding soils and harm to the life supporting capacity of soils.

<i>(h) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity;</i>	The existing / proposed driveway & parking area is necessary to provide access to the proposed laundromat/shops and is not considered excessive.
<i>(i) the extent to which land scaping and vegetation may reduce adverse effects of run-off;</i>	Existing vegetation and any plantings introduced by the owner during occupancy will aid in reducing surface water velocity and providing treatment. No specific landscaping scheme is proposed as part of the stormwater management system described herein.
<i>(j) any recognised standards promulgated by industry groups;</i>	Not applicable.
<i>k) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold;</i>	Through tank attenuation runoff resulting from the proposed development is to be attenuated back to permitted activity peak flows for the 1% AEP storm events, adjusted for climate change.
<i>(l) the extent to which the proposal has considered and provided for climate change;</i>	Rainfall data was obtained from HIRDS and increased by 20% to account for climate change.
<i>(m) the extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.</i>	Through tank attenuation runoff resulting from the proposed development is to be attenuated back to permitted activity peak flows for the 1% AEP storm events, adjusted for climate change.

9. NOTES

If any of the design specifications mentioned in the previous sections are altered or found to be different than what is described in this report, Wilton Joubert Ltd will be required to review this report. Indicative system details have been provided in the appendices of this report (145652-C200, 145652-C201, 145652-C210 & 145652-C211).

Care should be taken when constructing the discharge point to avoid any siphon or backflow effect within the stormwater system.

Subsequent to construction, a programme of regular inspection / maintenance of the system should be initiated by the Owner to ensure the continuance of effective function, and if necessary, the instigation of any maintenance required.

Wilton Joubert Ltd recommends that all contractors keep a photographic record of their work.

10. OPERATION & MAINTENANCE

The owner shall be responsible for the ongoing inspection and maintenance of the stormwater mitigation system to ensure it continues to operate as intended. This shall include periodic inspection and cleaning of roof gutters, leaf guards, first-flush devices, rainwater tanks, flow-control orifices, swales, silt traps, scruffy domes/grated inlets, riprap outlets and open drains to prevent blockage, sediment build-up, erosion or bypassing. The attenuation orifice shall be checked regularly to confirm it remains unobstructed, particularly following heavy rainfall events. Sediment accumulated within silt traps, swales or open drains shall be removed as required. Any damaged, blocked or eroded components shall be repaired promptly to maintain system performance and prevent adverse downstream effects.

11. LIMITATIONS

The recommendations and opinions contained in this report are based on information received and available from the client at the time of report writing.

This assignment only considers the primary stormwater system. Secondary stormwater system, Overland Flow Paths (OLFP), geotechnical requirements, vehicular access and the consideration of road/street water flooding is not included in this assessment.

The potable / reuse water supply arrangement, including treatment, filtration, pump sizing, backflow prevention and compliance with any applicable plumbing or public health requirements, is outside the scope of this stormwater report.

All drainage design is up to the connection point for each building face of any new structures/slabs; no internal building plumbing or layouts have been undertaken.

During construction, an engineer competent to judge whether the conditions are compatible with the assumptions made in this report should examine the site. In all circumstances, if variations occur which differ from that described or that are assumed to exist, then the matter should be referred to a suitably qualified and experienced engineer.

The performance behaviour outlined by this report is dependent on the construction activity and actions of the builder/contractor. Inappropriate actions during the construction phase may cause behaviour outside the limits given in this report.

This report has been prepared for the particular project described to us and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose.

Wilton Joubert Ltd.



Gustavo Brant
Civil Engineer
BE(Hons)

REPORT ATTACHMENTS

- Proposed Laundromat & Parking Area Site Plan - C200 (1 sheet)
- Existing Shed Site Plan – C201 (1 sheet)
- Tank Detail – C210 (1 sheet)
- Dispersal Trench Detail – C211 (1 sheet)
- Calculation Set



- NOTES:**
1. SITE PLAN IS ONLY INDICATIVE FOR CONCEPT DESIGN. NO MEASUREMENTS MAY BE TAKEN FROM DRAWING.
 2. BACKGROUND INFORMATION, CONTOURS & LOCAL SERVICES PROVIDED BY THE CLIENT & EXTRACTED FROM LOCAL COUNCIL GIS.
 3. ALL DIMENSION AND LEVELS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND MUST BE UNDERTAKEN IN ACCORDANCE WITH THE HEALTH AND SAFETY AT WORK ACT 2015.
 5. IMPERVIOUS SURFACES FOR MITIGATION:
SITE AREA = 40,059m²
PROPOSED LAUNDROMAT ROOF COVER = 457.2m²
PROPOSED PARKING AREA = 687m²



WILTON JOUBERT
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ISSUE / REVISION			
No.	DATE	BY	DESCRIPTION
01	APR '26	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY: GMB

DRAWN BY: GMB

CHECKED BY: BGS

SURVEYED BY: N/A

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BUILDING CONSENT

DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

DRAWING TITLE:

PROPOSED LAUNDROMAT & PARKING AREA SITE PLAN

PROJECT DESCRIPTION:

STORMWATER MITIGATION REPORT

PROJECT TITLE:

**LOT 5 DP 107403
4238 FAR NORTH ROAD
PUKENUI
NORTHLAND**

ORIGINAL DRAWING SIZE:	OFFICE:
A3	OREWA
DRAWING SCALE:	CO-ORDINATE SYSTEM:
1:250	NOT COORDINATED
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- NOTES:**
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 2. BACKGROUND INFORMATION, CONTOURS & LOCAL SERVICES PROVIDED BY THE CLIENT & EXTRACTED FROM LOCAL COUNCIL GIS.
 3. ALL DIMENSION AND LEVELS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND MUST BE UNDERTAKEN IN ACCORDANCE WITH THE HEALTH AND SAFETY AT WORK ACT 2015.
 5. IMPERVIOUS SURFACES FOR MITIGATION:
SITE AREA = 40,059m²
PROPOSED SHED ROOF COVER = 307.5m²

INDICATIVE OUTLET TO EXISTING OPEN DRAIN. EXISTING OPEN DRAIN TO BE LINED WITH MINIMUM 150mm AGGREGATE FOR 1m LENGTH DOWNSLOPE OF DISCHARGE POINT

EXISTING OPEN DRAIN

DRAINAGE LINE FROM GUTTERS TO OUTLET TO EXISTING OPEN DRAIN. 100Ø uPVC @ >1%

INDICATIVE GUTTERS & DOWNPIPES TO BE INSTALLED

EXISTING ROOF COVERAGE
~307.5m²

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BUILDING CONSENT

DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

DRAWING TITLE:

EXISTING SHED SITE PLAN

PROJECT DESCRIPTION:

STORMWATER MITIGATION REPORT

PROJECT TITLE:

**LOT 5 DP 107403
4238 FAR NORTH ROAD
PUKENUI
NORTHLAND**

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SURVEYED BY:	N/A

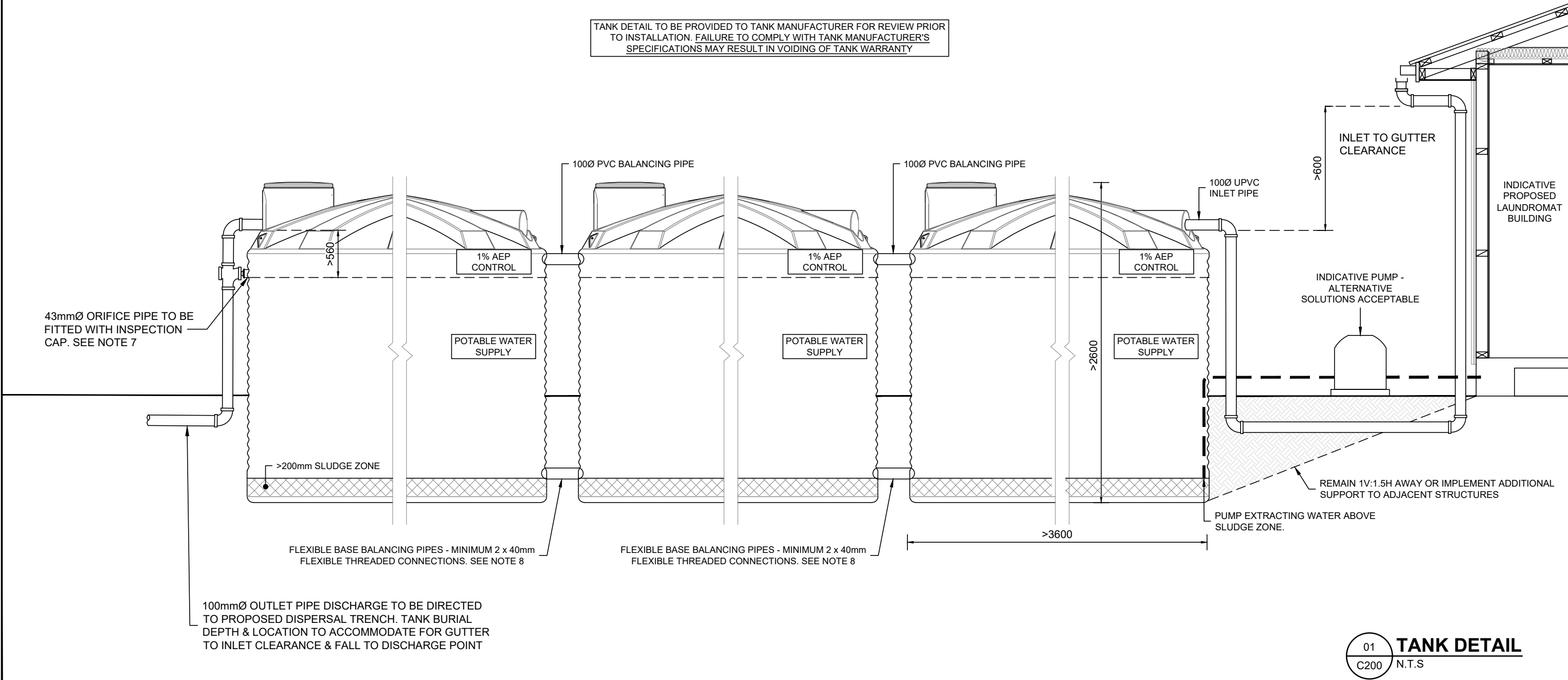
NOTES:

1. NOT TO SCALE. DRAWN INDICATIVELY ONLY.
2. ALL LEVELS & DIMENSIONS TO BE CONFIRMED ON SITE & ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. TANK TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS & RELEVANT COUNCIL STANDARDS.
4. REGULAR INSPECTION & CLEANING IS REQUIRED TO ENSURE THE EFFECTIVE OPERATION OF THE SYSTEM.
5. ALL ORIFICE OUTLETS TO BE COVERED WITH STAINLESS STEEL OR NYLON MESH.
6. ASSUMED USE OF EXISTING 3 x 25,000 LITRE PLASTIC WATER TANKS OR APPROVED EQUIVALENT.

PLASTIC TANKS NOTES:

7. ALL OUTLETS / PENETRATIONS UNDER PRESSURE TO BE INSTALLED BY THE MANUFACTURER.
8. TANKS TO BE CONNECTED AT BASE VIA FLEXIBLE THREADED CONNECTIONS ONLY.

TANK DETAIL TO BE PROVIDED TO TANK MANUFACTURER FOR REVIEW PRIOR TO INSTALLATION. FAILURE TO COMPLY WITH TANK MANUFACTURER'S SPECIFICATIONS MAY RESULT IN VOIDING OF TANK WARRANTY



01 TANK DETAIL
C200 N.T.S

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DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

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TANK DETAIL

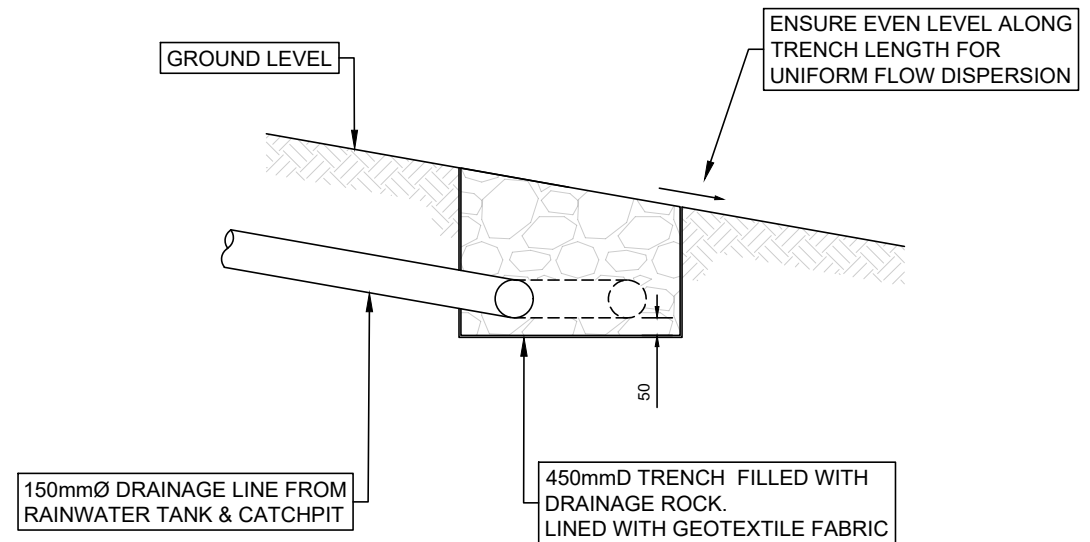
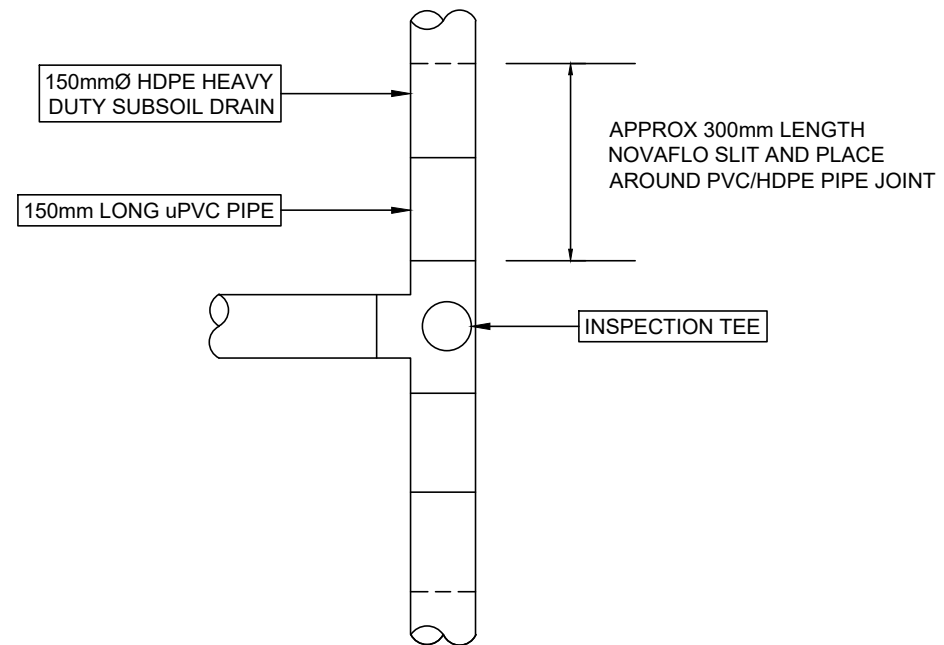
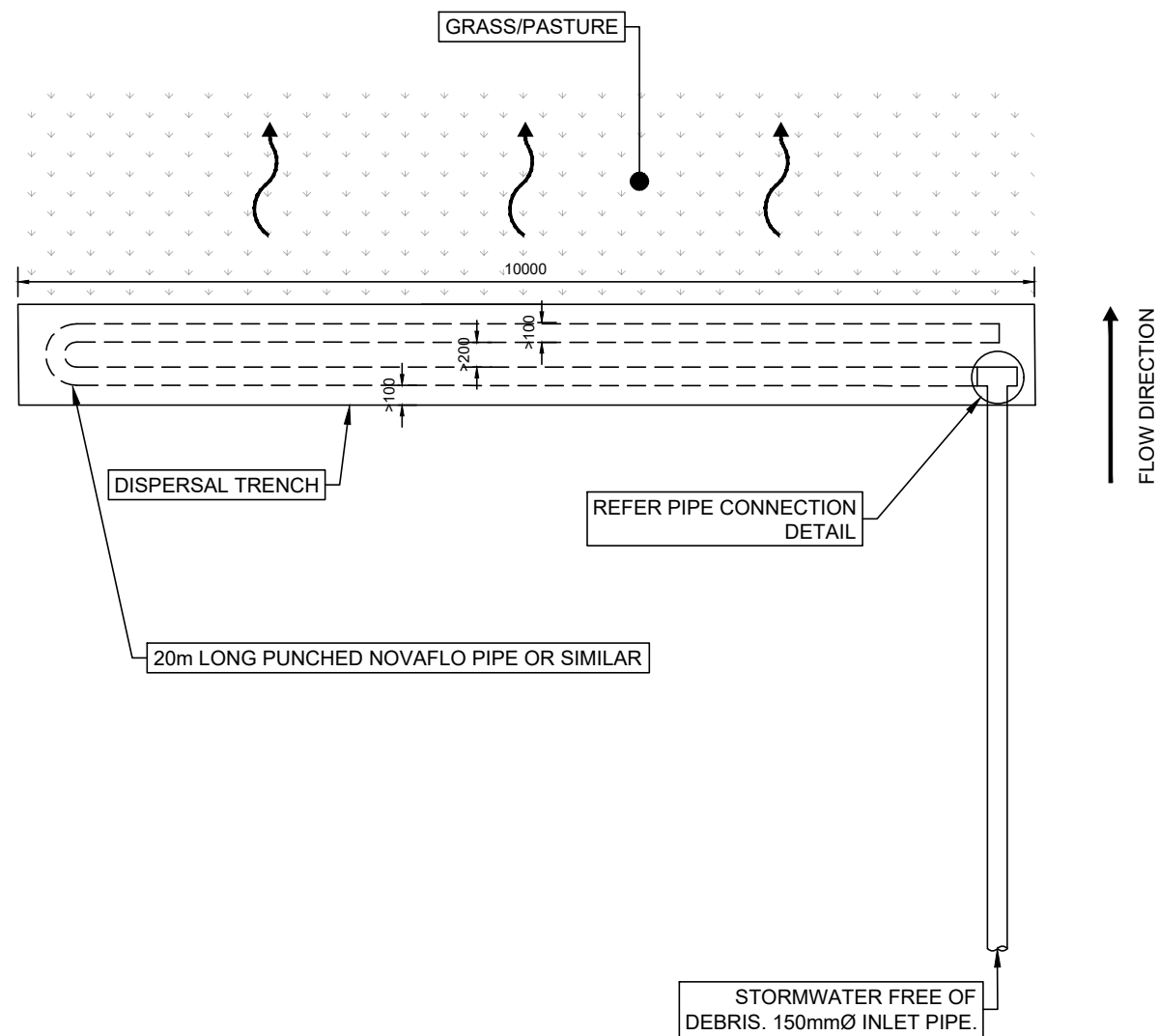
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STORMWATER MITIGATION REPORT

PROJECT TITLE:

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02 **DISPERSAL TRENCH DETAIL**
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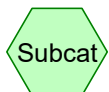
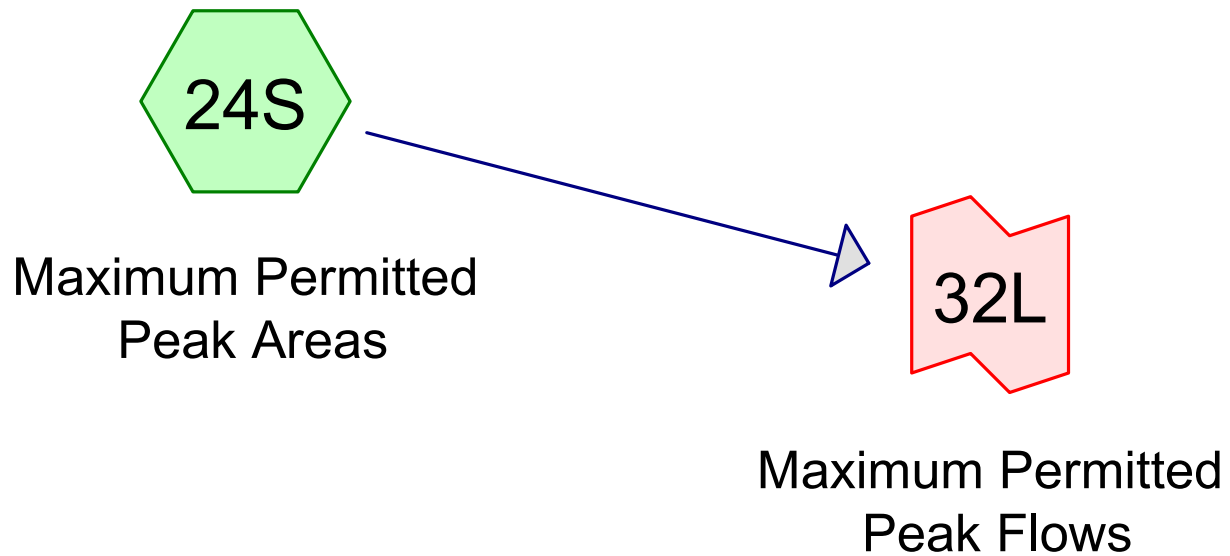
BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

DRAWING TITLE:	DISPERSAL TRENCH DETAIL
PROJECT DESCRIPTION:	STORMWATER MITIGATION REPORT

PROJECT TITLE:	LOT 5 DP 107403 4238 FAR NORTH ROAD PUKENUI NORTHLAND
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ORIGINAL DRAWING SIZE:	OFFICE:
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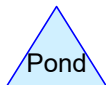
Permitted Activity Threshold



Subcat



Reach



Pond



Link

Routing Diagram for 145652 Attenuation

Prepared by Wilton Joubert Limited, Printed 22/04/2026
HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

145652 Attenuation

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Prepared by Wilton Joubert Limited

Printed 22/04/2026

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 24S: Maximum

Runoff Area=3,469.2 m² 47.16% Impervious Runoff Depth>194 mm
Tc=10.0 min CN=85 Runoff=48.32 L/s 672.7 m³

Link 32L: Maximum Permitted Peak Flows

Inflow=48.32 L/s 672.7 m³
Primary=48.32 L/s 672.7 m³

145652 Attenuation

Prepared by Wilton Joubert Limited

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 3

Summary for Subcatchment 24S: Maximum Permitted Peak Areas

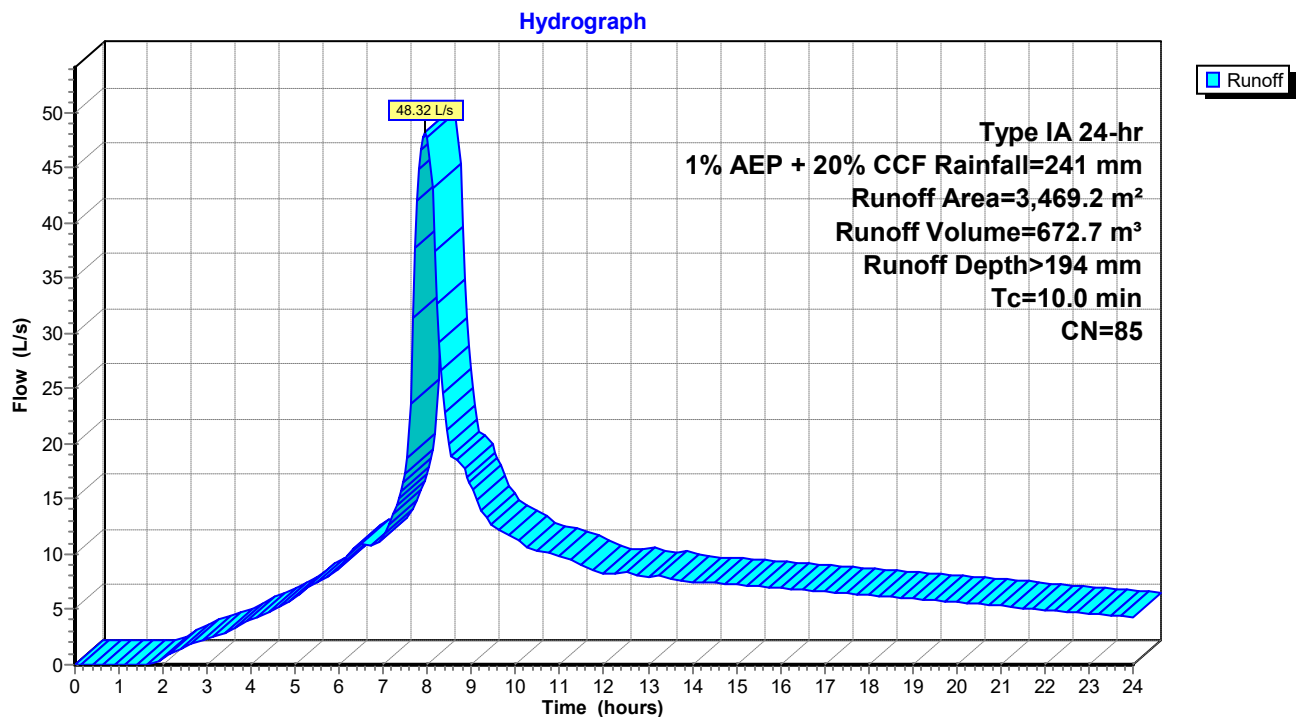
Runoff = 48.32 L/s @ 7.96 hrs, Volume= 672.7 m³, Depth> 194 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
1,833.2	74	>75% Grass cover, Good, HSG C
1,636.0	98	Roofs, HSG C
3,469.2	85	Weighted Average
1,833.2		52.84% Pervious Area
1,636.0		47.16% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 24S: Maximum Permitted Peak Areas



145652 Attenuation

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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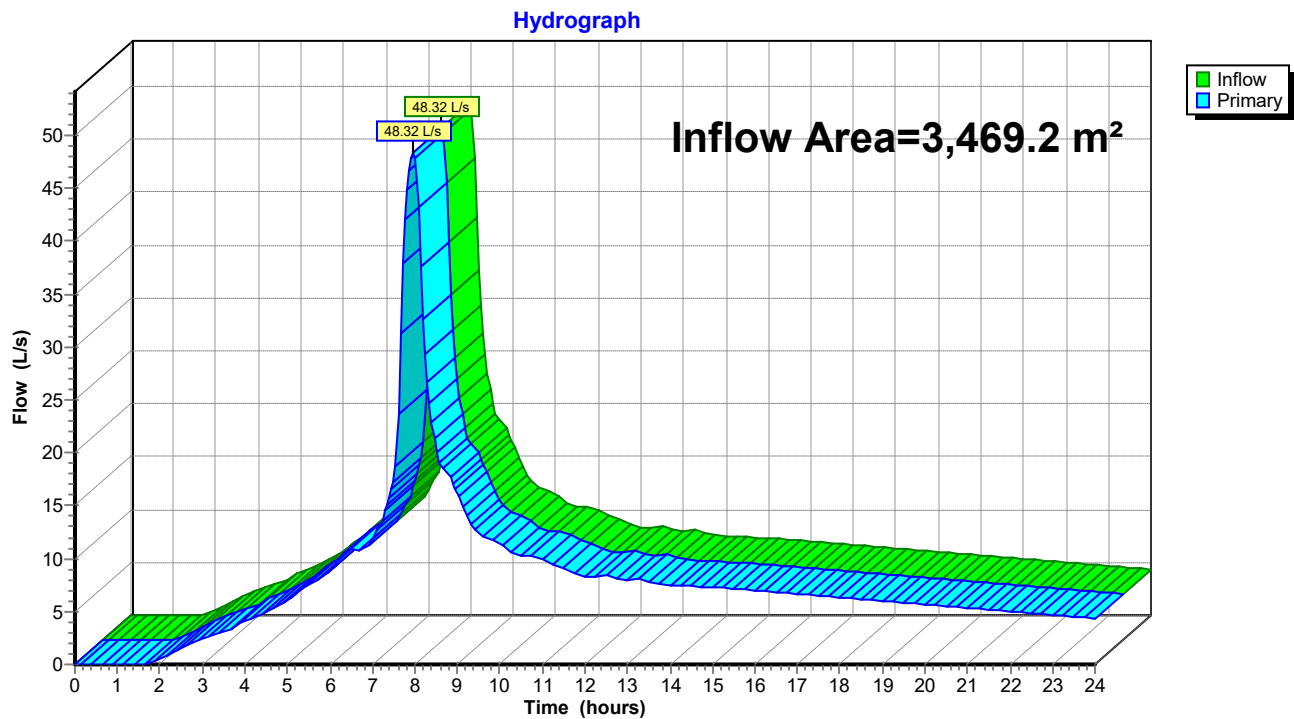
Page 4

Summary for Link 32L: Maximum Permitted Peak Flows

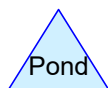
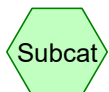
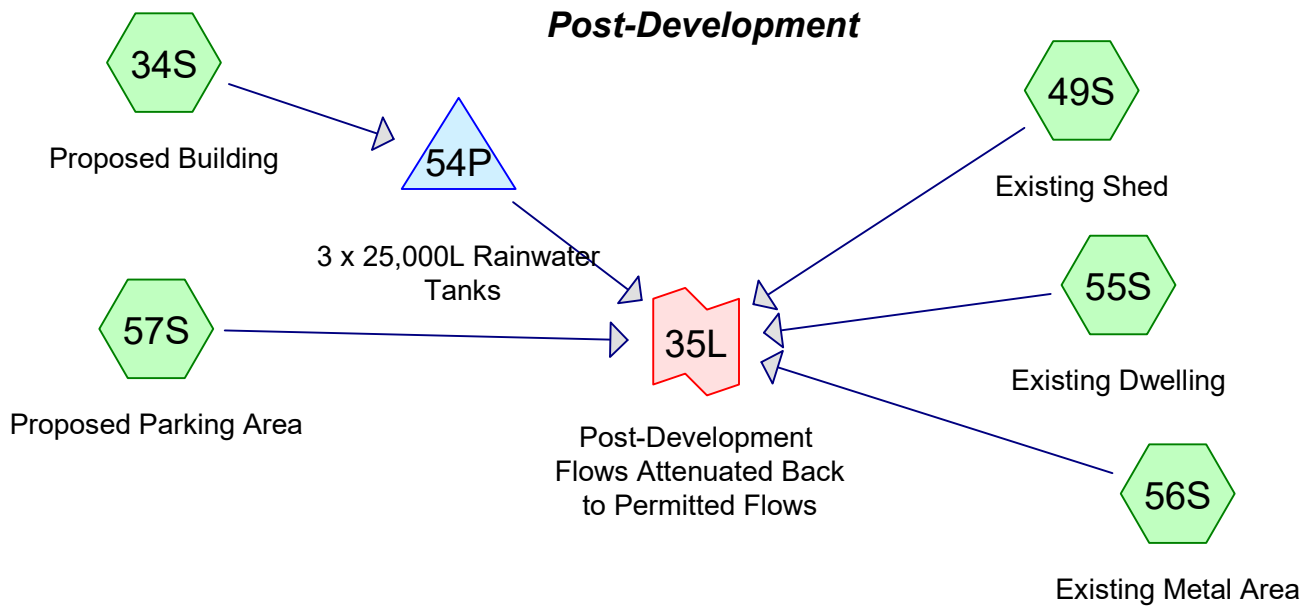
Inflow Area = 3,469.2 m², 47.16% Impervious, Inflow Depth > 194 mm for 1% AEP + 20% CCF event
Inflow = 48.32 L/s @ 7.96 hrs, Volume= 672.7 m³
Primary = 48.32 L/s @ 7.96 hrs, Volume= 672.7 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 32L: Maximum Permitted Peak Flows



Post-Development



Routing Diagram for 145652 Attenuation

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145652 Attenuation*Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm*

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 34S: Proposed Building Runoff Area=457.2 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=7.26 L/s 107.1 m³

Subcatchment 49S: Existing Shed Runoff Area=307.5 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=4.88 L/s 72.0 m³

Subcatchment 55S: Existing Dwelling Runoff Area=328.5 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=5.21 L/s 77.0 m³

Subcatchment 56S: Existing Metal Area Runoff Area=1,689.0 m² 0.00% Impervious Runoff Depth>206 mm
Tc=10.0 min CN=89 Runoff=24.91 L/s 348.7 m³

Subcatchment 57S: Proposed Parking Runoff Area=687.0 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=10.91 L/s 161.0 m³

Pond 54P: 3 x 25,000L Rainwater Tanks Peak Elev=0.554 m Storage=16.9 m³ Inflow=7.26 L/s 107.1 m³
Outflow=2.82 L/s 105.7 m³

Link 35L: Post-Development Flows Attenuated Back to Permitted Flows Inflow=48.31 L/s 764.3 m³
Primary=48.31 L/s 764.3 m³

145652 Attenuation

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 3

Summary for Subcatchment 34S: Proposed Building

Runoff = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³, Depth> 234 mm

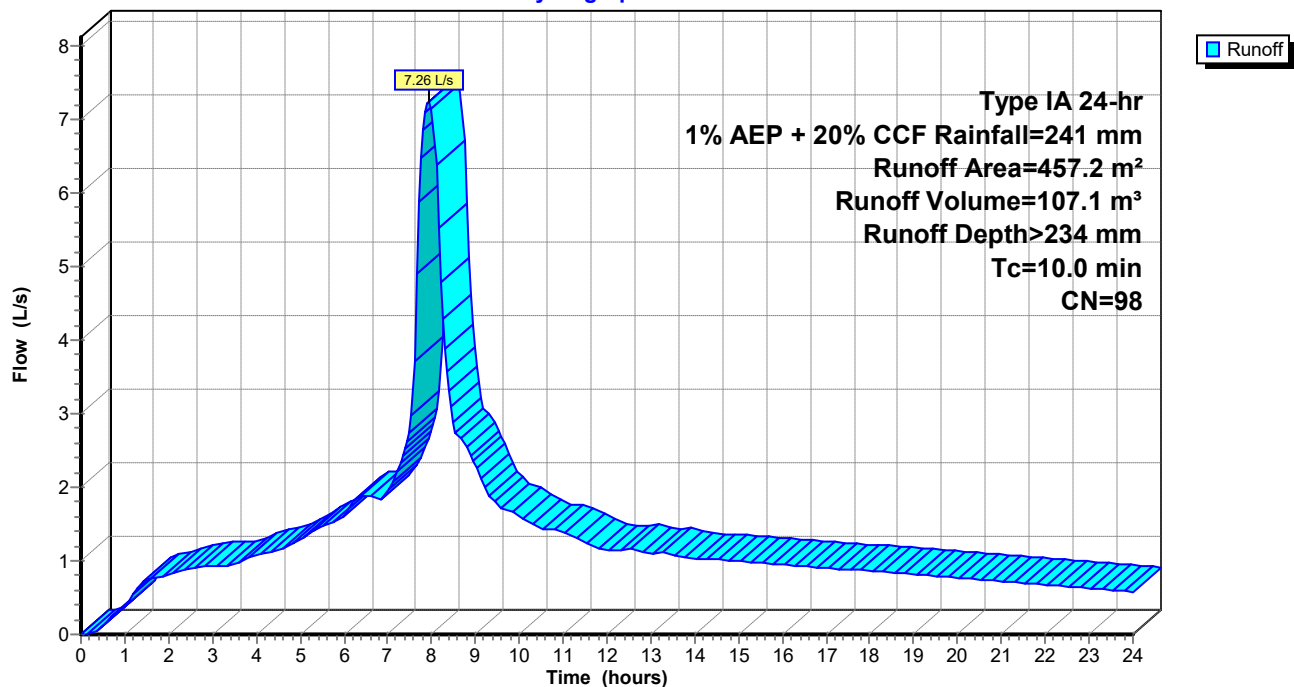
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
457.2	98	Roofs, HSG C
457.2		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 34S: Proposed Building

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

Summary for Subcatchment 49S: Existing Shed

Runoff = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³, Depth> 234 mm

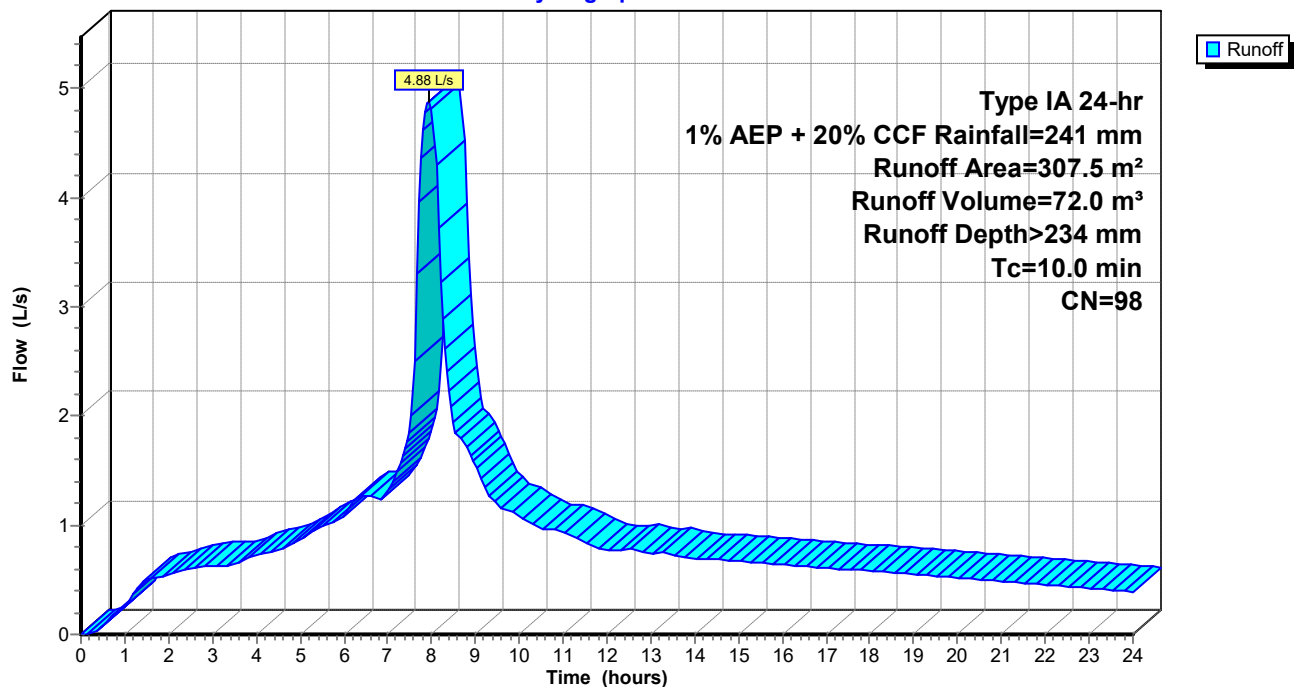
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
307.5	98	Paved parking, HSG C
307.5		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 49S: Existing Shed

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 5

Summary for Subcatchment 55S: Existing Dwelling

Runoff = 5.21 L/s @ 7.94 hrs, Volume= 77.0 m³, Depth> 234 mm

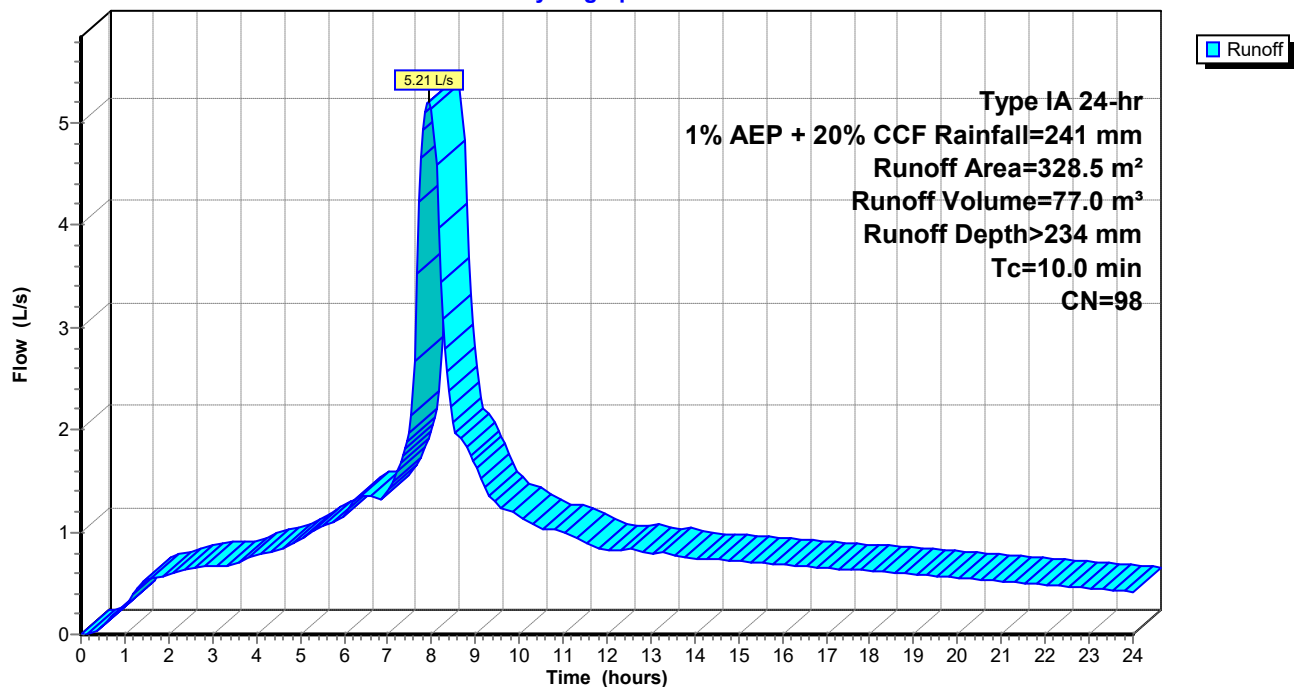
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
328.5	98	Paved parking, HSG C
328.5		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 55S: Existing Dwelling

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 6

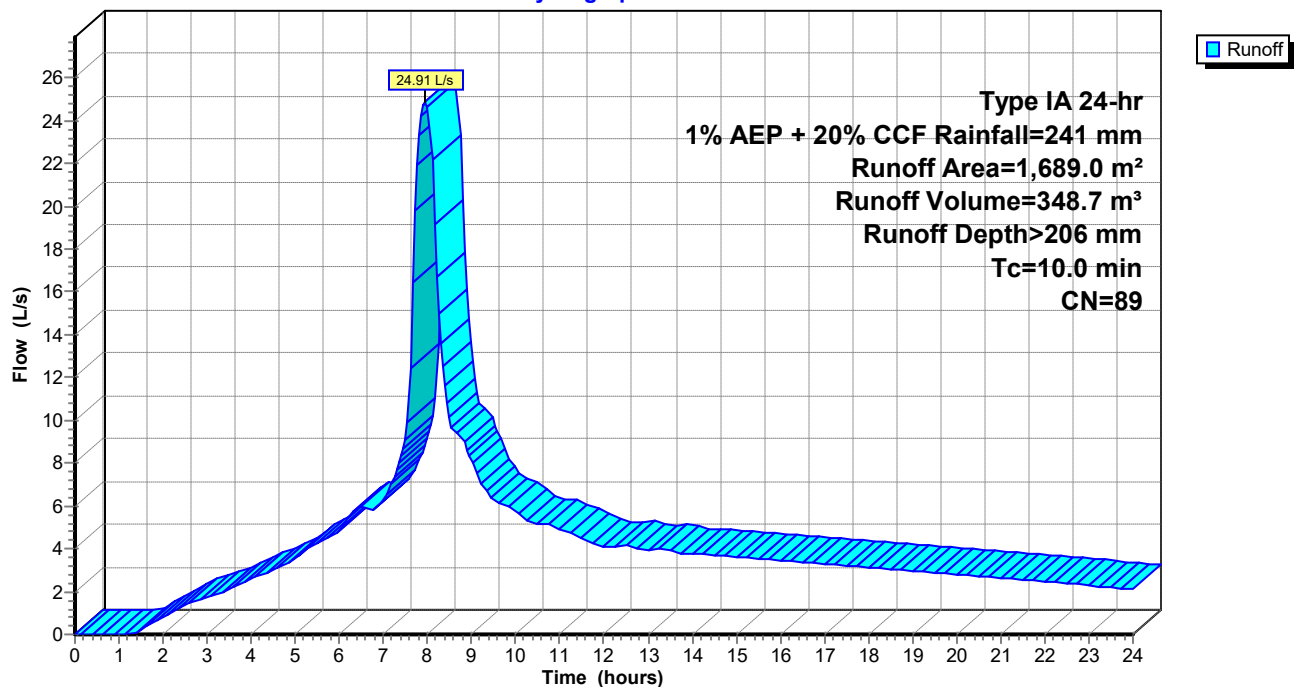
Summary for Subcatchment 56S: Existing Metal AreaRunoff = 24.91 L/s @ 7.95 hrs, Volume= 348.7 m³, Depth> 206 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m²)	CN	Description
1,689.0	89	Gravel roads, HSG C
1,689.0		100.00% Pervious Area

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

Subcatchment 56S: Existing Metal Area

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 7

Summary for Subcatchment 57S: Proposed Parking Area

Runoff = 10.91 L/s @ 7.94 hrs, Volume= 161.0 m³, Depth> 234 mm

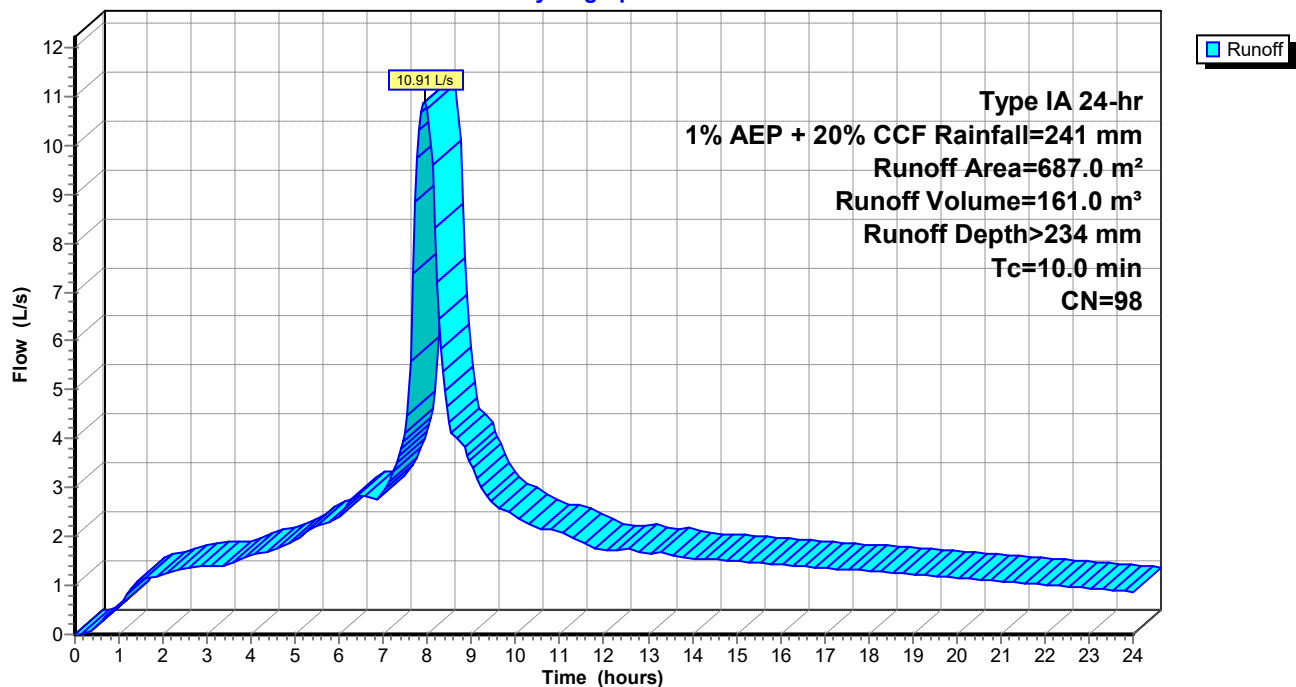
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
687.0	98	Paved roads w/curbs & sewers, HSG C
687.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 57S: Proposed Parking Area

Hydrograph



145652 Attenuation

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 8

Summary for Pond 54P: 3 x 25,000L Rainwater Tanks

Inflow Area = 457.2 m², 100.00% Impervious, Inflow Depth > 234 mm for 1% AEP + 20% CCF event
Inflow = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³
Outflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³, Atten= 61%, Lag= 35.3 min
Primary = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Peak Elev= 0.554 m @ 8.53 hrs Surf.Area= 30.5 m² Storage= 16.9 m³Plug-Flow detention time= 63.3 min calculated for 105.4 m³ (98% of inflow)

Center-of-Mass det. time= 52.5 min (699.1 - 646.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.000 m	79.4 m ³	3.60 mD x 2.60 mH Vertical Cone/Cylinder x 3

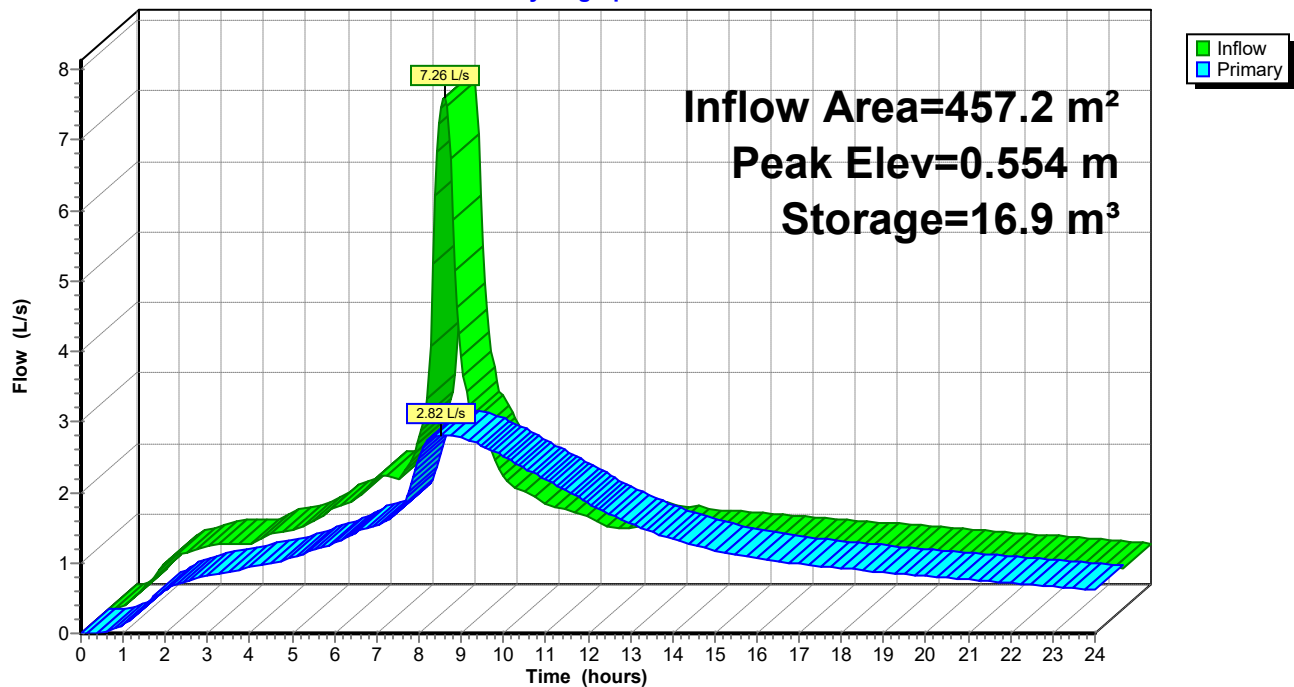
Device	Routing	Invert	Outlet Devices
#1	Primary	0.000 m	43 mm Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.82 L/s @ 8.53 hrs HW=0.554 m (Free Discharge)

↑1=Orifice/Grate (Orifice Controls 2.82 L/s @ 1.94 m/s)

Pond 54P: 3 x 25,000L Rainwater Tanks

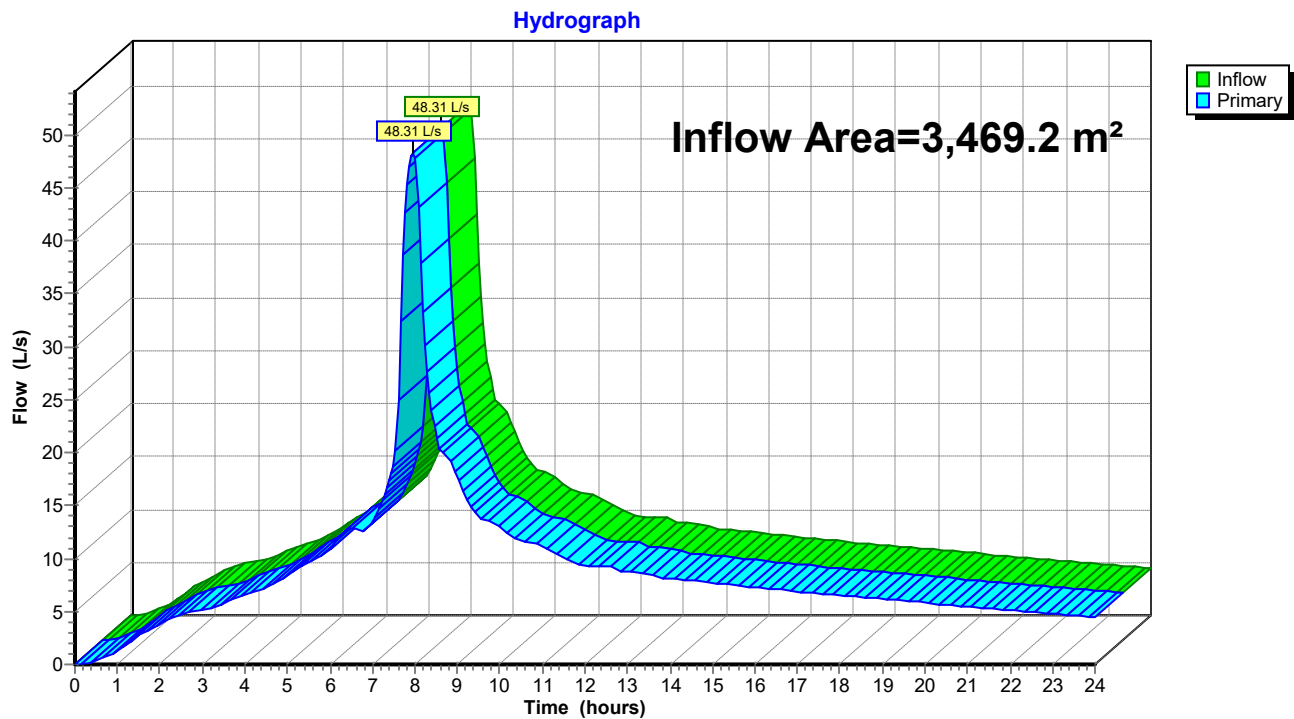
Hydrograph



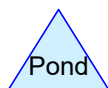
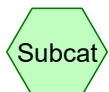
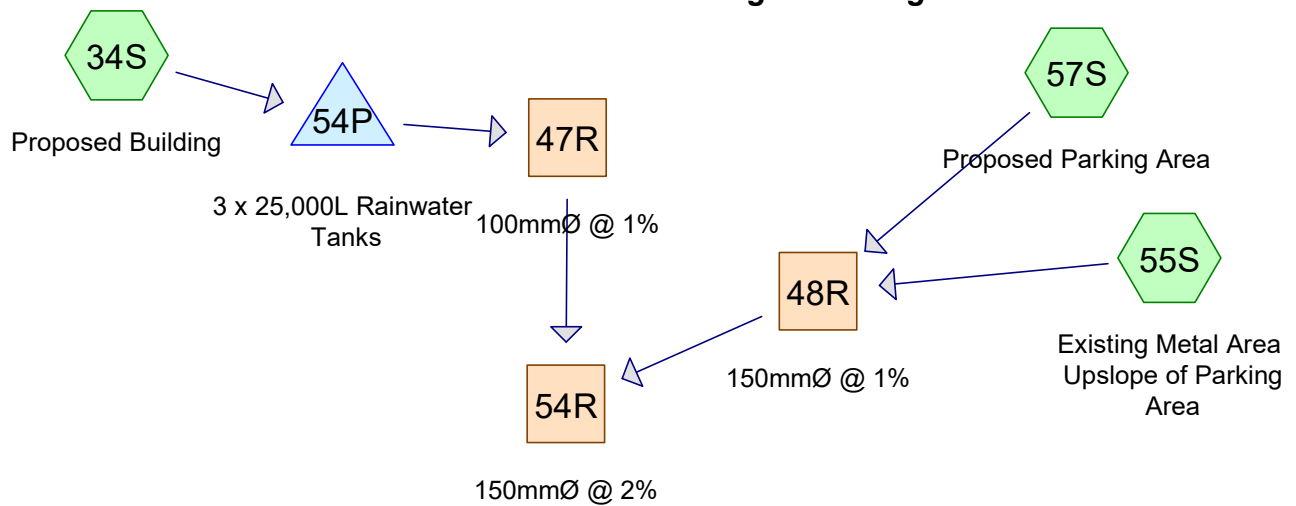
Summary for Link 35L: Post-Development Flows Attenuated Back to Permitted Flows

Inflow Area = 3,469.2 m², 51.31% Impervious, Inflow Depth > 220 mm for 1% AEP + 20% CCF event
Inflow = 48.31 L/s @ 7.95 hrs, Volume= 764.3 m³
Primary = 48.31 L/s @ 7.95 hrs, Volume= 764.3 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 35L: Post-Development Flows Attenuated Back to Permitted Flows

Pipe Sizing - Proposed Building & Parking



Routing Diagram for 145652 Sizing

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145652 Sizing*Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm*

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 34S: Proposed Building Runoff Area=457.2 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=7.26 L/s 107.1 m³

Subcatchment 55S: Existing Metal Area Runoff Area=404.0 m² 0.00% Impervious Runoff Depth>206 mm
Tc=10.0 min CN=89 Runoff=5.96 L/s 83.4 m³

Subcatchment 57S: Proposed Parking Runoff Area=687.0 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=10.91 L/s 161.0 m³

Reach 47R: 100mmØ @ 1% Avg. Flow Depth=0.05 m Max Vel=0.76 m/s Inflow=2.82 L/s 105.7 m³
100 mm Round Pipe n=0.011 L=10.00 m S=0.0100 m/m Capacity=6.10 L/s Outflow=2.82 L/s 105.7 m³

Reach 48R: 150mmØ @ 1% Avg. Flow Depth=0.12 m Max Vel=1.16 m/s Inflow=16.86 L/s 244.4 m³
150 mm Round Pipe n=0.011 L=10.00 m S=0.0100 m/m Capacity=18.00 L/s Outflow=16.86 L/s 244.3 m³

Reach 54R: 150mmØ @ 2% Avg. Flow Depth=0.10 m Max Vel=1.58 m/s Inflow=19.27 L/s 350.0 m³
150 mm Round Pipe n=0.011 L=10.00 m S=0.0200 m/m Capacity=25.45 L/s Outflow=19.27 L/s 350.0 m³

Pond 54P: 3 x 25,000L Rainwater Tanks Peak Elev=0.554 m Storage=16.9 m³ Inflow=7.26 L/s 107.1 m³
Outflow=2.82 L/s 105.7 m³

145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 3

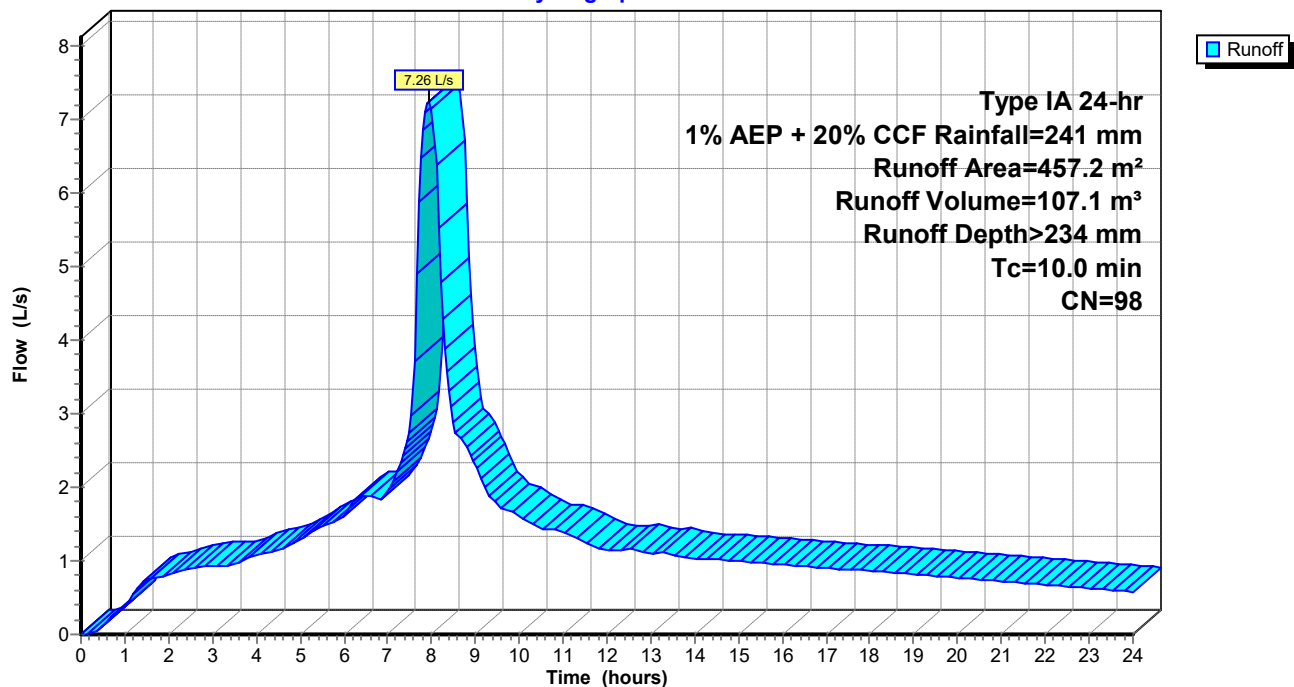
Summary for Subcatchment 34S: Proposed BuildingRunoff = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³, Depth> 234 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
457.2	98	Roofs, HSG C
457.2		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 34S: Proposed Building

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

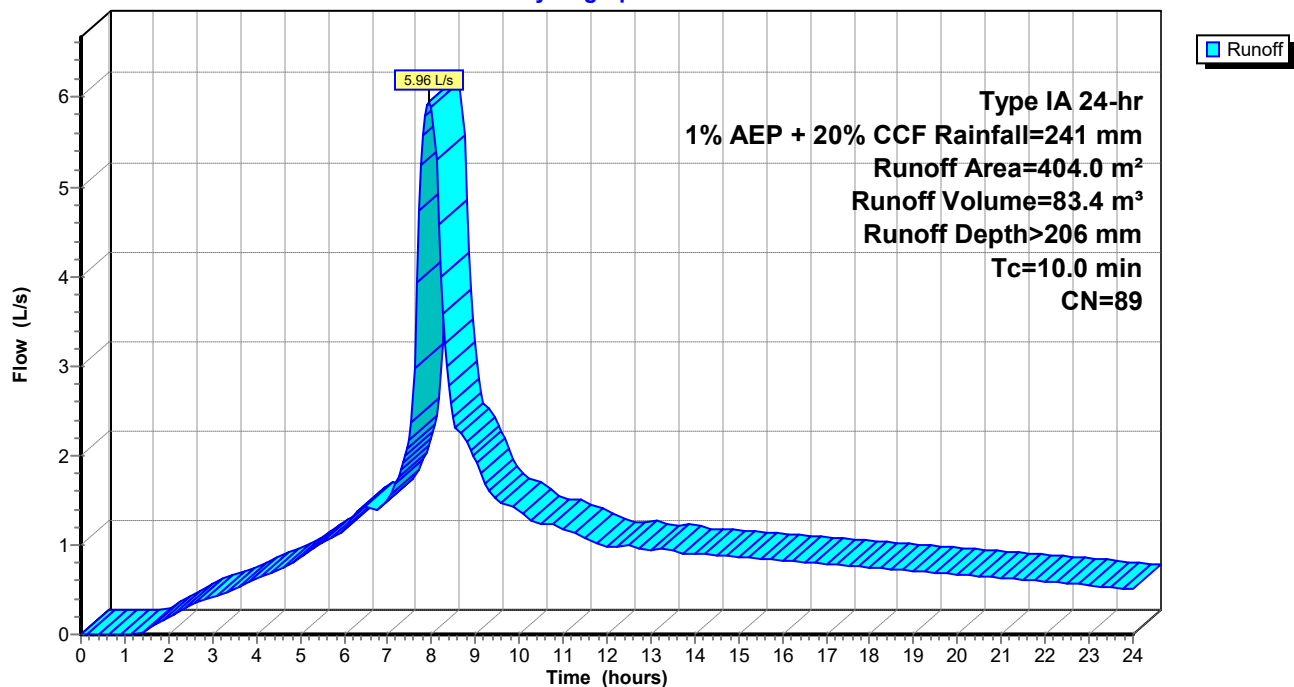
Summary for Subcatchment 55S: Existing Metal Area Upslope of Parking AreaRunoff = 5.96 L/s @ 7.95 hrs, Volume= 83.4 m³, Depth> 206 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
404.0	89	Gravel roads, HSG C
404.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 55S: Existing Metal Area Upslope of Parking Area

Hydrograph



Summary for Subcatchment 57S: Proposed Parking Area

Runoff = 10.91 L/s @ 7.94 hrs, Volume= 161.0 m³, Depth> 234 mm

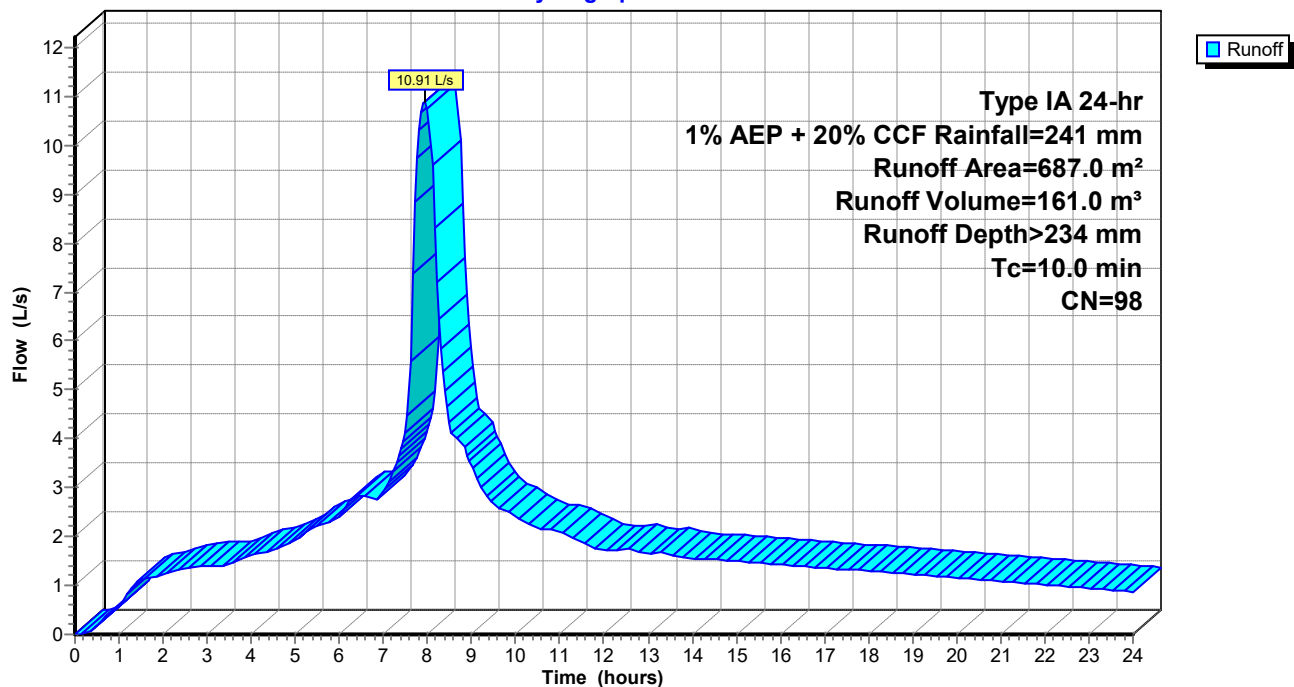
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
687.0	98	Paved roads w/curbs & sewers, HSG C
687.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 57S: Proposed Parking Area

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 6

Summary for Reach 47R: 100mmØ @ 1%

Inflow Area = 457.2 m², 100.00% Impervious, Inflow Depth > 231 mm for 1% AEP + 20% CCF event
Inflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³
Outflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.76 m/s, Min. Travel Time= 0.2 min

Avg. Velocity= 0.59 m/s, Avg. Travel Time= 0.3 min

Peak Storage= 0.0 m³ @ 8.53 hrs

Average Depth at Peak Storage= 0.05 m

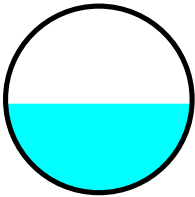
Bank-Full Depth= 0.10 m Flow Area= 0.01 m², Capacity= 6.10 L/s

100 mm Round Pipe

n= 0.011 PVC, smooth interior

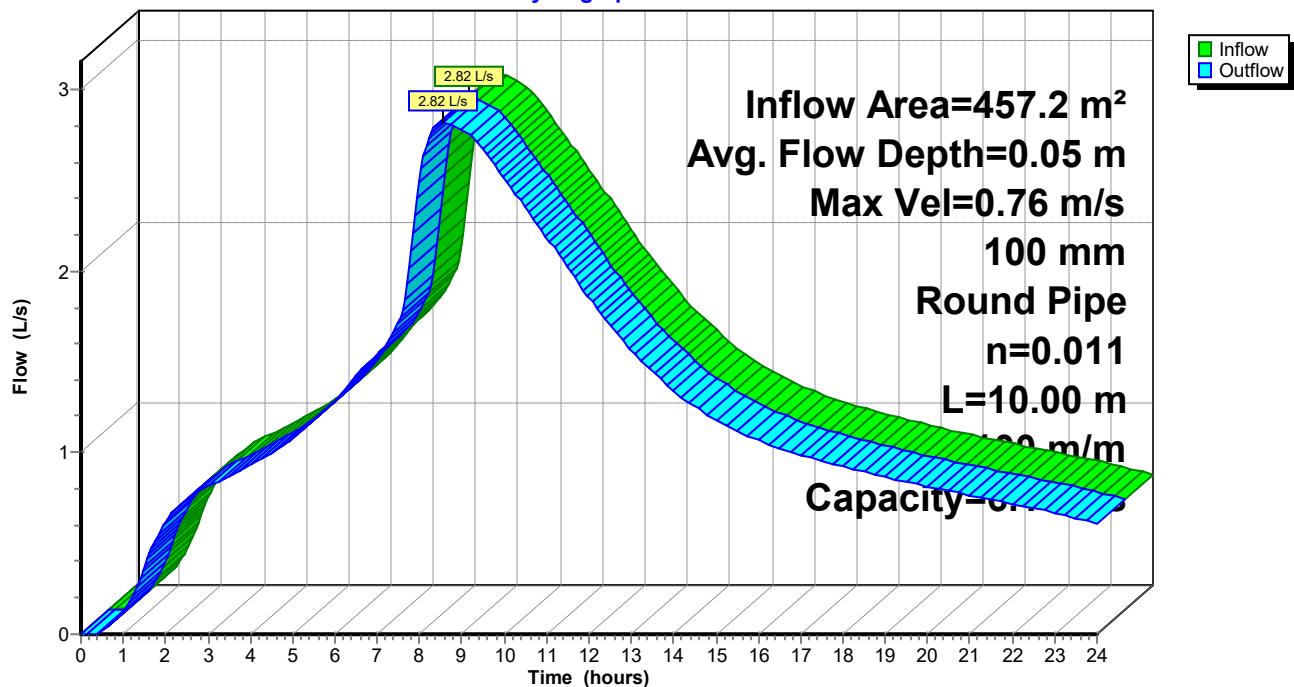
Length= 10.00 m Slope= 0.0100 m/m

Inlet Invert= -1.000 m, Outlet Invert= -1.100 m



Reach 47R: 100mmØ @ 1%

Hydrograph



145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 7

Summary for Reach 48R: 150mmØ @ 1%

Inflow Area = 1,091.0 m², 62.97% Impervious, Inflow Depth > 224 mm for 1% AEP + 20% CCF event
Inflow = 16.86 L/s @ 7.94 hrs, Volume= 244.4 m³
Outflow = 16.86 L/s @ 7.95 hrs, Volume= 244.3 m³, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.16 m/s, Min. Travel Time= 0.1 min

Avg. Velocity= 0.71 m/s, Avg. Travel Time= 0.2 min

Peak Storage= 0.1 m³ @ 7.95 hrs

Average Depth at Peak Storage= 0.12 m

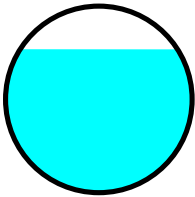
Bank-Full Depth= 0.15 m Flow Area= 0.02 m², Capacity= 18.00 L/s

150 mm Round Pipe

n= 0.011 PVC, smooth interior

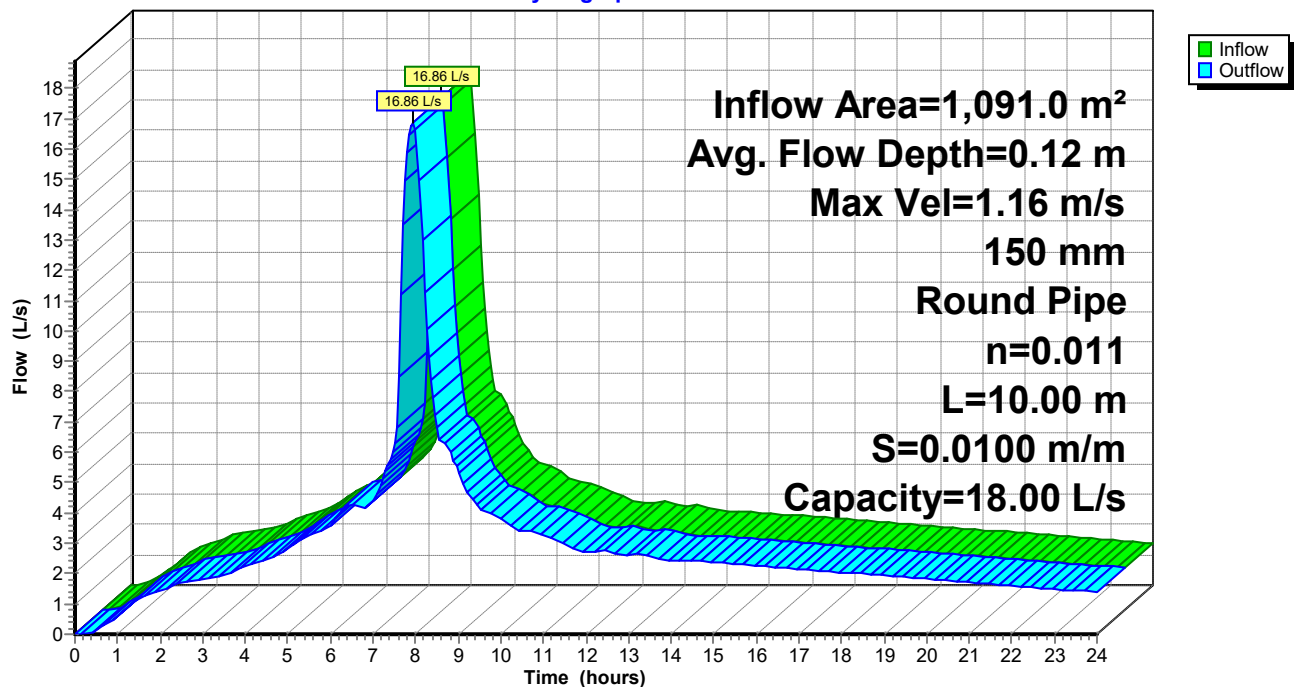
Length= 10.00 m Slope= 0.0100 m/m

Inlet Invert= -2.000 m, Outlet Invert= -2.100 m



Reach 48R: 150mmØ @ 1%

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 8

Summary for Reach 54R: 150mmØ @ 2%

Inflow Area = 1,548.2 m², 73.91% Impervious, Inflow Depth > 226 mm for 1% AEP + 20% CCF event
Inflow = 19.27 L/s @ 7.97 hrs, Volume= 350.0 m³
Outflow = 19.27 L/s @ 7.97 hrs, Volume= 350.0 m³, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.58 m/s, Min. Travel Time= 0.1 min

Avg. Velocity= 1.02 m/s, Avg. Travel Time= 0.2 min

Peak Storage= 0.1 m³ @ 7.97 hrs

Average Depth at Peak Storage= 0.10 m

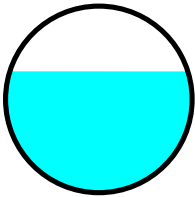
Bank-Full Depth= 0.15 m Flow Area= 0.02 m², Capacity= 25.45 L/s

150 mm Round Pipe

n= 0.011 PVC, smooth interior

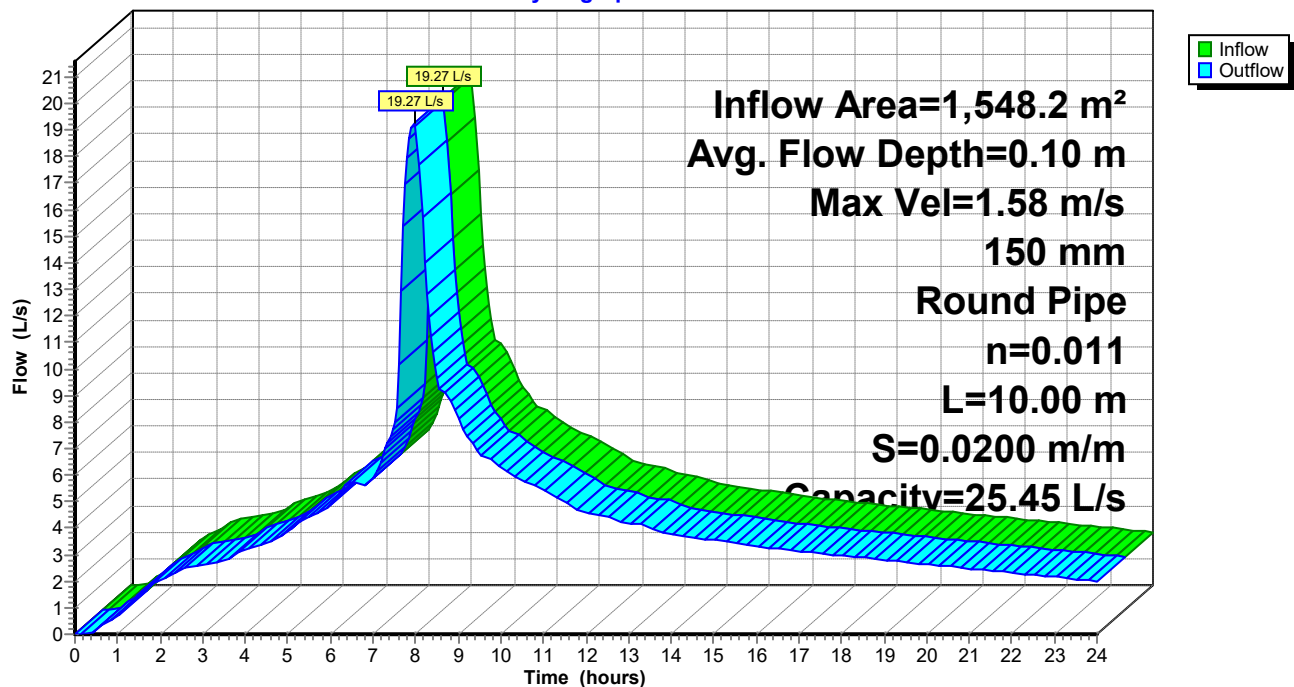
Length= 10.00 m Slope= 0.0200 m/m

Inlet Invert= -2.100 m, Outlet Invert= -2.300 m



Reach 54R: 150mmØ @ 2%

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 9

Summary for Pond 54P: 3 x 25,000L Rainwater Tanks

Inflow Area = 457.2 m², 100.00% Impervious, Inflow Depth > 234 mm for 1% AEP + 20% CCF event
Inflow = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³
Outflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³, Atten= 61%, Lag= 35.3 min
Primary = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Peak Elev= 0.554 m @ 8.53 hrs Surf.Area= 30.5 m² Storage= 16.9 m³Plug-Flow detention time= 63.3 min calculated for 105.4 m³ (98% of inflow)

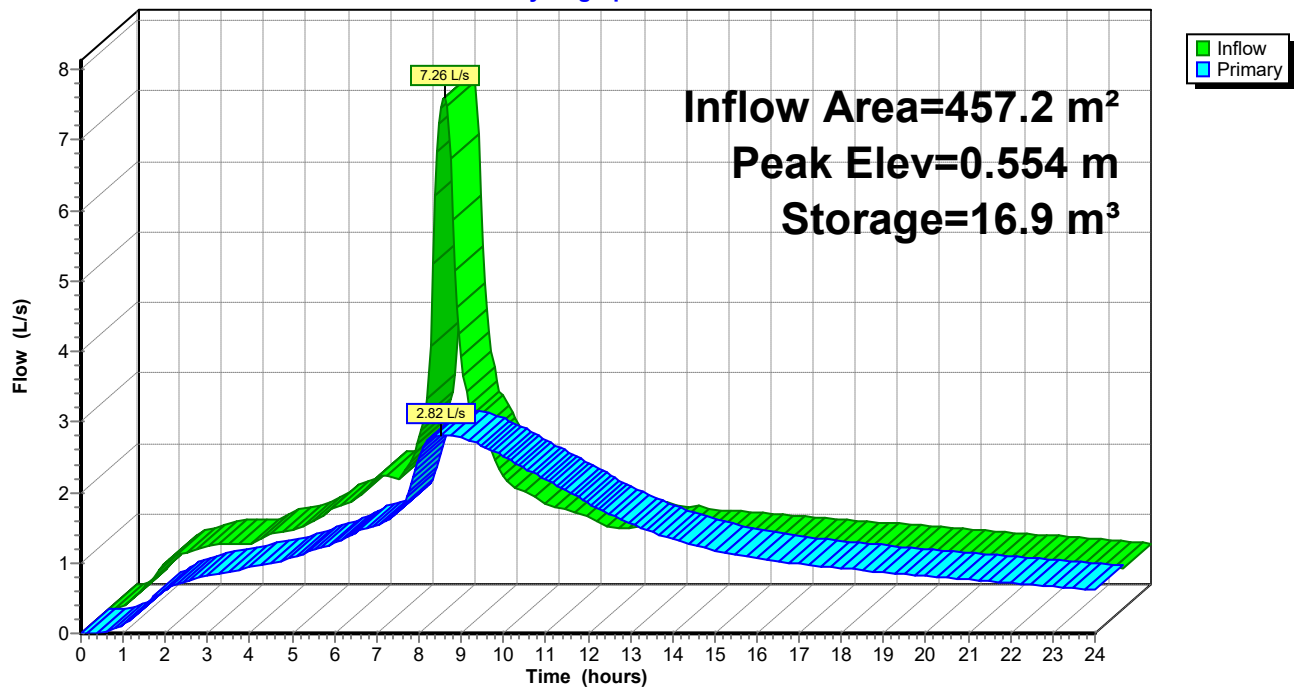
Center-of-Mass det. time= 52.5 min (699.1 - 646.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.000 m	79.4 m ³	3.60 mD x 2.60 mH Vertical Cone/Cylinder x 3

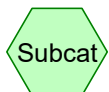
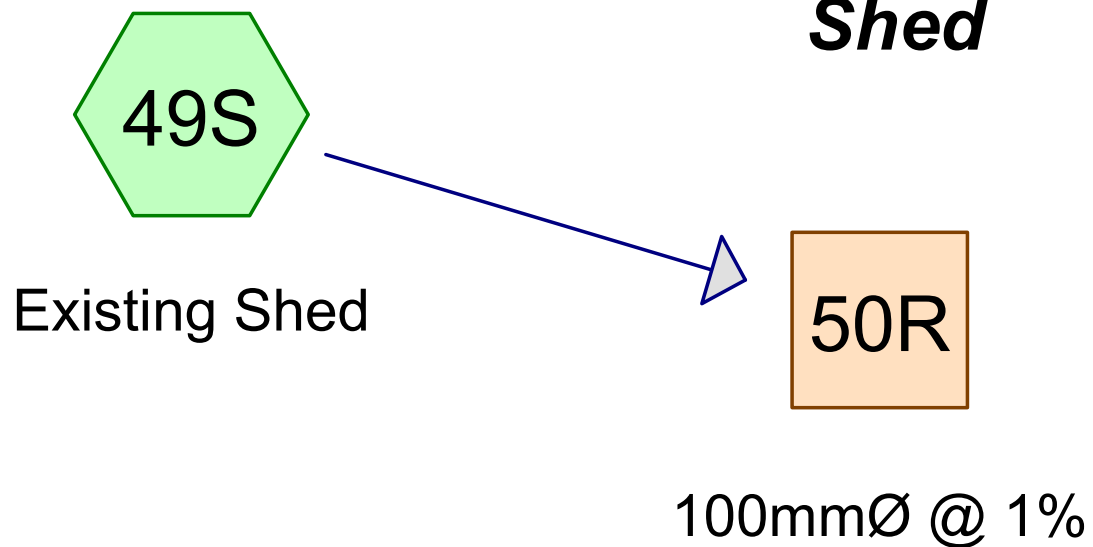
Device	Routing	Invert	Outlet Devices
#1	Primary	0.000 m	43 mm Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.82 L/s @ 8.53 hrs HW=0.554 m (Free Discharge)←**1=Orifice/Grate** (Orifice Controls 2.82 L/s @ 1.94 m/s)**Pond 54P: 3 x 25,000L Rainwater Tanks**

Hydrograph



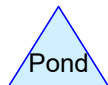
Pipe Sizing - Existing Shed



Subcat



Reach



Pond



Link

Routing Diagram for 145652 Sizing

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145652 Sizing

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 49S: Existing Shed

Runoff Area=307.5 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=4.88 L/s 72.0 m³

Reach 50R: 100mmØ @ 1%

Avg. Flow Depth=0.07 m Max Vel=0.86 m/s Inflow=4.88 L/s 72.0 m³
100 mm Round Pipe n=0.011 L=10.00 m S=0.0100 m/m Capacity=6.10 L/s Outflow=4.88 L/s 72.0 m³

145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 3

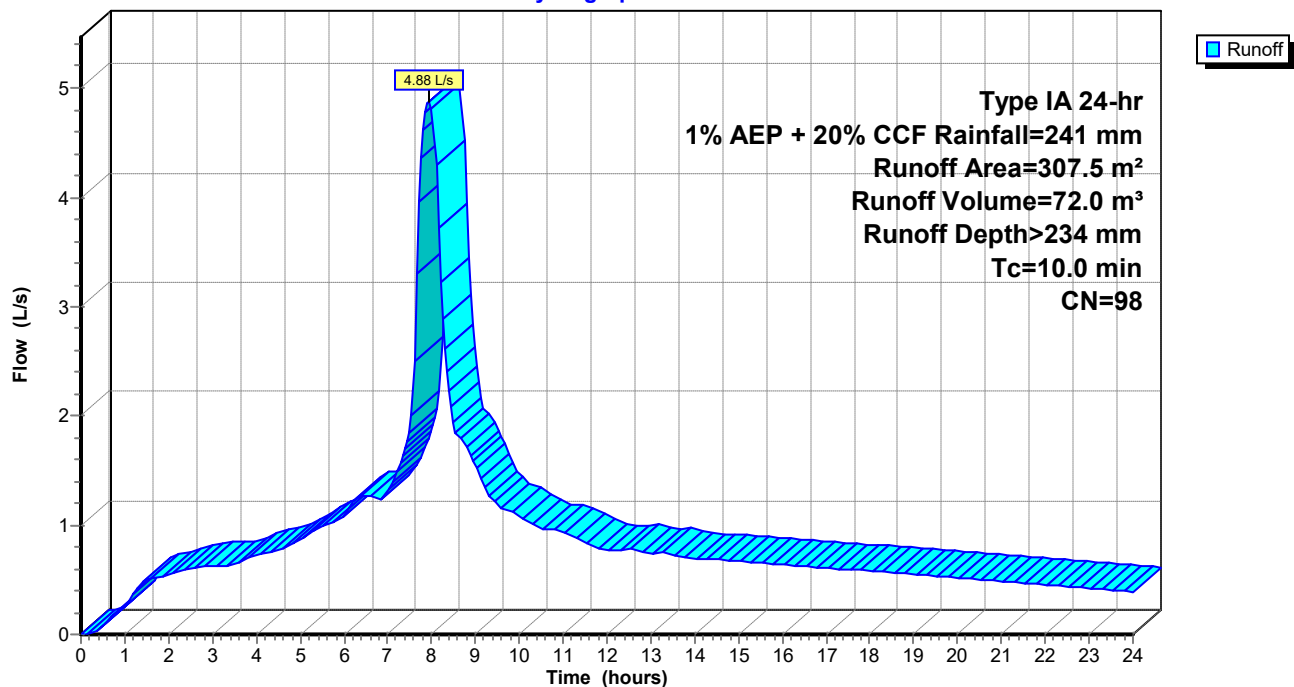
Summary for Subcatchment 49S: Existing ShedRunoff = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³, Depth> 234 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m²)	CN	Description
307.5	98	Paved parking, HSG C
307.5		100.00% Impervious Area

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

Subcatchment 49S: Existing Shed

Hydrograph



145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

Summary for Reach 50R: 100mmØ @ 1%

Inflow Area = 307.5 m², 100.00% Impervious, Inflow Depth > 234 mm for 1% AEP + 20% CCF event
Inflow = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³
Outflow = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.86 m/s, Min. Travel Time= 0.2 min

Avg. Velocity= 0.52 m/s, Avg. Travel Time= 0.3 min

Peak Storage= 0.1 m³ @ 7.94 hrs

Average Depth at Peak Storage= 0.07 m

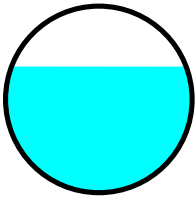
Bank-Full Depth= 0.10 m Flow Area= 0.01 m², Capacity= 6.10 L/s

100 mm Round Pipe

n= 0.011 PVC, smooth interior

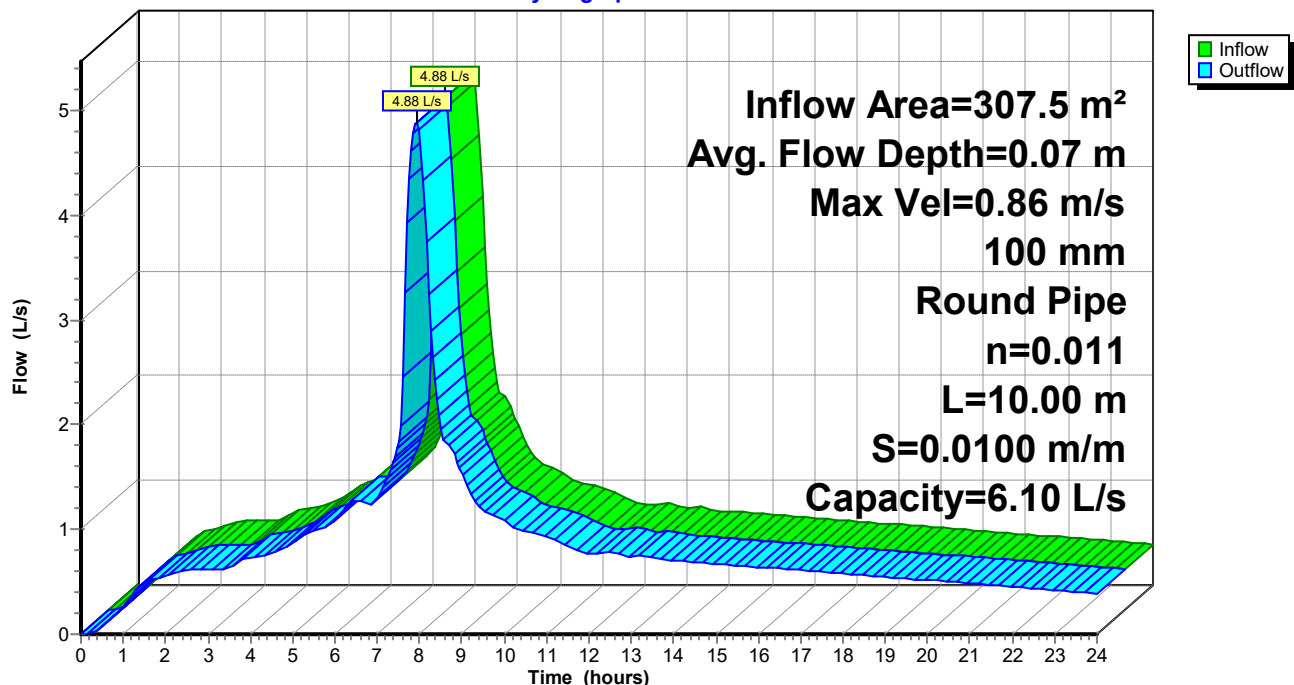
Length= 10.00 m Slope= 0.0100 m/m

Inlet Invert= 0.000 m, Outlet Invert= -0.100 m

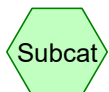
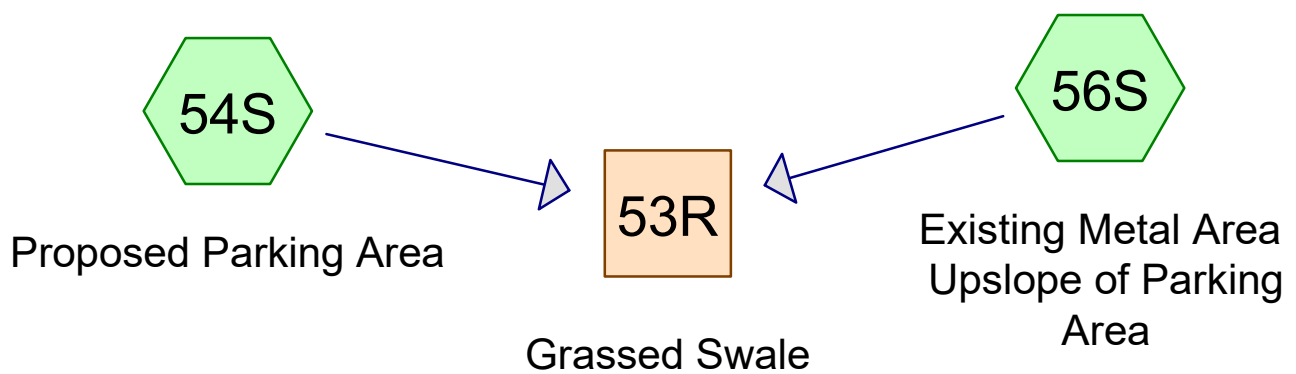


Reach 50R: 100mmØ @ 1%

Hydrograph



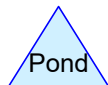
Swale Sizing



Subcat



Reach



Pond



Link

Routing Diagram for 145652 Sizing

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145652 Sizing

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 54S: Proposed Parking Runoff Area=687.0 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=10.91 L/s 161.0 m³

Subcatchment 56S: Existing Metal Area Runoff Area=404.0 m² 0.00% Impervious Runoff Depth>206 mm
Tc=10.0 min CN=89 Runoff=5.96 L/s 83.4 m³

Reach 53R: Grassed Swale Avg. Flow Depth=0.17 m Max Vel=0.47 m/s Inflow=16.86 L/s 244.4 m³
n=0.025 L=10.00 m S=0.0050 m/m Capacity=24.53 L/s Outflow=16.86 L/s 244.3 m³

Summary for Subcatchment 54S: Proposed Parking Area

Runoff = 10.91 L/s @ 7.94 hrs, Volume= 161.0 m³, Depth> 234 mm

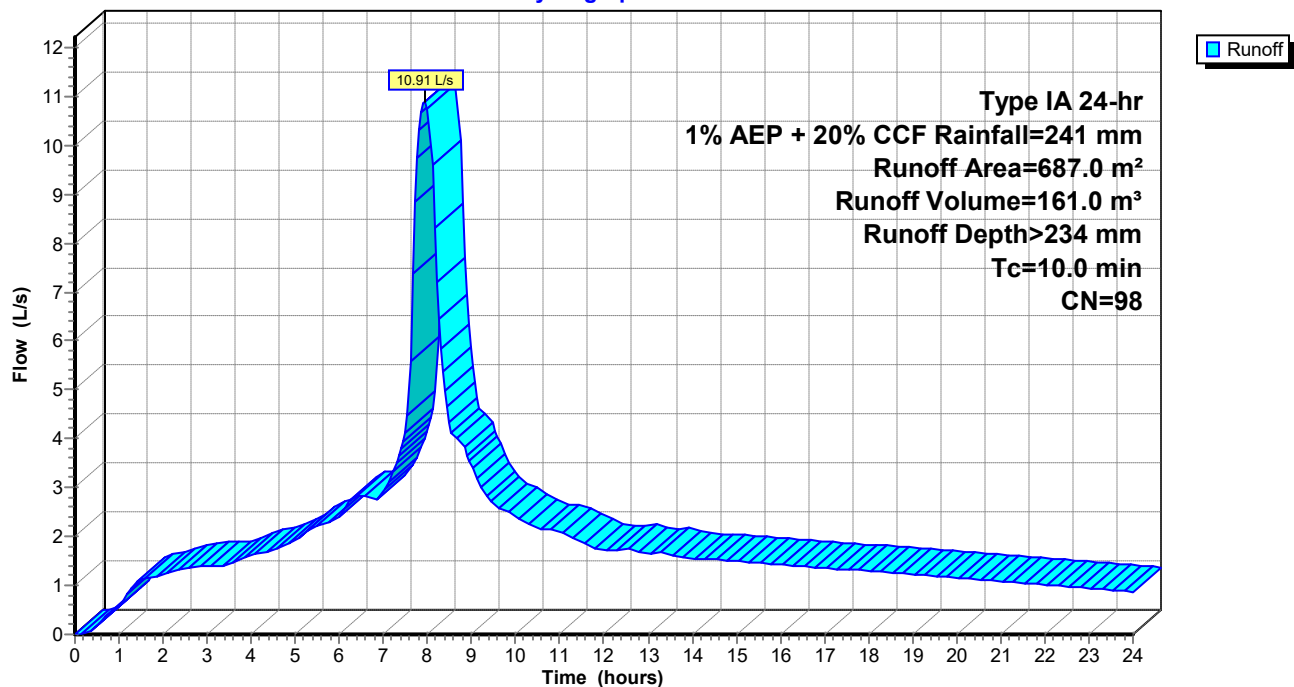
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
687.0	98	Paved roads w/curbs & sewers, HSG C
687.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 54S: Proposed Parking Area

Hydrograph



145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Printed 22/04/2026

Page 4

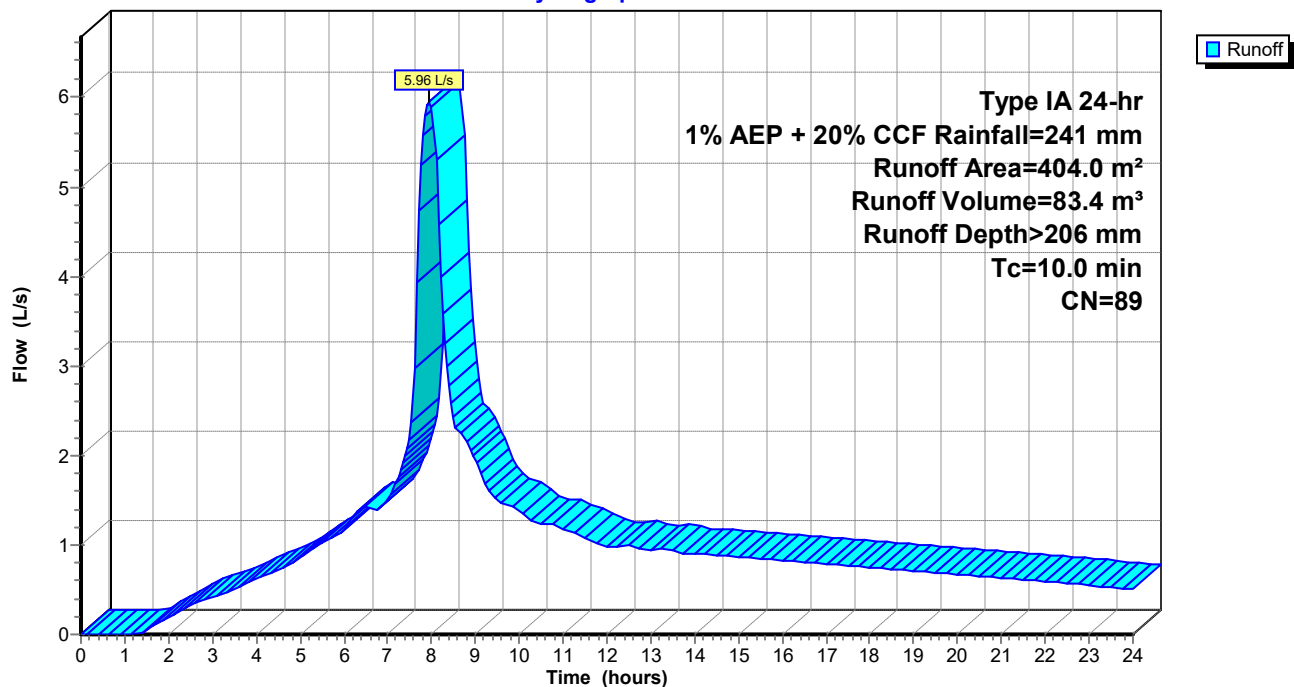
Summary for Subcatchment 56S: Existing Metal Area Upslope of Parking AreaRunoff = 5.96 L/s @ 7.95 hrs, Volume= 83.4 m³, Depth> 206 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
404.0	89	Gravel roads, HSG C
404.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 56S: Existing Metal Area Upslope of Parking Area

Hydrograph



Summary for Reach 53R: Grassed Swale

Inflow Area = 1,091.0 m², 62.97% Impervious, Inflow Depth > 224 mm for 1% AEP + 20% CCF event
 Inflow = 16.86 L/s @ 7.94 hrs, Volume= 244.4 m³
 Outflow = 16.86 L/s @ 7.95 hrs, Volume= 244.3 m³, Atten= 0%, Lag= 0.3 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.47 m/s, Min. Travel Time= 0.4 min

Avg. Velocity = 0.29 m/s, Avg. Travel Time= 0.6 min

Peak Storage= 0.4 m³ @ 7.95 hrs

Average Depth at Peak Storage= 0.17 m

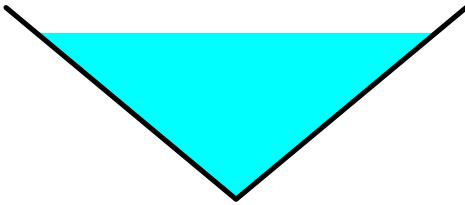
Bank-Full Depth= 0.20 m Flow Area= 0.05 m², Capacity= 24.53 L/s

0.00 m x 0.20 m deep channel, n= 0.025 Earth, clean & winding

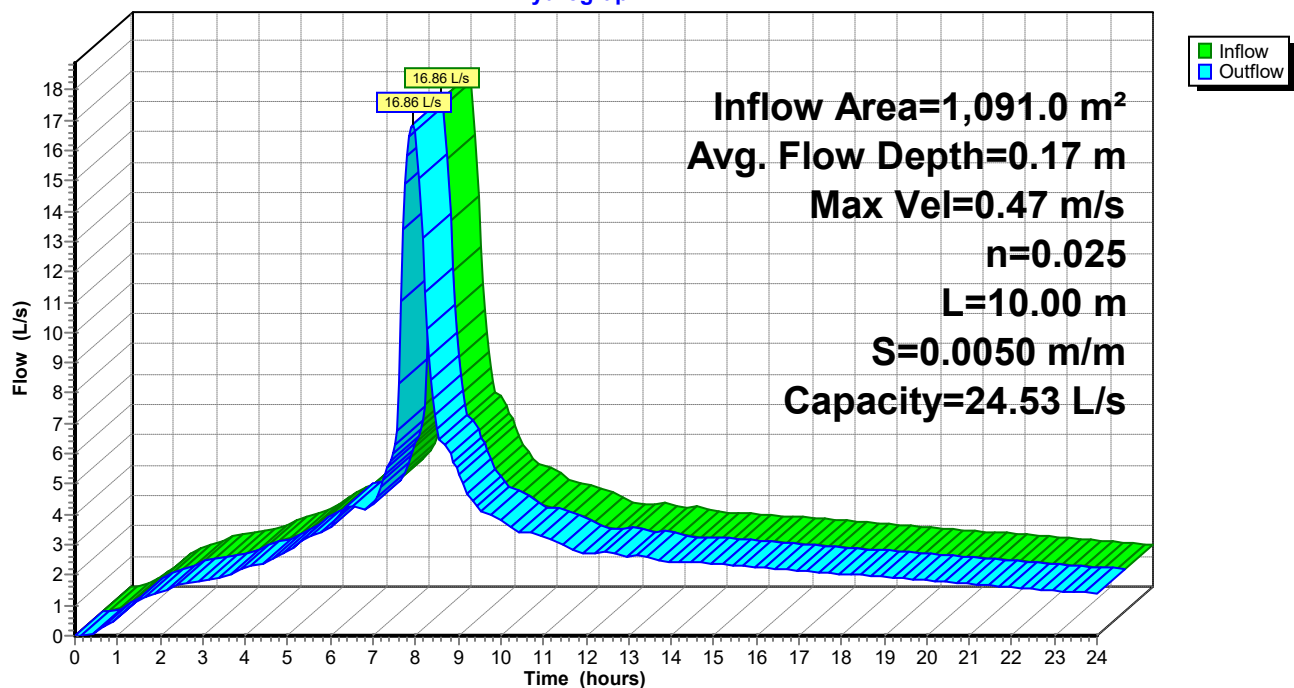
Side Slope Z-value= 1.2 m/m Top Width= 0.48 m

Length= 10.00 m Slope= 0.0050 m/m

Inlet Invert= 0.000 m, Outlet Invert= -0.050 m

**Reach 53R: Grassed Swale**

Hydrograph

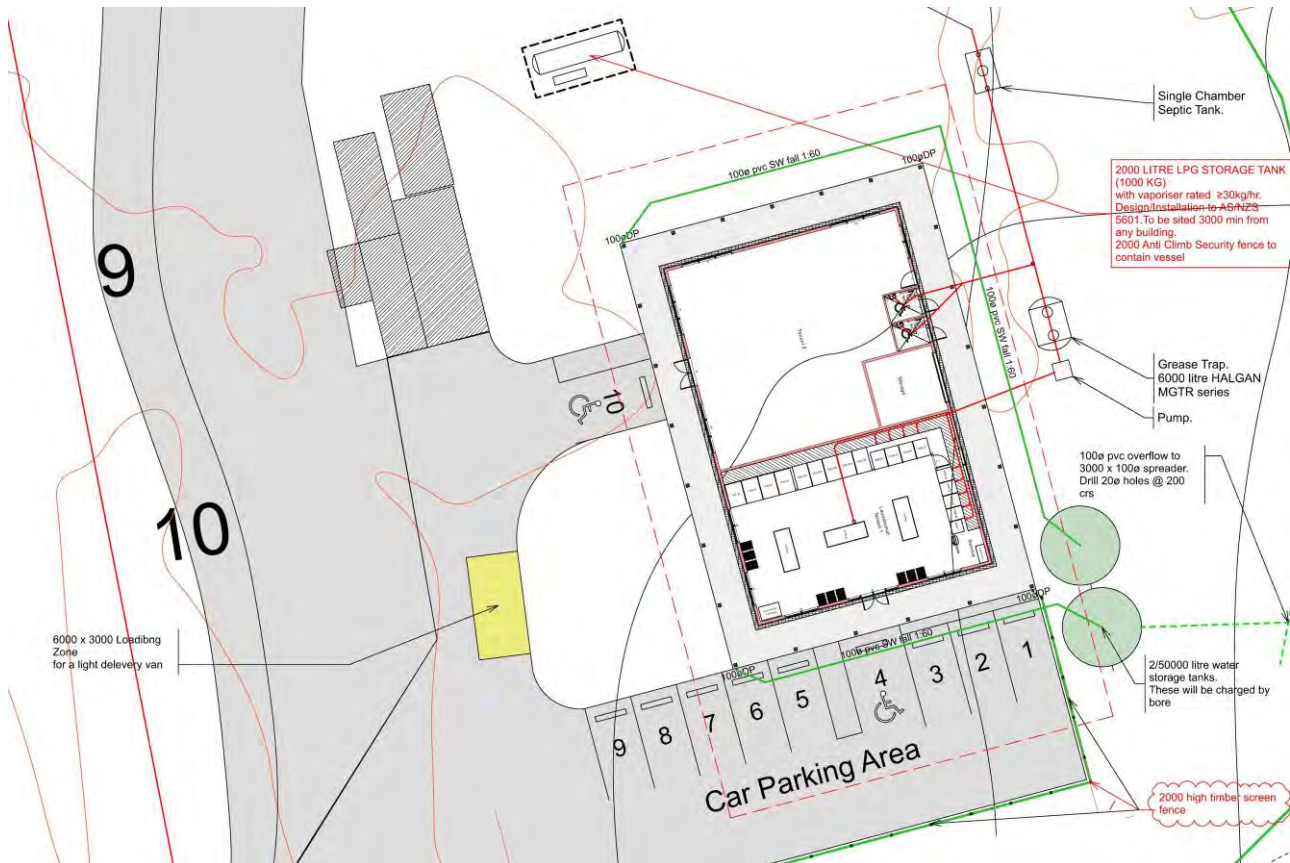


Appendix D – Traffic Impact Assessment



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PROPOSED COMMERCIAL & LAUNDRAMAT 4238 FAR NORTH RD/SH1 PUKENUI



ASSESSMENT OF TRAFFIC EFFECTS

Prepared by Engineering Outcomes Ltd
11 May 2026

Table of Contents

1. PURPOSE.....	1
2. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS.....	1
3. THE PROPOSAL AND EXISTING ACTIVITIES.....	1
4. THE EXISTING ROAD NETWORK	3
5. COUNCIL RULES AND STANDARDS	6
6. TRAFFIC.....	6
6.1 TRAFFIC GENERATION.....	6
6.2 TRAFFIC ON PUBLIC ROADS	7
6.3 PARKING DEMAND.....	7
6.4 CRASHES.....	8
7. ASSESSMENT OF TRAFFIC EFFECTS AND PROPOSED MITIGATION MEASURES	8
7.1 WIDTH OF FAR NORTH ROAD	8
7.2 PEDESTRIAN AND CYCLIST SAFETY	9
7.3 OTHER MATTERS.....	9
8. FAR NORTH DISTRICT PLAN – ASSESSMENT CRITERIA.....	10
8.1 RULE 15.1.6A.4.1: TRAFFIC INTENSITY MATTERS FOR CONSIDERATION.....	10
8.2 SECTION 15.1.6A.7: GENERAL ASSESSMENT CRITERIA, TRAFFIC	11
APPENDIX A: SITE PLAN.....	14
APPENDIX B: ANALYSIS OF WARRANTS FOR “TURN TREATMENTS” AND THEIR BASIS.....	15
 FIGURE 1. GENERAL PLAN OF THE SITE AND PROPOSAL INCLUDING THE CURRENT SITE PLAN	 2
FIGURE 2. SIGHTLINES NORTH OF THE NORTHERN CROSSING	2
FIGURE 3. AUSTROADS’ “TURN TREATMENT” WARRANTS FOR THE BUSIEST ENTRIES DURING HOLIDAYS.	8
 TABLE 1. DETAILS OF TYPE GA AND GD CRASHES ON SEALED RURAL ROADS IN THE FAR NORTH DISTRICT IN THE MOST RECENT 5 CALENDAR YEARS	 16

1. PURPOSE

This is a report covering the traffic effects of a proposed laundromat and existing commercial activity on a site known as “Houhora Honey Bees” at 4238 Far North Road/SH1, Pukenui. It covers the movement of generated traffic including internal vehicle movement, pedestrian safety, parking, loading and effects on the existing road network.

2. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Overall, it is concluded that the traffic effects and safety risks associated with the proposal will be well within acceptable limits and less than minor.

There is ample parking and loading space on the site to cater for the demand from all existing and proposed activities including associated turning/manoeuvring and internal movement, without any likelihood of overspill from the site. Despite the absence of turn treatments at the two crossings, entries are well managed/not resulting in risks that are outside acceptable limits and this will continue. The crossings are sealed and the sight distances associated with them are at least adequate.

Some walk-ins already occur but very few, quite likely none, are expected as a result of the laundromat and second tenancy. No crashes have been reported involving vehicles turning through the site crossings, nor vulnerable road users, since at least the start of 2016.

The effects on the wider road network are expected to be virtually negligible and no associated mitigation is warranted.

3. THE PROPOSAL AND EXISTING ACTIVITIES

The proposal is for a laundromat with nine washing machines and driers plus an industrial unit (150 sq.m GFA) and associated storage (16 sq.m) both intended at least initially for the use of the applicant. The laundromat will operate between 8am and 8pm with automated pay terminals and no staff. Existing activities on the site include a “container café” with some outdoor seating and a takeaway food service, plus an existing turning and parking area for school buses and the parents of pupils, which the applicant allows as a community service.

The activities are all located on Lot 5 DP 107403 on Far North Road/SH1, Pukenui, Northland.

The site will provide parking for more than forty cars plus a loading area, all outside of the bus turning and parking. A loading bay is proposed at a suitable location near the industrial unit.

All activities lead to two existing access connections on the eastern side of Far North Road at route positions 65/3.75 km (northern) and 65/3.83 km. There are three no-stopping signs on the berm of Far North Road nearly opposite the northern crossing. Those cover the only berms on which cars could park off the site in its vicinity.

There is a footpath along the site frontage, which ends at the northern crossing. It provides a continuous pathway to all parts of Pukenui settlement including the shopping centre and wharf.

Another private access leads to Far North Road at the location of the northern crossing and shares that with the activities on the subject site. It leads to fourteen dwellings including one on the site.

The activities, parking loading and crossings are depicted in Figure 1 and sightlines are shown in Figure 2.

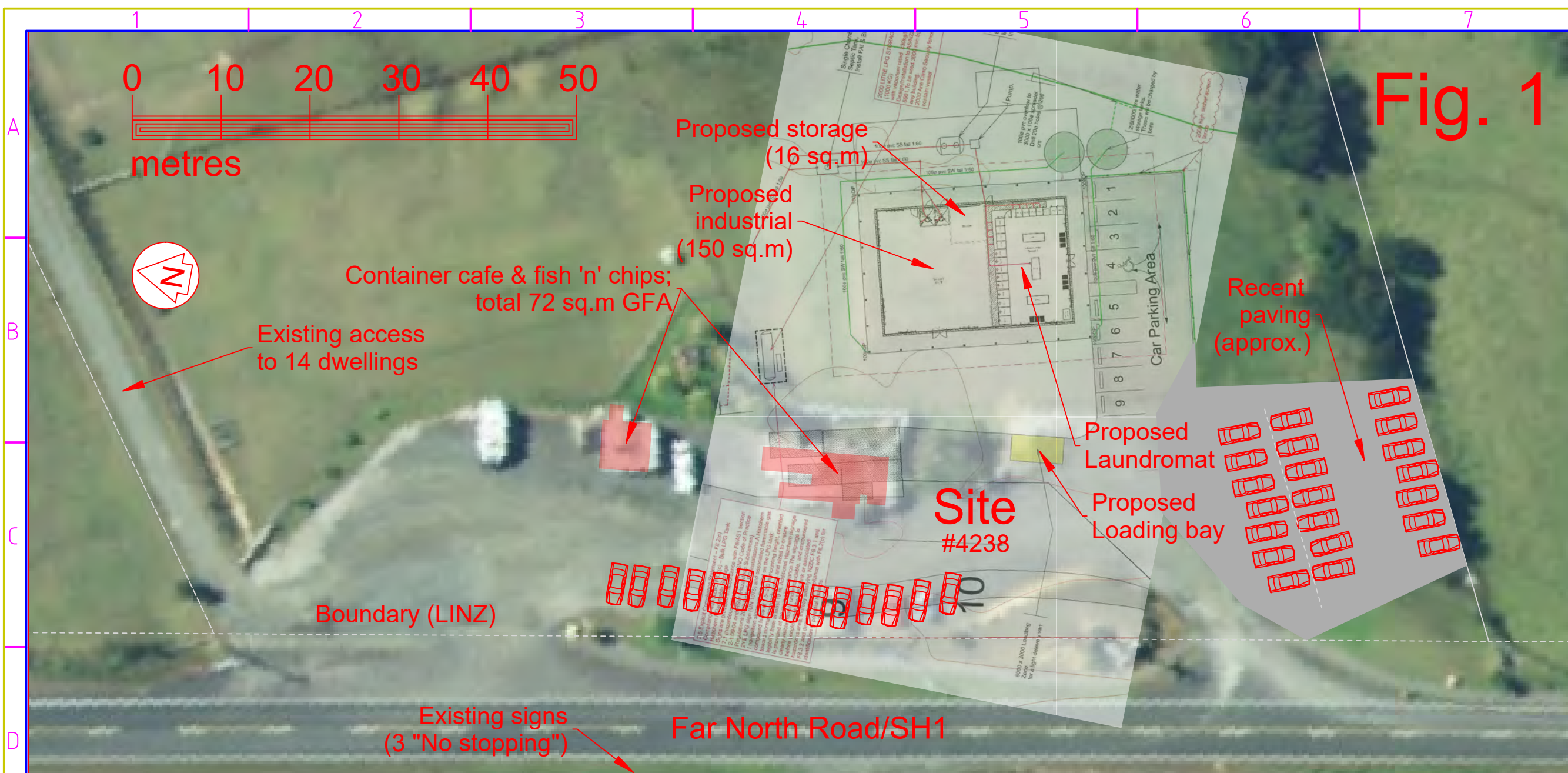


Fig. 1

Plans

Parking Sightlines

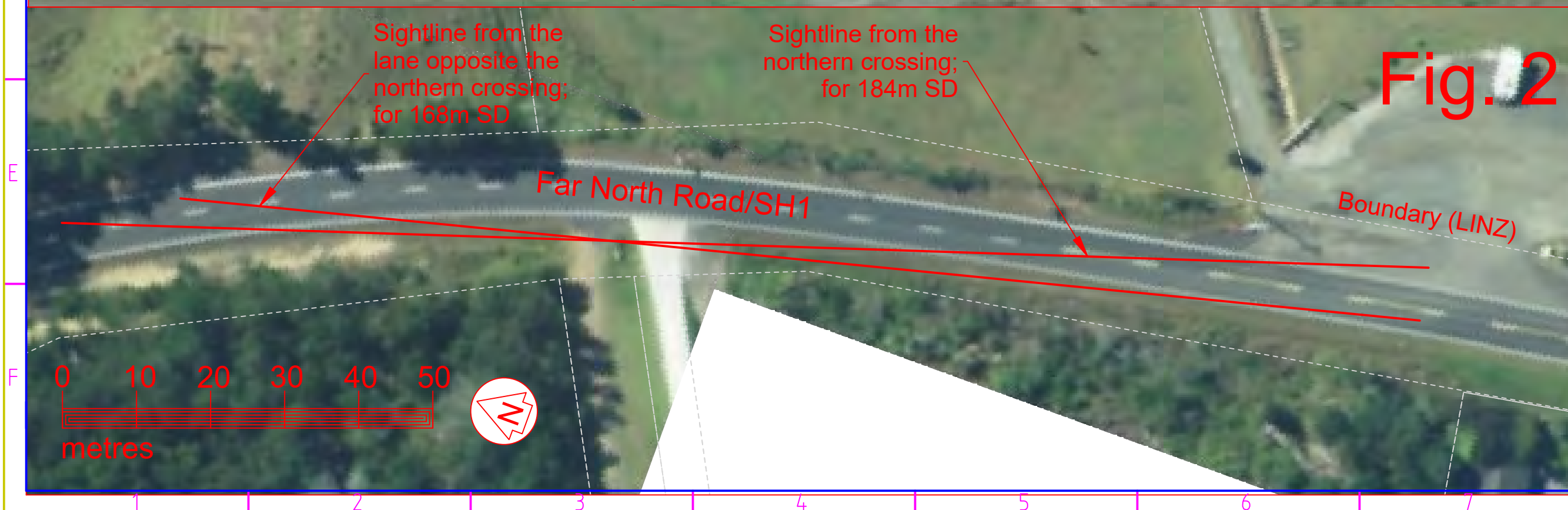


Fig. 2



Tel. 09 436 5534
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Project
Commercial
4238 Far North Rd
Pukenui

Client
**Houhora
Honey Bees**

Surveyed by
LINZ

Amendments

Council ref.

Scale 1:500 at A3

Date 11-May-2026 09:13:02

4. THE EXISTING ROAD NETWORK

Far North Road is sealed with two lanes, a carriageway width close to 6.5 metres through the site frontage and open side drains. It is near level and straight along the frontage.

The speed limit on this part of Far North Road is 80 kilometres per hour but there is a transition to 50 km/hr only 70 metres south of the southern crossing (which is at the northern extent of the Pukenui settlement).

There is no carriageway lighting on Far North Road in this vicinity.

Photo 1. A panorama of the site and existing parking from north (left) to south, centred on the location of the proposed industrial unit. The laundromat will be at centre-right (beyond the grey car), the existing container café is at centre-left and the takeaway food outlet is beyond that (with the white car parked in front).



Photo 2. A panorama of Far North Road from north (left) to south, centred on the southern access crossing and laundromat site. Sight distances in this locality are all greater than the safe-intersection standard - the highest standard applicable to safety.



Photo 3. A panorama of Far North Road from north (left) to south, centred on the northern access crossing.



Photo 4. Looking south along Far North Road from the southern access crossing. Note the speed limit transition (from 80 to 50 km/hr).



Photo 5. Looking north along Far North Road from the southern access crossing.



Photo 6. Looking north along Far North Road from the northern access crossing.



Photo 7. Looking south along Far North Road from the northern access crossing.



Photo 8. Looking east along the private access that leads to Far North Road a short distance north of the site.



Photo 9. The existing no-stopping signs opposite the northern crossing, looking north.



5. COUNCIL RULES AND STANDARDS

The *Far North district plan* rule 15.1.6C.1.1c specifies that private access is permitted for access that leads to eight household equivalents and that access leading to nine or more household equivalents is to be a public road. Discretionary land-use consent is required for private access that leads to more than eight household equivalents. A household equivalent generates up to 10 vehicle movements per day.

Section 3.3.7.4 of the council's engineering standard 2009, which is part of the district plan, specifies that:

Accesses that carry 60 vehicle [movements] per day or more and have access onto rural roads that are expected to carry fewer than 1,000 vehicles per day in 10 years shall be in accordance with drawing FNDC/S/6D.

That is, it is specified that such accesses are to have local widening on the priority route to separate vehicles that are turning off that route from others that are not turning. [It is suggested that this clause should read "... **more** than 1,000 vehicles per day..." because FNDC/S/6D specifies a higher standard of crossing than any others. Far North Road does carry more than 1,000 vehicle movements per day at this locality.]

6. TRAFFIC

All vehicle movements are one-way movements whether an entry or exit or a movement in one direction along public roads.

6.1 Traffic generation

The traffic generation of the proposal has been estimated by monitoring the site and crossings, with digital video, in the third week of March 2026 including a Friday and weekend.

The total daily traffic on the Friday was 420 movements of which 63% travelled to/from the south and 12% occurred during the busiest hour (2 to 3pm). The two other busiest hours were between 7 and 8am and noon to 1pm during which 9% of the daily traffic movement occurred. A total of fourteen movements of large vehicles were observed of which four were of (school) buses, the remainder being trucks that were all visiting as customers, ie not making deliveries.

On the Saturday, the overall traffic was lower, but that around the middle of the day was slightly higher – specifically 76 movements between 11am and 1pm compared with 67 during the same period on the Friday. This indicates that a significant number of traffic movements on weekdays are generated by both workers and school pupils.

Of entries to the site and private access, 61% of right turns are into the southern access and 88% of left turns are into the northern access. The proportion of laundromat trips to/from the south is expected to mirror that from the overall site – 63% and a large proportion of entries are expected through the southern crossing.

A total of 70 movements were counted on the private access on the Friday. Based on the nearest 24-hour counts on SH1, this is equivalent to 74 movements over 24 hours.

It is expected that each of the laundromat machines will be used an average of four times on average days and up to eight times each during busy/holiday periods. The second tenancy will initially be used as a workspace for the container café. Even if it is let to an external tenant, it is expected to generate no more than 8 to 10 movements per day.

Some crossover, or “internal capture”, is expected such that laundromat customers would also patronise the café or takeaway food outlet and would have done so without the laundromat. This effect is expected to be only on traffic movement and be relatively small, but also far from insignificant – likely in the range 15 to 25% of laundromat customers.

As such, the laundromat and industrial unit is estimated to generate traffic in the range 60 to 66 additional movements on average days and 120 to 130 during holiday periods (over and above the traffic generated by the existing activities). This will increase the traffic on average weekdays to close to 500 movements. Similar levels are expected during holiday periods, when there is more recreational traffic but less of workers and none of school pupils.

6.2 Traffic on public roads

The current traffic on this part of Far North Road is estimated at 1,250 to 1,300 movements on an average day with future growth in the range 25 to 28 movements per day per annum¹. Significant increases are expected during holiday periods – potentially as much as a doubling.

In 2024 and 2025, weekend traffic at the nearest count station - 600 metres south of Turk Valley Road (south of Pukenui), was 87% of weekday traffic. This is expected to be mirrored at this site including with traffic generated by the laundromat.

6.3 Parking Demand

The peak existing parking demand occurred on the Friday of the monitoring, shortly before 8am, and was ten cars². The laundromat is expected to generate demand for nine cars when all machines are in use.

As shown in Figures 1 and 2, there is space for more than forty cars to park without the need to form or pave additional areas. Those are all clear of turning areas for buses and visiting trucks.

¹ Linear growth based on the nearest count, 600 metres south of Turk Valley Road which is south of both Pukenui and the Houhora Heads and Wagener holiday park. The linear trend in 15 years of counts from that location, determined using least-squares linear regression, was 34 movements per day per annum. The resulting daily traffic is below that estimated in Mobile Road for this locality, which is 1,500 movements on an average day, but that estimate is not supported by the count data.

² Determined by tracking each individual vehicle movement.

6.4 Crashes

The CAS crash database has been searched this part of Far North Road, including both crossings, over the period since the start of 2016. Two crashes are reported along the frontage in that time period including one, in October 2020, that resulted in serious injuries. However, the applicants owned the site in October 2020 and are not aware of any such crash and neither are other local residents. Furthermore, there is no crossing in the location reported in CAS. There is a crossing on the western side of Far North Road close to 44 metres north of the southern connection of Harbour View Road and another similarly situated in relation to Waterfront Road south of Pukenui (which is reported to be commonly confused with Harbour View Road and at which the speed limit is also the 80 km/hr as stated in the traffic crash report). In any event, the reported serious crash was not related to the activities on the subject site.

The other crash on the site frontage involved a left turn into #4231 Far North Road, opposite the site, but no injuries resulted.

No crashes have been reported that involve vulnerable road users, or of any type at the existing access crossings, in at least that time period.

7. ASSESSMENT OF TRAFFIC EFFECTS AND PROPOSED MITIGATION MEASURES

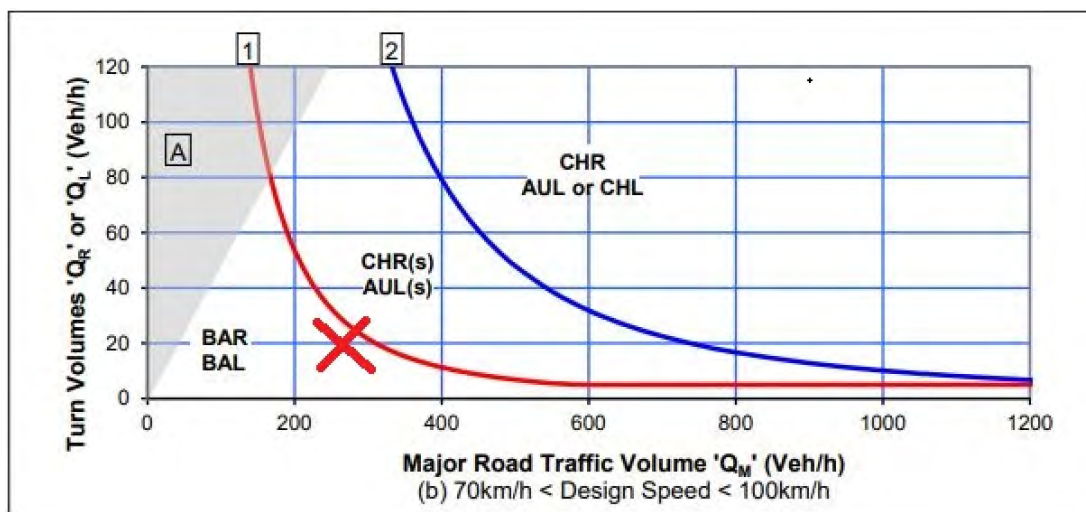
With the ample space on the site for all parking, loading and turning as shown, the key potential traffic effects of the proposal are considered to be the width of Far North Road at the access crossings and potential hazards to people on foot.

Sight distances and effects on the wider existing road network also warrant comment. It is not necessary to evaluate the capacity of the crossings because the traffic on this part of Far North Road will not reach levels at which exits can be challenging, for many decades at least and likely never. The existence of two crossings also splits the traffic and increases the overall capacity again.

7.1 Width of Far North Road

AUSTROADS' *Guide to Traffic Engineering* series of guidelines has warrants charts for local widening at crossings, which are generally known as "turn treatments". Figure 3 shows where the busier crossing for the busier entries falls on the relevant chart during holiday periods.

Figure 3. AUSTROADS' "turn treatment" warrants for the busiest entries during holidays.



This shows that neither “CHR” (a right turn bay) nor “AUL” (left turn lane) treatments are warranted at this location.

However the chart does specify “BAR” and “BAL” treatment of which NZTA’s Diagram D and E widening are examples. In fact, the chart specifies this for all combinations of traffic below the borderline for CHR and AUL treatment. Appendix B is a first-principles assessment of whether such treatments are, in fact, warranted here and concludes that the benefits would be less than one twentieth of the level that might warrant the equivalent of BAR and/or BAL widening³.

This assessment is also conservative because the southern crossing, where most right-turn entries occur, is only 70 metres beyond the transition from 50 km/hr, so it is unlikely that the operating speed at that location will be at levels typical for rural areas more remote from urban settlements. This part of SH1N is also nowhere near as busy as the average of the priority routes in which the relevant historic crashes occurred.

Overall, it is concluded that the risks associated with existing access crossings, including the width of Far North Road through them, are well within acceptable limits and, as such, the overall effects, including with the additional traffic, will be less than minor.

7.2 Pedestrian and cyclist safety

A small number of people were observed walking and cycling on Far North Road over the two days of monitoring – between 5 and 8 of each per day, most of whom were travelling to/from the site.

The proposal will slightly increase the risks to vulnerable road users because of the expected (~15%) increase in vehicle traffic. However, that risk is extremely low – not a single incident involving vulnerable road users has been reported in this vicinity since at least the start of 2016. A 15% increase in a virtually undetectable risk is concluded to be an effect that is less than minor.

7.3 Other matters

The sight distances associated with the crossings are all well above the safe-stopping standard (SSSD)⁴ and most are above the safe-intersection standard (the highest standard applicable to safety).

A Far North district-wide search of crashes involving vehicles exiting from an intersection or side road, on sealed rural roads in locations in which visibility is restricted, and being hit from the right⁵, did not find a single such crash in the most recent 5 calendar years. This is despite numerous locations in the district in which there are visibility restrictions to the right of exiting crossings and intersections.

Reinforcing this conclusion is a complete absence of crashes at the crossings for at least the last 10 years despite them having been in use for at least that period.

Overall, it is concluded that the risks associated with the sight distances from the crossing point are well within acceptable limits and, as such, the effects will be less than minor.

³ Which on State highways in this country is either Diagram D or E widening.

⁴ The most restricted sightline vector is ahead of the northern crossing, which is necessary for vehicles turning right into the crossing, from which the sight distance is SSSD plus 1.4 seconds of travel at the full operating speed. The proposal is not likely to increase the frequency of such turns. The available sight distance north of the northern crossing itself is SSSD plus another 2.0 seconds.

⁵ Type “JA” crashes in CAS.

The accessible parking space for the laundromat (#4) is located at the entrance door to the facility.

The road network beyond that site has ample surplus capacity for the traffic generated by existing activities additional traffic expected from the proposal.

8. FAR NORTH DISTRICT PLAN – ASSESSMENT CRITERIA

There are three sets of criteria in the plan relevant to traffic management and access. No assessment is given against the parking criteria in Section 15.1.6B.5, because all parking demand can be easily accommodated on the lots in accordance with section 15.1.6B and the Far North district plan no longer has minimum parking requirements. Each of the other criteria is quoted here and the assessment is given with each one.

8.1 Rule 15.1.6A.4.1: Traffic Intensity Matters for Consideration

This is an assessment of the proposal against matters that the Council will restrict the exercise of its discretion to with respect to restricted-discretionary activities.

Criterion (a): The time of day when the extra vehicle movements will occur.

The activities are expected to generate traffic at all times during opening hours, but with peaks around mid-afternoon on weekdays and around noon during holiday periods, with smaller peak around noon on weekends and between 7 and 8 am weekdays.

Criterion (b): The distance between the location where the vehicle movements take place and any adjacent properties.

The nearest existing dwellings are on the opposite side of Far North Road. That on the same side is more than 100 metres from the access.

Criterion (c): The width and capability of any street to be able to cope safely with the extra vehicle movements.

Far North Road will be suitable at its current width even with the additional traffic.

Criterion (d): The location of any footpaths and the volume of pedestrian traffic on them.

There is a footpath on Far North Road along the site frontage and which connects to all of Pukenui. For the reasons given in section 7.2, the effects of the proposal on pedestrians will be less than minor.

Criterion (e): The sight distances associated with the vehicle access onto the street.

Assessment of Criterion (e): This is addressed in section 7.3 and finds that all sight distances are at least adequate.

Criterion (f): The existing volume of traffic on the streets affected.

See section 6.2.

Criterion (g): Any existing congestion or safety problems on the streets affected.

There is no congestion in this locality and no evidence of unusual safety issues on Far North Road. See section 6.4

Criterion (h): With respect to effects in local neighbourhoods, the ability to mitigate any adverse effects through the design of the access, or the screening of vehicle movements, or limiting the times when vehicle movements occur.

Most vehicle movements are already screened from the closest properties by vegetation.

Criterion (i): With respect to the effects on through traffic on roads with more than 1000 vehicle movements per day, the extent to which Council's "Engineering Standards and Guidelines" (2004) are met.

There are no council transport assets in this locality that the *Engineering Standards* refer to.

Criterion (j): Effects of the activity where it is located within 500m of reserve land administered by the Department of Conservation upon the ability of the Department to manage and administer that land.

The site is not located within 500 metres of land administered by the Department of Conservation.

Criterion (k): The provision of safe access for pedestrians moving within or exiting the site

Some people walk to/from and through the site. For the reasons given in section 7.2, the risk to those people is well within acceptable limits and the effects are less than minor.

8.2 Section 15.1.6A.7: General Assessment Criteria, Traffic

This section includes eleven criteria. Criteria (a), (j), (k) and (l) are unique to this section of the plan. Criteria (b) to (i) are identical to criteria (a) to (h) of the assessment criteria in 15.1.6A.4.1, respectively, and have already been assessed in the previous section. This section is restricted to the criteria unique to 15.1.6A.7.

Criterion (a): The extent to which the expected traffic intensity exceeds the threshold set by the Traffic Intensity Factor contained in Appendix 3A in Part 4 of the district plan.

The permitted Traffic Intensity Factor (TIF) threshold for this site is 60 and while both the existing (consented) and proposed activities will significantly exceed that TIF, in reality as shown, the proposed traffic management and existing and proposed roadways will be able to cope with it at least adequately.

Criterion (j): With respect to the effects on through traffic on arterial roads, strategic roads and State Highways, any measures such as right-turn bays, flush medians, left-turn deceleration tapers, etc. proposed to be installed on the road as part of the development to accommodate traffic turning into and out of the site.

Far North Road has more than adequate capacity for traffic from both the existing and proposed activities on the site.

Criterion (k): The extent to which the activity may cause or exacerbate natural hazards or may be adversely affected by natural hazards, and therefore increase the risk to life, property and the environment.

The site access upgrading will require minimal earthworks and/or retaining and will not cause or exacerbate natural hazards. This is addressed in more detail in the reports of others.

Criterion (l): Whether providing or having access to bicycle parking, shower/changing facilities or alternative transportation would reduce the number of vehicle movements associated with the proposed activity.

Such facilities might encourage a small number of staff to travel by bicycle but even this is not certain and there is little, probably nothing, to be gained by the provision of special facilities.

15.1.6C.4.1 Property Access

Criteria (a) and (b) of this repeat those in other sections and have already been addressed. Specific comment is given for all others.

Criterion (c): Any foreseeable future changes in traffic patterns in the area.

No significant projects or road links are planned that might significantly change the patterns of traffic in this vicinity.

Criterion (d): Possible measures or restrictions on vehicle movements in and out of the access.

For the reasons given, the traffic will be well managed and there is no need for restrictions on vehicle movements.

Criterion (e): The adequacy of the engineering standards proposed and the ease of access to and from, and within, the site.

This is addressed in detailed section 7 and finds that the site access is, and will remain, adequate and fit-for-purpose.

Criterion (f): The provision of access for all persons and vehicles likely to need access to the site, including pedestrian, cycle, disabled, vehicular.

The access connections to Far North Road ensure adequate access for all transport modes. Pedestrians access by way of the footpath along the frontage and cyclists will be able to enter the site safely by way of the access and vehicle crossing connection.

Criterion (g): The provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties.

The new parking and associated access and manoeuvring will require minimal earthworks and/or retaining and will not cause or exacerbate natural hazards. This is addressed in more detail in the reports of others.

Criterion (h) relates to sites with a road frontage on Kerikeri Road so is not relevant.

Criterion (i) The provisions of the roading hierarchy, and any development plans of the roading network.

No significant projects or road links are planned that might significantly change the patterns of traffic in this vicinity.

Criterion (j) relates to alternative access for car parking and vehicle loading in business zones and is not relevant.

Criterion (k) Any need to require provision to be made in a subdivision for the vesting of reserves for the purpose of facilitating connections to future roading extensions to serve surrounding land; future connection of pedestrian accessways from street to street; future provision of service lanes; or planned road links that may need to pass through the subdivision; and the practicality of creating such easements at the time of subdivision application in order to facilitate later development, so is not relevant.

Also Criterion (l) Enter into agreements that will enable the Council to require the future owners to form and vest roads when other land becomes available (consent notices shall be registered on such Certificates of Title pursuant to Rule 13.6.7).

There is nothing to be gained by facilitating access to areas outside the site using the mechanisms described. No internal access has potential outlets to other locations and is private in any event.

Criterion (m) With respect to access to a State Highway that is a Limited Access Road, the effects on the safety and/or efficiency on any State Highway and its connection to the local road network and the provision of written approval from the New Zealand Transport Agency.

The site leads directly to a State highway that is limited access road. This report will form the basis for consultation with the NZ Transport Agency.

Appendix A

2.5 Explicit Compliance Statement – F8.2(c)
Compliance with NZBC F8.2(c) – Bulk LPG Tank
Hazchem / Flammable Signage
Signs are provided in accordance with F8/AS1 section 7.1 (hazardous substances), HSNO Code of Practice 2-1 09-04 and HSW (Hazardous Substances) Regulations 2017 for bulk LPG installations. A Hazchem 2YE LPG sign (UN 1075) and associated flammable gas / no-ignition signs are mounted on the LPG tank compound fence at 1.5–2.0 m mounting height, oriented toward normal approach paths, and sized to ensure legibility from at least 10 m. Additional Hazchem signage is provided at the main site entrance. The signage is clearly visible, readily understandable, and encountered before people reach the LPG tank or associated hazardous area, thereby satisfying NZBC F8.3.1 and F8.3.2 and demonstrating compliance with F8.2(c) for identification of potential hazards.

Single Chamber
Septic Tank.
Install FAI & Bio Filter

2000 LITRE LPG STORAGE TANK
(1000 KG)
with vaporiser rated $\geq 30\text{kg/hr.}$
Design/Installation to AS/NZS
5601. To be sited 3000 min from
any building.
2000 Anti Climb Security fence to
contain vessel

Grease Trap.
6000 litre HALGAN
MGTR series.
Install FAI & Bio Filter

Pump.

100ø pvc overflow to
3000 x 100ø spreader.
Drill 20ø holes @ 200
crs

2/50000 litre water storage tanks.
These will be charged by bore

2000 high timber screen fence

6000 x 3000 Loading
Zone
for a light delivery van

CLIENT: **FIONA & SHAUN KEHELY**

PROJECT: SH10 PUKENUI

DWG ENLARGED SITE/PARKING PLAN

PROJECT #	FSK-0725
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25	DWG #
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A02

Beard Online Architecture 106 Arawhata Road Kaingaroa 0483 E: beardarc48@gmail.com
D M Beard Structural LTD Doug: 022 454 9863 Tyler: 021 247 7232 Kirsty: 022 167 9900

APPENDIX B: ANALYSIS OF WARRANTS FOR “TURN TREATMENTS” AND THEIR BASIS

The term “turn treatments” includes facilities such as right-turn bays, left-turn lanes and/or Diagram “D” or “E” widening. All are intended to provide space for vehicles that are not turning to safely overtake other vehicles that are turning into a side road or private access. As shown in Figure 2 of this report, according to AUSTROADS neither a right-turn bay nor a left-turn lane are warranted, but the warrants are not clear about lesser treatments that are also not currently in place at this site. This is a first-principles assessment of those.

Research that underpins AUSTROADS’ warrants is summarised in a paper entitled *New warrants for unsignalised intersection turn treatments* in the Proceedings of the Australian Road Research Board's 22nd annual conference (held in Canberra in 2006). That paper, which was prepared by the two researchers who developed the warrants - Dr Owen Arndt and Professor Rod Troutbeck, includes warrant charts identical to those in AUSTROADS’ *Guide to Traffic Management Part 6* and includes the following statement:

It is proposed that the new warrants be produced by identifying the location[s] at which the benefits of providing a higher-level treatment ([being] the reduction in estimated accident costs) are made [at least] equal to a proportion of the additional construction costs.’ [our additions to add clarification.]

The paper does not say what proportion of the costs it is appropriate to apply in respect of these warrants. In general, such upgrades are not even considered when the benefit-to-cost ratio (BCR) of doing so is below 1.0. In fact, a BCR much higher than 1.0 is generally required before such work is triggered. For the purposes of this investigation, a BCR of 1.0 has been taken as the trigger point for any upgrades. A lower trigger point is arguably appropriate for reviews to ensure there is time for review recommendations to be implemented.

This evaluation is for right turn treatment for the southern crossing and left turn treatment for the northern crossing. Those experience, and will continue to experience, the higher frequency of each of those types of entries.

Methods used

The BCR of the construction of local widening on Far North Road through the southern crossing location, has been estimated by comparing the expected frequency of right turns into that crossing with those turns over a much larger sample area than this single intersection - large enough to provide adequate statistical confidence⁶. From this, the “social cost” of relevant historic crashes has been calculated over the larger sample. Then, the benefits of upgrading the subject intersection have been estimated as a pro rata based on the frequency of turns through it. This has then been compared with the estimated cost of upgrading.

Relevant crash history

In the most recent 5 calendar years, eighteen historic injury-causing Types “GA” and “GD” crashes (rear-end crashes involving a vehicle turning left or right into a side road or private crossing) are reported on sealed rural roads in the Far North district. Of those, four resulted in serious injuries and fourteen resulted in minor injuries.

⁶ The entire Far North district including all State highways and non State highways.

A large proportion of the those crash locations have no specific widening. A large proportion of the crashes occurred on roads much busier than Far North in this location. More details of the crashes are given in Table 1.

Table 1. Details of Type GA and GD crashes on sealed rural roads in the Far North district in the most recent 5 calendar years

NOTES FROM DETAILED REPORTS	MVMT	CRASH SEVERITY	CRASH ROAD	CRASH DIST. (m)	SIDE ROAD DIRN	SIDE ROAD OR FEATURE	AADT, priority route	LATITUDE	LONGITUDE	CRASH ID	CRASH DATE
Long straight road, excellent visibility.	GD	S	SH 1N		I	SMITH ROAD	6750	-35.370068	173.97423	2021196006	24/07/2021
Long straight road, excellent visibility	GD	M	SH 1N	333	N	WIRELESS ROAD	7465	-35.085903	173.257099	2021203081	15/10/2021
Driveway. Driver distracted by tailgating vehicle	GD	M	AHIPARA ROAD	873	W	KAITAIA-AWAROA ROAD	2400	-35.173531	173.170976	2022221133	5/05/2022
Driveway Driver distracted "looking at the oranges".	GD	M	SH 10	452	N	COTTLE HILL DRIVE	9800	-35.261243	173.937335	2022224936	5/06/2022
10.7m wide, following driver distracted cleaning the windscreen.	GD	M	SH 1	877	N	WIRELESS ROAD	7860	-35.080818	173.257324	2023248259	16/02/2023
10.7m wide, following driver distracted cleaning the windscreen.	GD	M	SH 1	342	N	WIRELESS ROAD	7860	-35.085819	173.257095	2023257276	24/05/2023
7.5m wide	GD	M	SH 10	701	E	TAKOU BAY ROAD	4754	-35.14235	173.882278	2023259198	10/06/2023
9.6m wide. Following driver states the turning driver "pulled back onto the road after I tried to go around them".	GD	M	SH 12		I	WAITAHEKE ROAD	3600	-35.368267	173.866848	2023254894	16/02/2023
7.0m wide, inattention, motorbike.	GD	S	HOREKE ROAD	808	N	SH 12	260	-35.451725	173.650752	2025331139	3/05/2025
Inattention	GA	M	ORURU ROAD	271	N	DANGEN ROAD	950	-35.07735	173.508758	2022236456	16/09/2022
>/= Diagram E, inattention.	GD	M	SH 1		I	HUPARA ROAD	7520	-35.366161	173.969482	2024286101	30/04/2024
Previous crash site	GD	M	SH 1		I	WEHIRUA ROAD	1900	-35.319202	173.799638	2025352408	22/10/2025
Miscoded. Actually two-turning.	GD	M	SH 10	456	N	PUKEWHA ROAD		-35.269578	173.941739	2024279473	4/02/2024
10m wide. Driver distracted or fell asleep.	GD	S	SH 10		I	TAUPO BAY ROAD	3400	-35.001225	173.618312	2024281206	18/02/2024
9.1m wide, possible visibility restriction.	GD	M	SH 12	576	S	WAIWHARIKI ROAD	4550	-35.386326	173.847731	2024296871	14/09/2024
9.2m wide, "failed to notice slow/stopped vehicle ahead".	GD	M	WAIPAPA ROAD		I	PATHWAYS DRIVE	8950	-35.207681	173.936486	2025333674	17/05/2025
Inattention	GA	M	ORURU ROAD	271	N	DANGEN ROAD	950	-35.07735	173.508758	2022236456	16/09/2022
Motorbike following, rider not paying attention.	GA	S	TE AHU AHU ROAD	833	W	OLD BAY ROAD	1910	-35.313038	173.931193	2022243218	16/12/2022

This analysis is carried out as if right-turn treatment at the subject crossing would address all of these crashes. This is highly conservative because inattention was a factor in most of the crashes and "BAR" treatment does not generally address crashes resulting from inattention.

Analysis and results

It is not known how many right turns are made into rural side roads and private access across the Far North district each day, but it is possible to develop indicative estimates. There were close to than 20,000 rural households in the district in 2023⁷ – near the midpoint of the crash history under consideration. If an average of 6 vehicle trips are made to and from each household each day and each trip involved an average of two turns into a rural side road or access (in either direction), then a daily average of 240,000 such turns would be made each day.

The "social cost" of reported⁸ rural rear-end crashes that cause serious injury is in the order of \$830,000 and that for such crashes that cause minor injuries is in the order of \$90,000⁹. The average annual cost of the eighteen such crashes, in the historic record considered, is therefore \$915,000 for which the present value is \$21 million¹⁰.

⁷ 2023 Census, data obtained from the Stat.NZ web-based tool.

⁸ Those in the *Crash Analysis System* database.

⁹ Waka Kotahi *Monetised Benefits and Costs Manual*. Tables A33 and A34.

¹⁰ *ibid* Table A125 for 4% annual discount rate and 60 year planning horizon.

It is estimated that, with the laundromat and associated development, a daily average close to 100 turns will be made into each crossing in the relevant directions.

Even in the unlikely event that the risks associated with the crossing are close to the average for the region and that Diagram D treatment would eliminate 50% of all Type GA and GD crashes at the crossing, the present-value benefit of such widening is only:

$0.5 \times \$21 \text{ million} \times 200 \text{ entries per day} \div 240,000 \text{ such turns district-wide} = \text{\$8,800}.$

The cost of the widening and other work to necessary to create the equivalent of BAR and BAL widening at this location is likely to be close to average. Such widening typically costs at least \$200,000 and potentially significantly more. On this basis, the BCR of such work will, therefore be no more than 0.04, or less than one twentieth of the level that might warrant the equivalent of BAR and BAL widening.

It is acknowledged that there are a number of uncertainties in this analysis. In particular, the district-wide frequency of turns from rural roads. However, the analysis is still highly conservative for the reasons given.

There are also numerous intersections in the Far North district in which no serious crashes are recorded despite no turn treatment being in place, the intersections being subject to even more traffic than the subject intersection including right turns into the side roads and/or having other challenges such as two lanes of traffic opposing right turns and/or restricted sight distance. Examples are:

- SH1N/Whangae Road; Kawakawa
 - SH1N/Mangamuka Road, Mangamuka;
 - SH1N/Callaghans Road Maromaku
 - SH1N/Ruapekapeka Road, Towai;
 - SH1N/ Te Ahu Ahu Road, Waimate North;
 - SH10/Oromahoe Road, Oromahoe;
 - SH10/Cottle Hill Drive, Kerikeri;
 - Sh12/Wharekawa Rd, Oue, south Hokianga
 - Kohukohu Road/Broadwood Road/Mangamuka, Mangamuka;
 - Wiroa Road/Waimate North Road, Kerikeri;
 - Te Ahu Ahu Road/Waimate North Road, Kerikeri;
 - Waiare Road/Wiroa Road, Okaihau;
 - Te Pua Road/SH15 and Lake Road, Okaihau;
 - Several side roads off Landing Road, Kerikeri including Waipapa Landing Place and the entrance to Waipapa Landing;
 - Several side roads off Kapiro Road including Purerua Road and McCaughan Road,
- Plus numerous private accesses.

Appendix E – NZTA Correspondence

On Tue, Jun 23, 2026 at 10:35 AM Nicole Wallace <Nicole.Wallace@nzta.govt.nz> wrote:

Good morning Dean, I hope you're well.

I forwarded your email below to our regional Asset and Safety personnel for their comments and NZTA is still of the position that both vehicle crossings will need to be upgraded to Access Type E standard, and a construction design plan for these upgrades will need to be submitted to NZTA for review / approval. This upgrade is due to the substandard sight distances from the vehicle crossings, neither of which meet the desirable SISD for 80 km/h of 226m. There is also no control over which accessway a driver will use if both accessways are to be retained.

I hope this helps. If not, please feel free to get in touch with me.

Ngā mihi | Kind regards

Nicole Wallace BEP

Intermediate Planner - Poutiaki Taiao (Environmental Planning)

Environmental Planning | System Design | Transport Services | Te Toki Tārai

Email: nicole.wallace@nzta.govt.nz

Phone: 07 987 1101

NZ Transport Agency Waka Kotahi

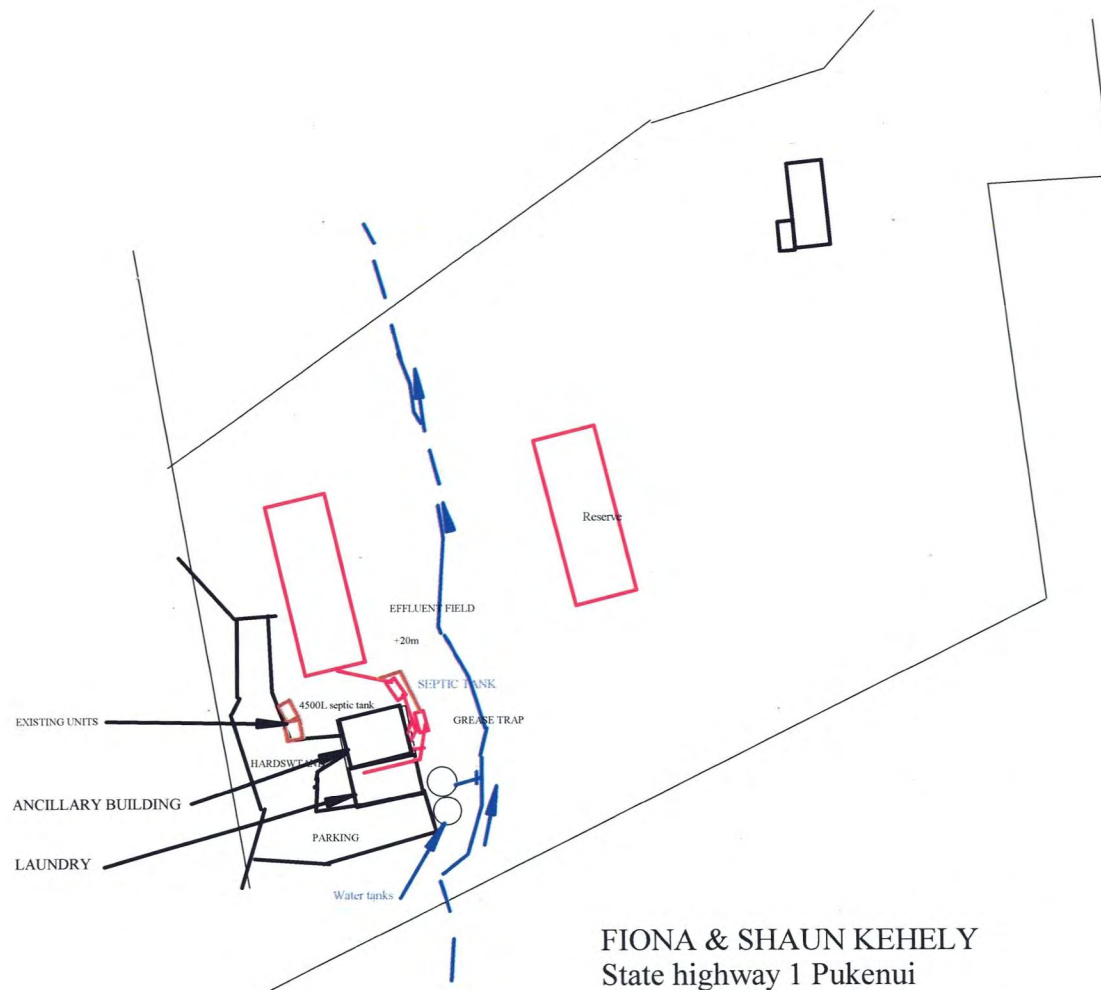
Hamilton Office, Level 1, Deloitte Building, 24 Anzac Parade

PO Box 973, Waikato Mail Centre, Hamilton 3240, New Zealand



www.nzta.govt.nz

Appendix F – TP58 Report



FIONA & SHAUN KEHELY
State highway 1 Pukenui
Septic & Waste water Schematic

Notes: All works to comply with ASNZS 3500
All materials to comply with ASNZS 1260
All septic and waste tanks to be a minimum of 3m off buildings
All septic works to be 1.5m off any boundary
Effluent field to be no closer than 15m from marked flood plain drainage
Falls to grease trap and septic tank to be no less than 1:60
Effluent field to be laid level
Septic tank to be 4500L fitted with FAI & Bio filter
Grease trap/laundry waste treatment tank to be fitted with fai & bio filter

Effluential DrainLayers Ltd

3778 Main North Road

R.D.4

Kaitia 0484

Phone 09 409 8854 Fax 09 409 7720 Mobile 0274 8855 84

Report Date: 15/10/2025

Owner Shaun & Fiona Keherly (KFCS Farms Ltd)

Storm Water Attenuation

Purpose

To control/assist the management of the effects of stormwater runoff from building developments and mitigate the impact this has on infrastructural assets.

Considerations

It needs to be accepted that the impact is greater in densely populated areas and less in urban/rural, this property is a farming enterprise.

The definition of soakage is the process where a permeable substance receives a liquid, in this case where storm water is disposed of into ground, or effective runoff slowed so as to minimize effects on the environment or infrastructure.

The infiltration factor k_{sat} assessment, assists in mitigating runoff impact.

Characteristics that determine permeability are soil structure, soil particle size, and geomorphology.

The flow rate of the soakage discharge is also dependent upon the soakage area and the hydraulic pressure forcing water into the absorbent media.

Site Description

The development is proposed to take place well back from Mangatoetoe road. This area of proposed development is in a soil type classed as TMH & WF The disposal area is more WF Whakapara Silt loam and Clay loam (moderately to well drained) soil class 4. This is a 1.9ha area of a large property.

Design Criteria

Soakage devices must be 3m from dwellings.

The Far North District Council aligns storm water attenuation requirements with other authorities.

The Whangarei District Council requires site attenuation when the percentage of impermeable surfaces exceeds 2%.

The Auckland Regional Council prepared TP10 as a reference on a similar basis and ASNZS 1547 is also structured in the same manner.

The spread sheet used in calculating Attenuation requirements has been developed in conjunction with the FNDC stormwater Engineer.

Effluential DrainLayers Ltd
3778 Main North Road
R.D.4
Kaitaia 0484

Phone 09 409 8854 Fax 09 409 7720 Mobile 0274 8855 84

The Far North District Council information was designed specifically to enable storm water design to be expedited quickly. The ARC prepared TP10 on the same basis. ASNZS1547 is also structured in the same manner.

Therefore, attenuation is only required when the ratio of impermeable surfaces to total property area exceeds 2%. However attenuation cannot be required by the FNDC retrospectively and so should not be a requirement with this development.

Design Calculations

All calculations submitted are via Stormwater calculation spread sheet. It is a given that new calculations may be required should future development take place.

Design Proposal

Any development has some adverse effects however in relation to the major area the new effects are small, with stormwater having no new immediate effect on any regional infrastructure. Stormwater overflow from tanks is designed to be slowed by a spreader to the existing drainage system, the metal hard stand is lower than the road and will discharge to the same over land area.

Devices which discharge water via infiltration through soil provide a storm water quality benefit to the receiving environment and the in-situ soil acts as a filter media for removing contaminants. This is a known beneficial factor and provides for infiltration devices to be used as storm water quality treatment.

On site observation indicates that there is not, and is unlikely to be, any erosion from this source.

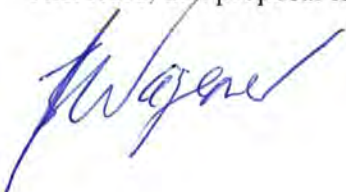
It is most unlikely given the percentage of change to impervious surfaces that there will be any new environmental effect which cannot be contained within the boundaries with this proposed development.

This combination of circumstance lessens the impact on the downstream environment while providing for the maximum soil absorption as proposed by TP10, again lessening the potential impact on infrastructure. Stormwater discharge is designed to be via a spreader to the natural vegetation and overland flow path. TP10 can not be applied retrospectively therefore this assessment is on the newly created areas.

Regional Plan:

The Northland Regional Council proposed rule C6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network, provided that (amongst other conditions) the discharge or diversion does not cause or increase nuisance or damage to other property. In this case there will be no affected neighboring properties.

Therefore, this proposal is in accordance with NRC Rule C6.4.2.



10yr

S & F Kehny 25

Pre – Development water flow

Rational method

48hr

Pre – Development water flow		Roof & decks 1 (m ²)	Concrete & smooth seal 2 (m ²)	Metaled area Or rough seal 3 (m ²)	Other Impervious 4 (m ²)	Vegetation 5 (m ²)	Bush 6 (m ²)
(Original water flow)	Total area.	986.60	0	0	0	986.6	0

Pre-development Slope %	10
CI correction	0.00

Runoff coefficient
Use "C" values from FNDc TR55 chart
Generally do not use slope adjustment Ci factor if using TR55

CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)
FALSE	FALSE	FALSE	FALSE	0.59	FALSE
0.96	0.96	0.3	0.65	0.59	0.59

Rainfall intensity
Rainfall Data from NIWA, Hirds 4, RCP6, 2081-2100
Use an appropriate event for the situation

1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)
1.58	2.99	2.99	2.99	2.99	2.99
0.000	0.000	0.000	0.000	0.000	0.000

Flow rate of surface water

Pre – development flow of developed area

Qp (m ³ /sec)	Qp (L/sec)
0.0005	0.48

Post-development Slope %	10
CI correction	0.00

Post – Development water flow

Any area where there is a change in the impermeability values

Roof & decks 1 (m ²)	Concrete & smooth seal 2 (m ²)	Metaled area Or rough seal 3 (m ²)	Vegetation 4 (m ²)	Concrete & smooth seal 5 (m ²)	Metaled area or vegetation 6 (m ²)	Metaled area or seal 7 (m ²)	Vegetation 8 (m ²)
299.6	0	687	0	0	0	0	0
CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)	CI (coefficient)
0.96	FALSE	0.90	FALSE	0.2	0.3	FALSE	FALSE
0.96	0.96	0.9	0.59	"C" value difference between Pre & Post Maximum value 0.2 (at the moment)			
1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)	1 (mm/hr)
3.33	3.33	3.33	3.33	2.99	2.99	2.99	2.99
0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)
0.27	0.00	0.57	0.00	0.00	0.00	0.00	0.00

Use "C" values from FNDc TR55 chart
Generally do not use slope adjustment Ci factor if using TR55

Rainfall intensity rate
Rainfall Data from NIWA, Hirds 4, RCP6, 2081-2100
Use an appropriate event for the situation

Flow rate of surface water	Flow rate of surface water	Flow rate of surface water	Flow rate of surface water	Flow rate of surface water	Flow rate of surface water	Flow rate of surface water	Flow rate of surface water
0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)	Qc (L/sec)
0.27	0.00	0.57	0.00	0.00	0.00	0.00	0.00

Total included in attenuation system calc's
post – development flow

Qa (m ³ /sec)	Qa (L/sec)
0.000	0.35

Post – Pre development flow

Qdpp (m ³ /sec)	Qdpp (L/sec)
0.0004	0.35

Total post development flow
Developed flow + undeveloped flow

Qatt (m ³ /sec)	Qatt (L/sec)
0.0008	0.84

0 to 10min

1b

Rational method

48hr

[illegible][illegible]

PRODUCER STATEMENT

DESIGN: ON-SITE EFFLUENT DISPOSAL SYSTEMS (T.P.58)

ISSUED BY:.....*Eric Wagener*..... (approved qualified design professional)

TO:.....*Shaun Keherly*..... (owner)

TO BE SUPPLIED TO:*Far North District Council*.....

PROPERTY LOCATION:....*Henderson Bay Road*.....

LEGAL DESCRIPTION

TO PROVIDE : Design an on-site effluent disposal system in accordance with Technical paper 58 and provide a schedule to the owner for the systems maintenance.

THE DESIGN: Has been in accordance with G13 (Foul Water) G14 (Industrial Liquid Waste) B2 (durability 15 years) of the Building Regulations 1992.

As an independent approved design professional covered by a current policy of Professional Indemnity

Insurance (Design) to a minimum value of \$200,000.00, I BELIEVE ON REASONABLE GROUNDS that subject to:

- (1) The site verification of the soil types.
- (2) All proprietary products met the performance requirements.

The proposed design will met the relevant provisions of the Building Code and 5.3.11 of The Far North District Council Engineering Standards.

.....*[Signature]*..... (Signature of approved design professional)

.....*Certifying Registered Drainlayer*..... (Professional qualifications)

.....*05877*..... (Licence Number or professional Registration number)

Address*3778 Far North Rd, RD4 Kaitaia*.....

Phone Number.....*09 4098 854*.....

Fax Number

Cell Phone*0274 885 584*.....

Date*23/03/2025*.....

Note: This form is to accompany every application for a Building Consent incorporating a T.P.58. Approval as a design professional is at Councils discretion.

On-site Wastewater Disposal Site Evaluation Investigation Checklist

FAR NORTH DISTRICT COUNCIL

Appendix E

TP58

On-site Wastewater Disposal Site Evaluation Investigation Checklist

Part A –Owners Details

1. Applicant Details:

Applicant Name	Shaun & Fiona Kehely		
Company Name	KFCS Farms Limited		
Property Owner Name(s)	First Name(s)	Surname	
	Shaun Fiona	Kehely	
Nature of Applicant*	Owner		

(*i.e. Owner, Leasee, Prospective Purchaser, Developer)

2. Consultant / Site Evaluator Details:

Consultant/Agent Name	Eric Wagener & Robert Wagener			
Site Evaluator Name				
Postal Address	3778 Far North Rd			
	RD4			
	Kaitaia			
Phone Number	Business	094098854	Private	
	Mobile	0274885584	Fax	
Name of Contact Person	Eric Wagener			
E-mail Address	ewagener@xtra.co.nz			

3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?

Yes		No	☒	(Please tick)
-----	--	----	-------------------------------------	---------------

If yes give Reference Numbers and Description	

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted

If so, specify Application Details and Consent No.

(eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)

See CT

Part B- Property Details

1. Property for which this application relates:

Physical Address of Property	4238 Far North Road Pukenui		
Territorial Local Authority	FAR NORTH DISTRICT COUNCIL		
Regional Council	NORTHLAND REGIONAL COUNCIL		
Legal Status of Activity	Permitted:	Controlled:	Discretionary:
Relevant Regional Rule(s) (Note 1)			
Total Property Area (m ²)	40194m2		
Map Grid Reference of Property If Known			

2. Legal description of land (as shown on Certificate of Title)

Lot No.		DP No.		CT No.	
5		107403		Blk X1 Houhora East	
Other (specify)					

Please ensure copy of Certificate of Title is attached

PART C: Site Assessment - Surface Evaluation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation and Sn 5.2.2(a) Site Surface Evaluation)

Note: Underlined terms defined in Table 1, attached

Has a relevant property history study been conducted?

Yes		No	☒	(Please tick one)
-----	--	----	-------------------------------------	-------------------

If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

There are no HAIL issues as it is remote from hazardous activity. The property has been urban lifestyle for many years. There are no known recorded hazards apart from potential flood as per maps

1. Has a Slope Stability Assessment been carried out on the property?

Yes ☐ No ☒ Please tick

If No, why not?

There are no signs of stability problems.

If Yes, please give details of report (and if possible, please attach report):

Author	
Company/Agency	
Date of Report	
Brief Description of Report Findings:-	

2. Site Characteristics (See Table 1 attached):

Provide descriptive details below:
Performance of Adjacent Systems:
<i>Systems are working well</i>
Estimated Rainfall and Seasonal Variation:
Information available from N.I.W.A MET RESEARCH
<i>1100-1300mm/yr</i>
Vegetation / Tree Cover:
<i>Grass</i>
Slope Shape: (Please provide diagrams)
<i>Basically flat. at proposed development</i>
Slope Angle:
<i>Minor parabolic dune structure It will not create any difficulties for installation of disposal system. Slope 1>2 degrees</i>
Surface Water Drainage Characteristics:
<i>Surface water will be alleviated by the natural contour of the land.</i>
Flooding Potential: YES/NO
<i>Unlikely to flood at proposed building, or disposal field location. Refer to enclosed flood map</i>
If yes, specify relevant flood levels on appended site plan, i.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area.
Surface Water Separation:
<i>+20m</i>
Site Characteristics: or any other limitation influencing factors

3. Site Geology Check Rock Maps

Houhora sand over sandstone, followed by silica sands is listed in the soil maps. This was confirmed by onsite test

Geological Map Reference Number *NZMS 290*

4. What Aspect(s) does the proposed disposal system face? (please tick)

North	☒	West	☐
North-West	☐	South-West	☐
North-East	☐	South-East	☐
East	☐	South	☐

5. Site clearances,(Indicate on site plan where relevant)

Separation Distance from	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)
Boundaries	<i>+20m</i>	Check Council requirements <i>+1.5m</i>
Surface water, rivers creeks, drains etc	<i>+20m</i>	<i>+20m</i>
Groundwater	<i>+ 1.8m</i>	<i>+ .800m</i>
Stands of Trees/Shrubs	<i>+5m</i>	<i>+5m</i>
Wells, water bores	<i>N/A</i>	<i>N/A</i>
Embankments/retaining walls	<i>N/A</i>	<i>N/A</i>
Buildings	<i>+3m</i>	<i>+3m</i>
Other (specify):	<i>N/A</i>	<i>N/A</i>

PART D: Site Assessment - Subsoil Investigation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation, and Sn 5.2.2(a) Site Surface Evaluation and Sn 5.3 Subsurface Investigations)

Note: Underlined terms defined in Table 2, attached

1. Please identify the soil profile determination method:

Test Pit	Depth_____m	No of Test Pits	
Bore Hole	Depth___ <i>0.75</i> ___m	No of Bore Holes	<i>2</i>
Other (specify):			

Soil Report attached?

Yes ☒ No ☐ Please tick

2. Was fill material intercepted during the subsoil investigation?

Yes ☐ No ☒ Please tick

If yes, please specify the effect of the fill on wastewater disposal

3. Percolation testing (mandatory and site specific for trenches in soil type 4 to 7)

Please specify the method

Constant Head ksat

Test Report Attached?	Yes	☒	No	☐	Please tick
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4. Are surface water interception/diversion drains required?

Yes	☐	No	☒	Please tick
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If yes, please show on site plan

4a Are subsurface drains required

Yes	☐	No	☒
-----	--------------------------	----	-------------------------------------

If yes enter details

5. Please state the depth of the seasonal water table:

Winter	<i>Not found</i>	Measured	☐	Estimated	☒
Summer	<i>Not found</i>	Measured	☐	Estimated	☒

6. Are there any potential storm water short circuit paths?

Yes	☐	No	☒	Please tick
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If the answer is yes, please explain how these have been addressed

7. Based on results of subsoil investigation above, please indicate the disposal field soil category (Refer TP58 Table 5.1)

Is Topsoil Present?	<i>Yes</i>	If so, Topsoil Depth? (m)	<i>70> 150mm</i>
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Soil Category	Description	Drainage	Tick One
1	Gravel, coarse sand	Rapid draining	
2	Coarse to medium sand	Free draining	
3	Medium-fine & loamy sand	Good drainage	<i>X</i>
4	Sandy loam, loam & silt loam	Moderate drainage	
5	Sandy clay-loam, clay-loam & silty clay-loam	Moderate to slow drainage	
6	Sandy clay, non-swelling clay & silty clay	Slow draining	
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	

Reasons for placing in stated category

<i>Onsite soil tests put this soil into category 3</i>
<i>Category was corroborated by soil maps.</i>

PART E: Discharge Details

1. Water supply source for the property (please tick):

Rainwater (roof collection)	☒
Bore/well	☐
Public supply	☐

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available
(Refer TP58 Table 6.1 and 6.2)

Number of Bedrooms	<i>Commercial Laundry</i>	
Design Occupancy	<i>Plus twin toilets</i>	(Number of People)
Per capita Wastewater Production	<i>Est 36 person @ 20L=720L</i>	(Litres per person per day)
Other – specify		<i>Used supplier machine water use for calcs</i>
Total Daily Wastewater Production	<i>9620L</i>	(Litres per day)

3. Do any special conditions apply regarding water saving devices

a) Full Water Conservation Devices?	Yes		No	☒	(Please tick)
b) Water Recycling - what %?		%			(Please tick)

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage

4. Is Daily Wastewater Discharge Volume more than 2000 litres:

Yes	☒	(Please tick)
No		(Please tick)

Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required

Note This is greywater only

5. Gross Lot Area to Discharge Ratio:

Gross Lot Area	<i>40194</i>	m ²
Total Daily Wastewater Production	<i>9620</i>	(Litres per day)(from above)
Lot Area to Discharge Ratio	<i>2.39</i>	

7. Does this proposal comply with the Northland Regional Council Gross Lot Area to Discharge Ratio of greater than 3?

Yes	☒	No		(Please tick)
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8. Is a Northland Regional Council Discharge Consent Required?

Yes	☒	No		(Please tick)
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PART F: Primary Treatment (Refer TP58 Section 7.2)

1. Please indicate below the no. and capacity (litres) of all septic tanks including type (single/dual chamber grease traps) to be installed or currently existing: If not 4500 litre, dual chamber explain why not

Number of Tanks	Type of Tank	Capacity of Tank (Litres)
1	Standard concrete septic	4500L
1	PVC Grease Trap	6000
	Total Capacity	10500L

2. Type of Septic Tank Outlet Filter to be installed?

Biofilter in both

PART G: Secondary and Tertiary Treatment

(Refer TP58 Section 7.3, 7.4, 7.5 and 7.6)

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system: (please tick)

Secondary Treatment	
Home aeration plant	
Commercial aeration plant	
Intermediate sand filter	
Recirculating sand filter	
Recirculating textile filter	
Clarification tank grease trap	X
Tertiary Treatment	
Ultraviolet disinfection	
Chlorination	
Other	Specify

PART H: Land Disposal Method

(Refer TP58 Section 8)

1. Please indicate the proposed loading method: (please tick)

Gravity	✓
Dosing Siphon	
Pump	

2. High water level alarm to be installed in pump chambers

Yes		No	X
-----	--	----	---

If not to be installed, explain why

3. If a pump is being used, please provide the following information:

Total Design Head		(m)
Pump Chamber Volume		(Litres)
Emergency Storage Volume		(Litres)

4. Please identify the type(s) of land disposal method proposed for this site: (please tick)

(Refer TP58 Sections 9 and 10)

Surface Dripper Irrigation		
Sub-surface Dripper irrigation		
Standard Trench		
Deep Trench		
Mound		
Conventional bed		
Other	X	Specify <i>Wide trench as per plans</i>

5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:

Loading Rate	25	(Litres/m ² /day)
Disposal Area	Design	384 (m ²)
	Reserve	384 (m ²)

Explanation (Refer TP58 Sections 9 and 10)*This is in line with TP58 for cat 2>3 soils.***6. What is the available reserve wastewater disposal area** (Refer TP58 Table 5.3)

Reserve Disposal Area (m ²)	384
Percentage of Primary Disposal Area (%)	100%

7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:**Description and Dimensions of Disposal Field:***See Design Site Plan**Total basal area required is 384m²*Plan Attached? Yes ☒ No ☐**If not, explain why not**

PART I: Maintenance & Management

(Refer TP58 Section 12.2)

1. Has a maintenance agreement been made with the treatment and disposal system suppliers?

Yes		No	☒
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 (Please tick)

Name of Suppliers

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PART J: Assessment of Environmental Effects**1. Is an assessment of environmental effects (AEE) included with application?**

(Refer TP58 section 5. Ensure all issues concerning potential effects addressed)

Yes	☒	No	
-----	-------------------------------------	----	--

 (Please tick)

If Yes, list and explain possible effects

Nil

PART K: Is Your Application Complete?**1. In order to provide a complete application you have remembered to:**

Fully Complete this Assessment Form	☒
Include a <i>Location Plan</i> and <i>Site Plan</i> (with Scale Bars)	☒
Attach an Assessment of Environmental Effects (AEE)	☒

1. Declaration

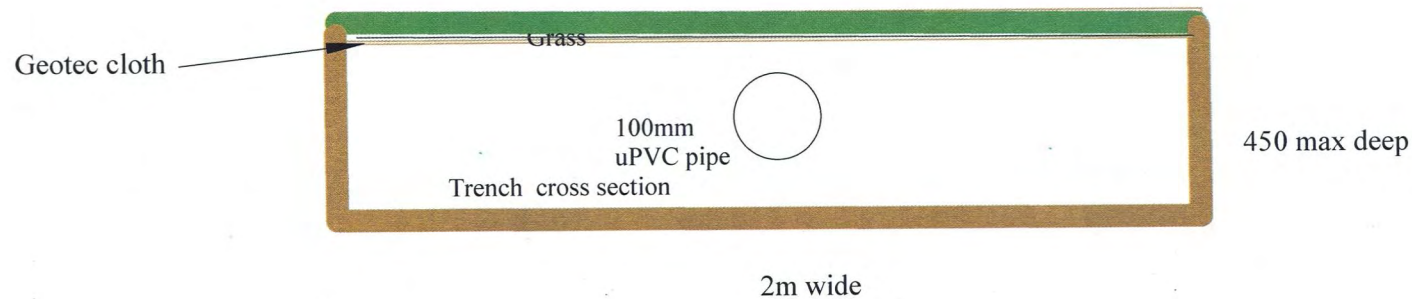
I hereby certify that, to the best of knowledge and belief, the information given in this application is true and complete.

Name	Eric Wagener	Signature	
Position	Certifying Reg Drainlayer	Date	23/03/2025

Note

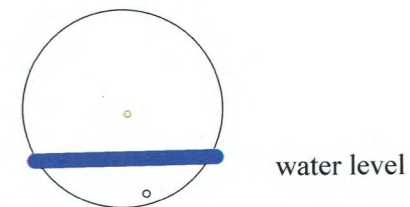
Any alteration to the site plan or design after approval will result in non compliance.





S & F Kehely
Black & Grey water disposal

E.J.Wagener 05877



Pipe sawcut or drilled with 20mm holes so as to form a cup
holes at 600c/c

Calcs: total waste water produced = 9620L/D
 $9620 / k_{sat} 25 = 384.8 \text{ m}^2$
 $384.8 / 2 = 192.4$
 $192.4 / 35 = 5.5 \text{ trenches}$

Appendix G – Approved Form 4 Letter (EBC/2026-300-00)

25 November 2025

KFCS Farms Limited
S C R Kehely & F Kehely
4238 Far North Road
RD 4
Kaitaia 0484

Dear Sir / Madam,

Building consent number: EBC-2026-300/0
Property ID: 3336811
Address: 4238K Far North Road, Pukenui 0484
Description: Commercial Building Install Commercial Laundry in Tenancy
1 Install On-Site Wastewater Disposal System and LPG
Storage Tank

Requirement for Resource Consent

PIM Assessment of your application has highlighted the need for Resource Consent that must be granted prior to any building works or earthworks commencing.

NB: As of 27th July 2022, some rules and standards in the Far North District Council Proposed District Plan took legal effect and compliance with these rules applies to your building consent. Please visit our website to see these rules
[Far North Proposed District Plan \(isoplan.co.nz\)](http://isoplan.co.nz)

The site is zoned **Coastal Residential** under the Operative District Plan and Resource Consent is required for breach of the following:

Rule:	10.8.5.1.3 SCALE OF ACTIVITIES
Reason:	The number of people permitted on this site is 26.79 or 27 people, excluding people who normally reside on the site or are members of the household. The Fire Safety Compliance Report for KFCS Farms Ltd at 4238 Far North Road, Pukenui, prepared by Formable Fire Safety Design has calculated total occupancy for this proposed building as 46-person occupancy, and this exceeds the permitted 2 persons per 3,000m ² threshold for this site.
Rule:	10.8.5.1.6 STORMWATER MANAGEMENT
Reason:	This application demonstrates impermeable surfaces total area of 3,469.2m ² , this exceeds the permitted 1,000m ² threshold for this site.
Rule:	10.8.5.1.12 HOURS OF OPERATION - NON-RESIDENTIAL ACTIVITIES
Reason:	The Agent advises the proposed hours of operation will be 7 days per week and will breach this rule.
Rule:	15.1.6A.2.1 TRAFFIC INTENSITY
Reason:	The proposed Land Use Activity retail generates 149.8 average daily one-way vehicle movements required for this proposed building work, and this exceeds the permitted 20 daily one-way vehicle movements for this site.

Rule:	12.8.6.1.1 HAZARDOUS SUBSTANCES - CONSENT STATUS INDICES FOR PERMITTED ACTIVITIES
Reason:	The proposed LPG storage tank quantity 2,000L (1 tonne) exceeds the relevant adjusted threshold for above-ground storage of hazardous substances in this zone.
Rule:	2019 Proposed Regional Plan for Northland – C.6.1.3 Other on-site treated domestic wastewater discharge – permitted activity: <i>Note: Far North District Council issue Discharge Consents under delegated authority from the Northland Regional Council for wastewater from domestic systems up to 3m³/day.</i>
Reason:	The volume of wastewater/greywater discharge proposed exceeds two cubic meters per day. Northland Regional Council Discharge Consent approval is required.

Please note there may be other rule breaches found during the Resource Consent process. It is your responsibility to ensure the Resource Consent approved plans match the Consented approved plans.

The application form can be downloaded from www.fndc.govt.nz and submitted to Council's (Planning Department) with the appropriate documentation and instalment fee.

If you have any queries, please contact the Duty Planner on Duty.Planner@fndc.govt.nz or 0800 920 029.

Yours faithfully



Lysigna Mare
PIM Officer

Delivery and Operations

Emailed to: beardarc48@gmail.com ; tylerkharissa@gmail.com

FORM 4
Certificate attached to
PROJECT INFORMATION MEMORANDUM

Section 37, Building Act 2004

Building Consent Number: EBC-2026-300/0

**RESTRICTIONS ON COMMENCING BUILDING WORK UNDER
RESOURCE MANAGEMENT ACT 1991**

The building work referred to in the attached Project Information Memorandum is also required to have the following **Resource Consent(s)** under the Resource Management Act 1991:

- **Resource Consent – REQUIRED**
- **Northland Regional Council Discharge Consent - REQUIRED**

As the above Resource Consent(s) will affect the building work to which the Project Information Memorandum relates, until this has been granted no building work may proceed.

As the above Discharge Consent will affect the building work to which the Project Information Memorandum relates, until this has been granted no building work may proceed.

Failure to comply with the requirements of this notice may result in legal action being taken against you under the Resource Management Act 1991.

Signature:



Trent Blakeman
Manager - Building Services –
Delivery and Operations
Far North District Council (Building Consent Authority)
25 November 2025

Position:

On behalf of:

Date:

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)

☐ Other (please specify)

☒ Discharge: Total volume = m³

Note; volumes >3m³ requires NRC Consent.

☐ Subdivision

☐ Existing Use Certificate (s.139A)

☐ Consent under National Environmental Standard
(e.g. Assessing and Managing Contaminants in Soil)

*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:

Shaun & Fiona Kehely

Email:

houhorahoneybees@gmail.com

Phone number:

Work 0274460626

Home

Postal address:

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

4238K Far North Road SH1 Houhora

Postcode

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:

Logiplan Limited (Attn: Nina Pivac)

Email:

nina@logiplan.co.nz

Phone number:

Work 0210614725

Home

Postal address:

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

50-64 Commerce Street Kaitaia

Postcode

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:

KFCS Farms Limited

Property address/
location:

4238K Far North Road Houhora

8. Application site details

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

Name/s:

KFCS Farms Limited

Site address/
location:

4238K Far North Road Houhora

Postcode

Legal description:

Lot 5 DP 107403

Val Number:

Certificate of title:

NA59D/893

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.

Please contact applicant to arrange site visit.

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.

Landuse to consent to authorise existing container cafe operation, and consent to construct and operate a new laundromat. See AEE for full description of proposal.

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

☐ Regional Council Consent (ref # if known)

☐ National Environmental Standard Consent

☐ Other (please specify)

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

☐ Disturbing, removing or sampling soil

☐ Changing the use of a piece of land

☐ 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

☐ Active Faults

☐ Landslips

☐ Liquefaction

☐ Coastal Erosion

☐ Tsunami

☐ Coastal Inundation

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)	Shaun & Fiona Kehely	
Email:	houhorahoneybees@gmail.com	
Phone number:	Work 0274460626	Home
Postal address: (or alternative method of service under section 352 of the act)	4238K Far North Road Houhora Postcode	

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)	Shaun & Fiona Kehely	
Signature: (signature of bill payer)	 MANDATORY	Date 14-Jul-2026

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)	Nina Pivac	
Signature	 <i>A signature is not required if the application is made by electronic means</i>	Date 14-Jul-2026

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.*



LANDUSE RESOURCE CONSENT APPLICATION
TO CONSTRUCT AND OPERATE A SELF-SERVICE LAUNDROMAT

4238K FAR NORTH ROAD (SH1) PUKENUI
LOT 5 DP 107403

ASSESSMENT OF ENVIRONMENTAL EFFECTS

PREPARED FOR:
SHAUN AND FIONA KEHELY

Rev A
14 July 2026

Table of Contents

1.0	THE APPLICANT AND PROPERTY DETAILS	2
2.0	PROPOSAL.....	3
3.0	SITE CONTEXT	3
4.0	OPERATIVE FAR NORTH DISTRICT PLAN (ODP) ASSESSMENT	4
5.0	PROPOSED FAR NORTH DISTRICT PLAN DECISIONS VERSION (PDP-DV) ASSESSMENT	9
6.0	PROPOSED NORTHLAND REGIONAL PLAN (PRP) ASSESSMENT	10
7.0	NES CONTAMINATED SOILS (NESCS)	10
8.0	NES FRESHWATER (NESFW)	10
9.0	NPS INDIGENOUS BIODIVERSITY (NPS-IB).....	10
10.0	NPS HIGHLY PRODUCTIVE LAND (NPSHPL)	11
11.0	NOTIFICATION	11
12.0	ASSESSMENT OF ENVIRONMENTAL EFFECTS	13
13.0	SECTION 104 ASSESSMENT	17
14.0	PART 2 ASSESSMENT	22
15.0	OVERALL CONCLUSION	22

APPENDICES:

Appendix A – Site, Floor and Elevation Plans
Appendix B – Certificate of Title
Appendix C – Stormwater Management Report
Appendix D – Traffic Impact Assessment
Appendix E – NZTA Correspondence
Appendix F – TP58 Report
Appendix G – Approved Form 4 Letter (EBC/2026-300-00)

1.0 THE APPLICANT AND PROPERTY DETAILS

To:	Far North District Council
Site address:	4238K Far North Road (SH1) Pukenui
Applicant's name:	Shaun and Fiona Kehely
Address for service:	Tohu Consulting Limited Attn: Nina Pivac 50-64 Commerce Street Kaitaia 0410
Legal description:	Lot 5 DP 107403
Site area:	4.0194ha
Site owner/s:	KFCS Farms Limited
Operative District Plan:	Far North District Plan
Operative zoning:	Coastal Residential Zone
Overlays/resource areas:	Partial NRC Coastal Environment
Proposed zoning/overlays:	Settlement Zone Treaty Settlement Area of Interest Coastal Environment
Brief description of proposal:	To construct and operate a self-service laundromat. The application also seeks to formalise existing activities on site which include a café/hospitality facility (Honeybees). Overall, resource consent is required under the following rules: • 10.8.5.1.3 Scale of Activities • 10.8.5.1.6 Stormwater Management • 10.8.5.1.12 Hours of Operation – Non-Residential Activities • 15.1.6A.2.1 Traffic Intensity • 12.8.6.1.1 Hazardous Substances – Consent Status Indices for Permitted Activities A discharge consent is also required under Rule C.6.1.3 of the Northland Regional Plan, due to wastewater/greywater discharge exceeding 2m³ per day.
Summary of reasons for consent:	Overall, resource consent is required as a Discretionary Activity under the Far North District Plan.

AUTHOR



Nina Pivac

Director | BAppSC | PGDipPlan | Assoc. NZPI

Date: 14 July 2026

Land-Use Resource Consent Application:
S & F Kehely – 4238K Far North Road

2.0 PROPOSAL

The applicants, Fiona and Shaun Kehely, propose to establish and operate a self-service laundromat, along with formalising the existing café/takeaway activity currently operating from the site (Honeybees). The subject site is located at 4238K Far North Road (SH1) within the Coastal Residential Zone. Under the Operative District Plan (ODP), resource consent is required under the following provisions:

- 10.8.5.1.3 Scale of Activities
- 10.8.5.1.6 Stormwater Management
- 10.8.5.1.12 Hours of Operation – Non-Residential Activities
- 15.1.6A.2.1 Traffic Intensity
- 12.8.6.1.1 Hazardous Substances – Consent Status Indices for Permitted Activities

Under the Proposed Northland Regional Plan (PRP), a discharge consent is also required under *Rule C.6.1.3 Other Onsite Treated Domestic Wastewater Discharge*, due to wastewater/greywater discharge exceeding 2m³ per day.

A comprehensive district plan assessment has been provided in Section 4.0 below.

A Stormwater Management Report and Traffic Impact Assessment have been prepared in support of the proposed development, as attached as **Appendix C and D** respectively.

Consultation has been undertaken with NZTA Waka Kotahi, as per **Appendix E**.

Overall, the application has been assessed as a **Discretionary Activity** under the ODP.

It should be noted that this application has been prepared in response to a Form 4 Letter issued in relation to EBC/2026-300-0, attached as **Appendix G**.

The following Assessment of Environmental Effects (AEE) has been prepared in accordance with the requirements of Section 88 of and Schedule 4 of the Resource Management Act 1991 (the Act) and is intended to provide the information necessary for a full understanding of the activity for which consent is sought and any actual or potential effects the proposal may have on the environment.

3.0 SITE CONTEXT

The subject site is located at 4238K Far North Road (SH1) Pukenui, on the outskirts of the Pukenui township. The site is legally described as Lot 5 DP 107403. A copy of the relevant Certificate of Title (CT) is attached as **Appendix B**.



Figure 2: Map showing subject site (Premise)

In terms of existing built development, the subject site currently contains an existing dwelling in the north-eastern portion of the site, and a café/takeaway activity situated near the western boundary of the site. The remainder of the site is in pasture.

The immediate surrounding environment is characterised by a mix of activities including a range of boutique accommodation facilities, and extensive residential development.

There are no significant areas of indigenous vegetation or habitats of indigenous fauna.

Access to the subject site is currently provided via two existing vehicle crossings off SH1. While the proposal will not alter the existing access arrangements, consultation with NZTA has identified the need for mitigation measures to address the additional traffic movements associated with the proposed activity (see **Appendix E**). As per NZTA's recommendations, the applicant accepts that both vehicle crossings will need to be upgraded to Access Type E standards - this upgrade is due to the substandard sight distances from the vehicle crossings.

4.0 OPERATIVE FAR NORTH DISTRICT PLAN (ODP) ASSESSMENT

Table 2 – ODP Assessment Coastal Residential Zone and District-Wide provisions

Coastal Residential Zone	Permitted Standards	Compliance
Rule 10.6.5.1.1 RELOCATED BUILDINGS	Permitted provided that they comply with all the standards for permitted activities in the Plan, and further provided that where the building is a relocated building all work required to reinstate the exterior including painting and repair of joinery	n/a

Coastal Residential Zone	Permitted Standards	Compliance
	shall be completed within six months of the building being delivered to the site. Reinstatement work is to include connections to all infrastructure services and closing in and ventilation of the foundations.	
Rule 10.6.5.1.2 RESIDENTIAL INTENSITY	Sewered sites: one unit per 800m ² Unsewered sites: one unit per 3,000m ²	The site contains one existing dwelling as per previous Council approvals. No additional dwellings are proposed as part of this application. Permitted
Rule 10.6.5.1.3 SCALE OF ACTIVITIES	The total number of people engaged at any one period of time in activities on a site, including employees and persons making use of any facilities, but excluding people who normally reside on the site or are members of the household shall not exceed: 2 persons per 800m² (sewered) 2 persons per 3,000m² (unsewered) Provided that: (a) this number may be exceeded for a period totalling not more than 60 days in any 12 month period where the increased number of persons is a direct result of activities ancillary to the primary activity on the site; and (b) this number may be exceeded where persons are engaged in constructing or establishing an activity (including environmental enhancement) on the site; and (c) this number may be exceeded where persons are visiting marae. In determining the total number of people engaged at	Based on an unsewered site with a land area of 4.0194ha, the number of people permitted on this site is 26.79 or 27 people, excluding people who normally reside on the site or are members of the household. Based on The Fire Safety Compliance Report for KFCS Farms Ltd at 4238 Far North Road, Pukenui, prepared by Formable Fire Safety Design has calculated maximum occupancy for the proposed laundromat as 46-person occupancy, and this exceeds the permitted 2 persons per 3,000m² threshold for this site. This is considered to be an overconservative estimate, given the laundromat only has 9 washing machines and 9 dryers. So in reality, maximum occupancy may only be from 9 – 18 people. Nonetheless, the applicant seeks consent for a maximum occupancy of 46-persons at any one time (excluding residents). Restricted Discretionary Activity

Coastal Residential Zone	Permitted Standards	Compliance
	any one period to time, the Council will consider the maximum capacity of the facility (for instance, the number of beds in visitors accommodation, the number of seats in a restaurant or theatre), the number of staff needed to cater for the maximum number of guests, and the number and nature of the vehicles that are to be accommodated on site to cater for those engaged in the activity.	
Rule 10.6.5.1.4 BUILDING HEIGHT	The maximum height of any building shall be 8m.	All existing and proposed development have a maximum building height of less than 8m. Permitted
Rule 10.6.5.1.5 SUNLIGHT	2m + 45-degree recession plane	No part of all existing and proposed buildings will encroach the recession plane. Permitted
Rule 10.6.5.1.6 STORMWATER MANAGEMENT	The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 50% or 1,000m ² , whichever is the lesser.	Total impermeable surfaces total area of 3,469.2m ² which exceeds the permitted and restricted discretionary threshold of 1,000m ² threshold for this site. Discretionary Activity
Rule 10.6.5.1.7 SETBACK FROM BOUNDARIES	(a) the minimum building setback from road boundaries shall be 3m; and (b) the minimum setback from any boundary apart from a road boundary is 1.2m except that no set-back is required for a maximum total length of 10m along any one such boundary; and (c) not less than 50% of that part of the site between the road boundary and a parallel line 2m therefrom shall be landscaped.	All existing and proposed development will be located at least 10m from all boundaries. More than 50% of the road boundary is landscaped. Permitted

Coastal Residential Zone	Permitted Standards	Compliance
Rule 10.6.5.1.8 SCREENING FOR NEIGHBOURS NON-RESIDENTIAL ACTIVITIES	n/a	n/a
10.8.5.1.9 OUTDOOR ACTIVITIES	n/a	n/a
10.8.5.1.10 TRANSPORTATION	TIF = 20	The proposed laundromat activity, combined with the existing container café and residential activities will exceed the permitted 20 daily one-way vehicle movements for this site. Discretionary Activity
10.8.5.1.11 SITE INTENSITY - NON RESIDENTIAL ACTIVITIES	The maximum net site area of any site for activities other than residential units shall be 1,000m ² for sewered sites, and 5,000m ² for unsewered sites, except that this area may be exceeded for public reserves without buildings.	The net site area of all non-residential activities on site will be less than 5000m². Permitted
10.8.5.1.12 HOURS OF OPERATION - NON-RESIDENTIAL ACTIVITIES	(a) The maximum number of hours the activity shall be open to visitors, clients or deliveries shall be 50 hours per week; and (b) Hours of operation shall be limited to between the hours: 0700 - 2000 Monday to Friday 0800 - 2000 Saturday, Sunday and Public Holidays Provided that this rule does not apply: (i) where the entire activity is located within a building; and (ii) where each person engaged in the activity outside the above hours resides permanently on the site; and (iii) where there are no visitors, clients or deliveries to or from the site	The proposed hours of operation for the café/takeaways activity are: Monday to Sunday 6am – 7pm The proposed hours of operation for the proposed laundromat activity are: 7 days a week 7am – 7pm While the entire proposed laundromat activity, and cooking, will take place entirely within buildings, visitors to the café/takeaway activity may eat their food outside on the tables provided. Discretionary Activity

Coastal Residential Zone	Permitted Standards	Compliance
	outside the above hours.	
10.8.5.1.14 NOISE	All activities shall be conducted so as to ensure that noise from the site shall not exceed the following noise limits as measured at or within the boundary of any other site in this zone or the Residential or Russell Township Zones, or at or within the notional boundary of any dwelling in a rural or coastal zone: 0700 to 2200 hours 2200 to 0700 hours 55 dBA L10 45 dBA L10 and 70 dBA Lmax	All noise will remain within these permitted thresholds. Permitted
10.8.5.1.16 BUILDING COVERAGE	Any new building or alteration/addition to an existing building is a permitted activity if the total Building Coverage of a site does not exceed 45% or 900m ² , whichever is the lesser, of the gross site area.	Total building coverage equates to 886m ² which falls within the permitted threshold. Permitted
12.8.6.1.1 HAZARDOUS SUBSTANCES - CONSENT STATUS INDICES FOR PERMITTED ACTIVITIES	Indices <0.02	The proposed LPG storage tank quantity 2,000L (1 tonne) exceeds the relevant adjusted threshold for above-ground storage of hazardous substances in this zone. Discretionary Activity

Overall, the proposal requires resource consent as a **Discretionary Activity** under the operative Far North District Plan.

5.0 PROPOSED FAR NORTH DISTRICT PLAN DECISIONS VERSION (PDP-DV) ASSESSMENT

Table 2 – PDP Assessment Settlement Zone and District-Wide provisions

Provision	Requirement	Assessment	Compliance / Activity Status
RSZ-R1 New buildings or structures, relocated buildings, or extensions/alterations	Permitted where the building accommodates a permitted, controlled or restricted discretionary activity and complies with RSZ-S1–S8 as applicable.	Discretionary Activity under RSZ-R8.	Discretionary Activity
RSZ-R2 Impermeable surface coverage	Maximum 35% of the site or 600m ² , whichever is the lesser.	Total impermeable surfaces will exceed 600m ² .	Restricted Discretionary Activity
RSZ-R3 – RSZ-R8	n/a	n/a	n/a
RSZ-R8 Commercial activity	Commercial activities are permitted. Specific GFA thresholds apply to retail activities, supermarkets and offices. The activity must also comply with RSZ-S5 and RSZ-S6.	The total area of all commercial activities, including the existing container café and proposed laundromat and office space, will exceed 300m ² .	Discretionary Activity
RSZ-R9 – RSZ-R15	n/a	n/a	n/a
RSZ-S1 Maximum height	Maximum building/structure height of 8m.	All existing and proposed buildings are less than 8m in height.	Permitted Activity
RSZ-S2 Height in relation to boundary	55 degrees at 2m above ground level at the northern boundary of the site; 45 degrees at 2m above ground level at the eastern and western boundaries of the site; and 35 degrees at 2m above ground level at the southern boundary of the site.	As per the site plan, all buildings are clear of the recession plane.	Permitted Activity
RSZ-S3 Setback	Minimum 1.2m from site boundaries, 3m from a road boundary, and 3m from the KHR rail designation boundary, where relevant.	As per the site plan, all buildings setback at least 30m from the nearest boundary.	Permitted Activity
RSZ-S4 Outdoor living space	Not applicable	Not applicable	Not applicable
RSZ-S5 Outdoor storage	Outdoor storage must be screened by a solid fence or	Any bins, supplies, equipment or other	Permitted Activity

Provision	Requirement	Assessment	Compliance / Activity Status
	wall at least 1.8m high so it is not visible from adjoining sites or public land.	outdoor storage associated with the café or laundromat will be appropriately screened.	
RSZ-S6 -RSZ-S8	n/a	n/a	n/a

Overall, the proposal has been assessed as a **Discretionary Activity** under the proposed Far North District Plan.

6.0 PROPOSED NORTHLAND REGIONAL PLAN (PRP) ASSESSMENT

Under the Proposed Northland Regional Plan (PRP), a discharge consent is also required under *Rule C.6.1.3 Other Onsite Treated Domestic Wastewater Discharge*, due to wastewater/greywater discharge exceeding 2m³ per day.

7.0 NES CONTAMINATED SOILS (NESCS)

All applications that involve subdivision, or an activity that changes the use of a piece of land, or earthworks are subject to the provisions of the NES Contaminated Soils. The regulation sets out the requirements for considering the potential for soil contamination, based on the HAIL (Hazardous Activities and Industries List) and the risk that this may pose to human health as a result of the proposed land use.

It is noted that the subject site contains a small hobby orchard within the eastern portion of the property. Based on discussions with the applicant, it is understood that herbicides and pesticides have not historically been applied within this area. Furthermore, the proposed development is located well outside the extent of the orchard. Accordingly, it is considered that the NESCS does not apply in this instance.

8.0 NES FRESHWATER (NESFW)

A review of aerial images, including NRC's wetland maps, reveal no evidence to suggest that there are any wet areas that may be subject to the NES Freshwater provisions. Therefore, no further assessment is required under the NES Freshwater.

9.0 NPS INDIGENOUS BIODIVERSITY (NPS-IB)

As discussed earlier in the report, the subject site does not contain any significant areas of indigenous vegetation or habitats of indigenous fauna.

10.0 NPS HIGHLY PRODUCTIVE LAND (NPSHPL)

As shown on Far North LUC Maps, the site contains LUC 3 soils which are classified as 'highly productive' under the NPSHPL. However, given the subject site is located in the Coastal Residential Zone, the NPSHPL is not applicable in this instance.

11.0 NOTIFICATION

Public Notification

Section 95A specifies the steps the council is to follow to determine whether an application is to be publicly notified. These are addressed in statutory order below.

Step 1: Mandatory public notification is required in certain circumstances

Under Section 95A(3) an application must be publicly notified if:

- a) the applicant has requested that the application be publicly notified;*
- b) public notification is required under Section 95C.*

The applicant is not requesting public notification under clause (a). Clause (b) provisions relate to where an applicant does not provide further information formally requested under Section 92, which is not applicable in this case.

Public notification is not required and therefore Step 2 must be considered.

Step 2: If not required by Step 1, public notification precluded in certain circumstances

Under Section 95A (4) an application must not be publicly notified if:

- a) the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes public notification;*
- b) the application is for a resource consent for 1 or more of the following, but no other, activities:*
 - i. a controlled activity;*
 - ii. a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity;*

None of the above criteria apply, therefore public notification is not precluded in this instance. Step 3 must be considered.

Step 3: If not precluded by step 2, public notification required in certain circumstances

Under Section 95A(7), public notification is required if:

- a) the application is for a resource consent for 1 or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification;*
- b) the consent authority decides, in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor.*

Clause (a) does not apply in this situation.

An assessment of environmental effects in accordance with s95D has been undertaken in Section 8.0 below which concludes that any adverse effect arising as a result of the proposed development will be less than minor. Public notification is therefore not required in this instance.

Step 4: Public notification in special circumstances

Section 95A(9) sets out that the council is required to determine whether special circumstances exist that warrant it being publicly notified.

Special circumstances are those that are:

- *exceptional or unusual, but something less than extraordinary; or*
- *outside of the common run of applications of this nature; or*
- *circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.*

There are no special circumstances that apply to the subject site.

Public Notification Conclusion

Based on the above, it is considered that this application can be processed without public notification.

Limited Notification

Under Section 95B, if an application is not publicly notified, the Council must decide if there are any 'affected persons' and undertake limited notification to those persons. Under Section 95E(1) a person is considered 'affected' if the adverse effects of the activity on that person are 'minor or more than minor'. If the application is not publicly notified, the consent authority must follow the following steps to determine whether to give limited notification of an application.

Step 1: Certain affected protected customary rights groups must be notified

Step 1 requires limited notification where there are any affected protected customary rights groups or customary marine title groups, or affected persons under a statutory acknowledgement affecting the land.

The above does not apply to this land.

Step 2: If not required by step 1, limited notification precluded in certain circumstances

Step 2 describes that limited notification is precluded where all applicable rules and NES preclude limited notification; or the application is for a controlled activity (other than the subdivision of land) or a prescribed activity under section 360H(1)(a)(ii).

None of the above apply in this instance.

Step 3: if not precluded by step 2, certain other affected persons must be notified

In the case of a boundary activity, Council shall determine in accordance with section 95E whether an owner of an allotment with an infringing boundary is an affected person.

In the case of any other activity, Council shall determine whether a person is an affected person in accordance with section 95E.

If yes to any of the above, Council shall notify each affected person identified under subsections (7) and (8) of the application.

As concluded in the the assessment of effects, it is considered that any adverse effects will be less than minor. Further, written approval has been provided by NZTA.

Step 4: Further notification in special circumstances

In addition to the findings of the previous steps, the council is also required to determine whether special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined as eligible for limited notification.

As previously discussed, special circumstances are not considered to apply to this proposal.

Limited Notification Conclusion

Having undertaken the s95B limited notification tests, it is considered that this application can be processed without limited notification.

12.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

In accordance with Section 88(2)(b) of the Act and Clause 1(d) of Schedule 4, this assessment of environmental effects of the proposed activity has been prepared in such detail as corresponds with the scale and significance of the effects it may have on the environment.

Scale of Activities

The existing container café and proposed laundromat are concentrated within the south-western portion of the approximately 4ha site, adjoining the Far North Road frontage, with the wider balance of the property remaining largely undeveloped. The buildings associated with the activities are relatively small-scale and low-rise and, having regard to their siting and the substantial separation available from surrounding properties, are not anticipated to result in visual domination or any material loss of privacy or sunlight. The activities are accessed directly from Far North Road, with sufficient space available within the activity area to accommodate onsite access, parking and manoeuvring. As per the attached Traffic Impact Assessment, any potential adverse traffic effects will be appropriately managed. Potential noise will principally arise from laundry equipment, customer vehicle movements and general activity; however, the equipment will be contained within an enclosed building and, given the scale of the activity and separation from surrounding properties, noise effects are anticipated to be minor and capable of complying with the applicable District Plan standards.

The approximately 4ha site provides substantial physical capacity for onsite servicing. The site plan identifies existing and proposed water storage, including two 25,000-litre water storage tanks, supplemented by roof catchment and bore supply, with sufficient water supply to be confirmed having regard to the additional demand generated by the laundromat. Appropriate wastewater treatment and disposal arrangements will similarly be required given the nature and potential volume of wastewater generated; however, the site plan and TP58 report identifies a reserve disposal field and substantial undeveloped land, indicating that there is sufficient physical capacity for onsite servicing. As per the stormwater report, stormwater can also be managed onsite given the large site area and relatively low overall level of development.

The commercial activity area is not identified as immediately adjoining a public reserve and is concentrated near the Far North Road frontage, physically separated from the wider eastern portion of the property and Houhora Harbour margin. Accordingly, no material effects on the public use or enjoyment of any reserve are anticipated. Overall, the proposal is considered to be of an appropriate scale and intensity for the site and surrounding environment and, subject to confirmation of

adequate servicing and compliance with applicable noise and transport requirements, any adverse effects associated with the scale of the activities are considered capable of being appropriately avoided or mitigated.

Stormwater Management

A Stormwater Management Report has been prepared by Wilton Joubert in support of the proposed development (see **Appendix C**). In summary, the report concludes that any adverse effect in relation to stormwater management will be less than minor subject to the implementation of those recommendations outlined in their report. These include (but are not limited to):

- A proprietary guttering system is required to be installed to collect roof runoff from the existing shed and direct runoff via sealed pipes to the existing open drain to the northeast of the existing shed.
- It is recommended to shape the proposed metal parking area to shed runoff to two minimum 200mm deep x 500mm wide grassed v-channel swales (minimum 0.5% grade) along the southern and eastern side of the proposed parking area. Each swale is to have a silt trap with a scruffy dome or grated inlet at a low point. Each silt trap is to be fitted with a 150mmØ outlet pipe (minimum 1% grade) directed runoff to the discharge point.
- Alternatively, the metal parking area can be shaped to shed to the existing overland flow path via even sheet flow, if unconcentrated flows are achievable and won't affect any structures.
- If the parking area is sealed, runoff shall be collected by appropriately positioned catchpits and conveyed via sealed pipes. The piped drainage shall discharge to a dispersal trench or similar device, allowing initial flows to be dispersed and partially treated prior to overflow as sheet flow across pasture. This provides passive mitigation and treatment before runoff enters the existing overland flow path. Catchpits shall include suitable sumps for sediment capture and shall be designed and installed in accordance with NZBC E1 Surface Water.

The client accepts that these recommendations may be imposed as consent conditions.

Hours of Operation (Non-Residential Activities)

The proposed hours of operation are considered compatible with the existing and anticipated activities in the surrounding environment. The laundromat will operate between **7.00am and 7.00pm**, falling only slightly outside the permitted hours of operation and representing a relatively minor extension into an otherwise reasonable daytime and early evening operating period. Commercial activities have operated from the subject site for an extended period, with no known sensitivity issues, complaints or adverse effects understood to have arisen in relation to neighbouring properties. The laundromat is expected to largely serve the same customer base as the existing café, with customers anticipated to use the café while waiting for washing and drying cycles to be completed. Accordingly, the proposal is not expected to generate entirely separate or sustained streams of activity, with a degree of overlap and shared patronage anticipated between

the two activities. The majority of commercial activity will also occur indoors, which will assist in containing operational noise and activity. Given the nature and scale of the activities, their established presence on the site and the limited extent of the infringement, the proposed hours are not anticipated to result in unreasonable noise, disturbance, loss of privacy or reduced security for neighbouring properties.

While the laundromat may generate some additional vehicle movements, these are expected to be relatively low and intermittent, with customers generally arriving to load or unload washing before spending the intervening period at the café or otherwise remaining on the site. As confirmed in the traffic assessment, traffic associated with the proposal can be appropriately accommodated and managed within the site and surrounding transport network. The proposed **7.00am to 7.00pm** operating hours will also limit the potential for adverse effects associated with vehicle headlights, noise and vibration during more sensitive late-night periods. Potential effects on neighbouring properties will be further mitigated by the predominantly indoor nature of the activities and proposed planting along the southern boundary of the subject site, which will provide additional visual screening and separation from adjoining properties. Overall, having regard to the **minor extent of the infringement beyond the permitted operating hours**, the established commercial use of the site, the absence of known sensitivity issues or adverse effects arising from its operation to date, the complementary nature and likely shared patronage of the café and laundromat, the findings of the traffic assessment and the proposed mitigation measures, the proposed hours of operation are considered appropriate and any associated adverse effects on neighbouring properties are anticipated to be **less than minor**.

Traffic Intensity

A Traffic Impact Assessment (TIA) has been prepared by Dean Scanlen (E-Outcomes) in support of the proposed development (see **Appendix D**). Consultation was undertaken with NZTA as part of this process (see **Appendix E**). In summary, the report concludes that any adverse effect in relation to traffic intensity will be less than minor subject to the implementation of those recommendations outlined in their report. These include the upgrading of both existing vehicle crossings to Type E standards, as recommended by NZTA.

The client accepts that these recommendations may be imposed as consent conditions.

Hazardous Substances

The LPG required for the operation of the laundromat will be stored in purpose-designed tanks within a dedicated and appropriately managed area of the site. LPG is flammable and, if released, can accumulate in low-lying or poorly ventilated areas and present a fire or explosion risk; however, the probability of such an event is considered low where the tanks, associated pipework and appliances are correctly designed, installed, inspected and maintained. The tanks will be positioned in a secure, well-ventilated external location with appropriate separation from buildings, site boundaries, ignition sources, vehicle movements and areas regularly occupied by customers. Protection from accidental vehicle impact, unauthorised access and tampering will be provided where necessary, together with clear warning signage and unobstructed access for servicing and emergency response. The activity is relatively small in scale and the LPG will be used solely to support the laundromat rather than for industrial-scale processing. Accordingly, the number of

people potentially exposed to risk will be limited principally to customers and staff temporarily present on the site, with the majority of the activity occurring indoors and away from the tank storage area. The proposed tank location and management measures will ensure that risks to adjoining properties, nearby activities and the wider natural and physical environment remain low. There are no known high-concentration sensitive activities immediately associated with the proposed storage area, and the tanks can be located with sufficient separation from any waterbody, wetland, drainage feature or other sensitive receiving environment. LPG does not generate a liquid contaminant discharge during normal storage and use; however, the tanks will not be located within stormwater flow paths, enclosed depressions or areas where escaping gas could accumulate or migrate into buildings, drains or underground services.

The storage, delivery and use of LPG will be managed through appropriate site procedures, including regular inspection and maintenance of the tanks, valves, regulators, pipework and connected appliances; prompt repair or isolation of any identified fault; controlled access to the storage area; and delivery and replacement by suitably qualified suppliers. LPG deliveries will be intermittent and involve relatively small volumes associated with the operation of the laundromat, such that cumulative effects arising from the storage, transport or use of hazardous substances are not expected to be significant. The site has direct access to Far North Road and is readily accessible from the wider roading network, avoiding the need for delivery vehicles to travel extensively through residential local roads. The site provides sufficient space for vehicles to enter, manoeuvre, service the tanks and exit safely without creating conflict with customers or the adjoining road, and the traffic assessment confirms that vehicle movements associated with the wider proposal can be appropriately accommodated and managed. Emergency procedures will address fire, suspected leaks, equipment failure and evacuation, including isolation of the gas supply, maintaining safe separation, contacting emergency services and preventing re-entry until the area has been confirmed safe. Tank quantities, deliveries, inspections, maintenance and any incidents will be appropriately recorded, with LPG cylinders or tanks removed, replaced or disposed of through an authorised supplier rather than being discarded onsite. The storage area will also be selected having regard to any identified natural hazards and will not be located where flooding, erosion, instability or other hazards could undermine the tanks or associated infrastructure. Given the confined scale of the storage, its location within an established commercial activity area and the proposed operational controls, no adverse effects on cultural or spiritual values are anticipated. Alternative energy methods are available in principle; however, they are not considered necessary to avoid significant environmental effects because the risks associated with LPG can be effectively managed through the proposed site layout, installation standards, monitoring, maintenance and emergency procedures. Overall, the proposed LPG storage is not expected to create an undue risk to human health, adjoining property or the environment, and any potential adverse effects will be appropriately avoided or mitigated.

Wastewater Disposal

A TP58 Report has been prepared by Eric Wagener (Effluent Drainlayers) in support of the proposed development (see **Appendix F**). Overall, the report concludes that any adverse effect in relation to wastewater disposal will be less than minor subject to the implementation of those recommendations outlined in the report.

Conclusion

Based on the above, it is considered that any adverse effects as a result of the proposal will be less than minor.

13.0 SECTION 104 ASSESSMENT

Assessment of Effects

Section 104(1)(a) requires consideration of any actual and potential effects on the environment of allowing the activity. This has been carried out in the assessment above. The conclusion reached overall is that the adverse effects of granting consent to the proposal are less than minor. Some positive effects will arise from the development, including:

- Improved access to essential services for local residents who may otherwise need to travel significant distances to Kaitia to access laundry facilities;
- Enhanced convenience and social wellbeing for the surrounding local community, particularly for lower-income households, elderly residents, seasonal workers, campers, and families without adequate onsite laundry infrastructure;
- Reduced travel demand to distant service centres, which may in turn reduce vehicle trips, fuel consumption, and associated emissions at a wider network scale;
- Support for community resilience and self-sufficiency by increasing the availability of basic day-to-day services within the local area;
- Positive economic effects through the establishment of a small-scale local business, including local employment opportunities during establishment and operation, and increased spending retention within the local community;
- Potential support for surrounding businesses and activities by encouraging people to remain within the locality while utilising the laundromat and associated services (such as nearby cafés, takeaways, or retail activities);
- Efficient use of existing infrastructure and an already developed commercial site, where the activity can operate without requiring substantial additional infrastructure upgrades; and
- Improved amenity and public hygiene outcomes for some residents and visitors who may otherwise have limited access to reliable laundry facilities.

Therefore, the effects are considered acceptable in the receiving environment.

National and Regional Planning Documents

Other than those discussed earlier, there are no other national or regional planning documents directly relevant to this application.

Operative Far North District Plan – Objectives and Policies

The relevant objectives and policies of the District Plan can be found in the Coastal Residential Zone Chapters.

Coastal Residential Zone - Objectives	
Objective	Comment
10.8.3.1 To enable the development of residential activity in and around existing coastal settlements.	The site contains existing residential development. The proposed development will enable the efficient use of surplus land in a manner that enables residential activities to continue, and does not give rise to reverse sensitivity effects.
10.8.3.2 To protect the coastline from inappropriate subdivision, use and development.	The proposed development is located at least 270m from the CMA, and is located outside of the NRC Coastal Environment.
10.8.3.3 To enable the development of coastal settlements where urban amenity and coastal environmental values are compatible.	The proposed development will result in activities that will complement existing urban amenity, in a manner that does not affect coastal environmental values.

Coastal Residential Zone - Policies	
Objective	Comment
10.8.4.1 That standards in the zone enable a range of housing types and forms of accommodation to be provided, recognising the diverse needs of the community and the coastal location of the zone.	The site contains existing residential development. The proposed development will enable the efficient use of surplus land in a manner that enables residential activities to continue, and does not give rise to reverse sensitivity effects.
10.8.4.2 Non-residential activities within the Coastal Residential Zone shall be designed, built, and located so that any effects that are more than minor on the existing character of the residential environment or the scale and intensity of residential activities, are avoided, remedied or mitigated.	As outlined in the AEE, appropriate mitigation measures will be implemented to ensure that any adverse effects on the existing residential character are appropriately avoided, remedied, or mitigated to a less than minor level.
10.8.4.3 That residential activities have sufficient land associated with each household unit to provide for outdoor space and sewage disposal	The site contains an existing dwelling and associated services including sewage disposal, as per previous Council approvals. These will remain unaffected by the proposed development.
10.8.4.4 That the portion of a site covered in buildings and other impermeable surfaces be limited to enable open space and landscaping around buildings and avoid or mitigate the effects of stormwater runoff on receiving environments	Based on a site area of over 4ha, only 2.1% of the site will be covered in buildings, and less than 9% in impermeable surfaces. A stormwater management report has been prepared in support of the application, which concludes that any adverse effect in relation to stormwater management will be less than minor subject to the implementation of those recommendations outlined in their report.
10.8.4.5. That provision be made for ensuring sites have adequate access to sunlight and daylight.	As noted earlier, all buildings will be setback at least 10m from all boundaries and no part of any building will encroach the 2m + 45 degree recession plane.
10.8.4.6 That activities with net effects greater than a single residential unit could be expected to have, be required to minimise adverse effects on the amenity values and general peaceful enjoyment of any adjacent residential activities.	Although the proposed activities are non-residential, it is considered that ample open space (over 3ha) will be maintained within the site so as to maintain existing amenity values and protect the peaceful enjoyment of any adjacent residential activities.

Coastal Residential Zone - Policies	
Objective	Comment
10.8.4.7 That provision be made to ensure a reasonable level of privacy and amenity for inhabitants of buildings.	As above. The proposed activity will be located at least 80m from the nearest dwelling which will help to ensure a reasonable level of privacy and amenity for inhabitants of neighbouring dwellings.

Proposed Far North District Plan – Objectives and Policies

Settlement Zone - Objectives	
Provision	Assessment
RSZ-01 – Rural and coastal settlements are used predominantly for residential activities and are sustained by a range of compatible activities and services.	The existing container café and proposed laundromat are small-scale commercial/service activities that complement the predominantly residential function of the Settlement Zone. Both activities provide services to the local community and are of the type of non-residential activity anticipated within rural and coastal settlements. In particular, the Zone overview expressly recognises that larger settlements may provide commercial services, including small-scale food outlets, to the surrounding community and travelling public.
RSZ-02 – Land use and subdivision is of a scale and intensity that is in keeping with the rural or coastal character and amenity values of each settlement.	The proposal involves an existing container café together with a laundromat. Assuming the activities remain relatively small in scale and are appropriately located, designed and serviced, they are unlikely to introduce an urban-scale commercial development that would be inconsistent with the character and amenity of the settlement. The use of container-based or modest-scale buildings may also assist in maintaining an informal, small-scale character, although visual amenity, traffic, parking, noise and hours of operation should be considered.
RSZ-03 – Land use and subdivision in the Settlement Zone is appropriate for the physical and environmental attributes of the site and any infrastructure constraints.	As confirmed by the attached traffic, stormwater and TP58 reports, the subject site has the ability to accommodate the proposed activities.
RSZ-04 – Land use and subdivision in the Settlement Zone is managed to control any reverse sensitivity issues that may occur within the zone or at the zone interface.	Neither the café nor laundromat is a sensitive activity. Accordingly, the proposal is not expected to create significant reverse sensitivity effects in relation to surrounding rural or productive activities. Any potential effects of the commercial activities themselves on neighbouring residential properties can be managed through appropriate hours of operation, noise management and site design.

Settlement Zone - Policies	
Provision	Assessment
RSZ-P1 – Enable residential and complementary non-residential activities	Both the café and laundromat are complementary non-residential activities that provide services to residents and

Settlement Zone - Policies	
Provision	Assessment
that support the role and function of the Settlement Zone.	visitors. Their relatively small scale supports, rather than undermines, the role and function of the settlement.
RSZ-P2 – Require land use and subdivision associated with non-residential activities to demonstrate the ability to provide for onsite infrastructure unless a reticulated service is available.	The proposal demonstrates that sufficient infrastructure is available for the activities.
RSZ-P3(a) – Non-residential activities are of a scale, intensity and character that complements residential activities and amenity values in the settlement.	The café and laundromat are relatively small-scale commercial/service activities and are considered capable of operating compatibly with surrounding residential activities. Potential effects such as noise, traffic, lighting and operating hours should remain appropriate to the receiving environment.
RSZ-P3(b) – Support the social and economic wellbeing of the community.	The activities provide local services, business activity and potentially employment opportunities. A laundromat may provide a particularly useful service in a settlement where residents do not otherwise have convenient access to such facilities.
RSZ-P3(c) – Do not adversely affect the viability and vitality of nearby urban centres.	Given the small scale and local-service nature of the activities, the proposal is not expected to undermine the viability or vitality of nearby urban centres. The activities are primarily intended to serve the immediate community and passing visitors.
RSZ-P3(d) – Demonstrate the ability to provide for onsite infrastructure.	The site is able to accommodate adequate water supply, wastewater and stormwater demands associated with both activities.
RSZ-P4 – Avoid land use and development that results in reverse sensitivity effects either within the zone or on activities in adjacent zones.	The proposal does not involve a sensitive activity and is therefore unlikely to constrain existing lawful activities on adjoining land.
RSZ-P5(a) – Scale, character and amenity values of the settlement, particularly impacts on existing residential activities.	The proposal is small-scale and service-oriented. Effects on nearby residential properties will be appropriately managed through the location of buildings and activity areas, operating hours, noise, lighting and landscaping where necessary.
RSZ-P5(b) – Siting and design.	The existing café and proposed laundromat are able to comply with the relevant height, height in relation to boundary and setback standards.
RSZ-P5(c) – Cultural and social wellbeing, including health and safety.	The activities provide useful services to the community and are not expected to adversely affect cultural or social wellbeing. Appropriate management of vehicle and pedestrian movements, wastewater and general site safety will be required.
RSZ-P5(d) – Potential reverse sensitivity effects within the settlement and on	No significant reverse sensitivity effects are anticipated.

Settlement Zone - Policies	
Provision	Assessment
adjacent zones and the rail designation boundary.	
RSZ-P5(e) – Location within or adjoining the settlement.	The site is located within the Settlement Zone, where appropriately scaled commercial and service activities are anticipated.
RSZ-P5(f) – Vitality and viability of nearby urban environments.	The scale and nature of the activities are unlikely to adversely affect nearby urban centres.
RSZ-P5(g) – Capacity of the site to cater for onsite infrastructure.	As above.
RSZ-P5(h) – Adequacy of roading infrastructure.	See TIA.
RSZ-P5(i) – Managing natural hazards.	n/a
RSZ-P5(j) – Effects on historic heritage, cultural values, natural features and landscapes, natural character and indigenous biodiversity.	n/a
RSZ-P5(k) – Historical, spiritual or cultural associations held by tangata whenua.	n/a

District Plan Weighting Summary

In accordance with section 104(1)(b) of the Resource Management Act 1991 (RMA), regard has been had to the relevant provisions of both the Far North Operative District Plan (ODP) and the Far North Proposed District Plan (PDP) Decisions Version.

The ODP remains the operative district plan. However, following the public notification of Council's decisions on submissions, all rules within the PDP Decisions Version have legal effect pursuant to section 86B(1) of the RMA. The PDP nevertheless remains subject to the statutory appeal process and will not become fully operative until those appeals have been resolved. Accordingly, both planning documents are relevant considerations for the purposes of section 104(1)(b).

In determining the appropriate weight to afford each planning document, consideration has been given to the advanced stage reached by the PDP through the Schedule 1 process, the extent to which the relevant provisions have been tested through submissions and hearings, whether the provisions remain subject to appeal, and the extent to which they give effect to higher-order statutory planning instruments.

The relevant PDP provisions have progressed through submissions, hearings and Council decisions, and therefore represent the Council's most recent policy position. Consequently, they are considered to attract significant weight in this assessment. However, as the relevant provisions remain capable of amendment through the appeal process, they are not considered determinative. The ODP continues to carry considerable weight as the operative district plan, particularly where corresponding PDP provisions remain subject to appeal.

Overall, while both the ODP and PDP have informed this assessment, greater weight has generally been afforded to the relevant provisions of the PDP Decisions Version where they represent the Council's contemporary planning framework and there is no indication that they are likely to be materially altered through the appeal process.

Other Matters

There are no other matters considered relevant to the proposal.

14.0 PART 2 ASSESSMENT

As per current case law, an assessment of matters under Part 2 is only required where there is invalidity, incomplete coverage or uncertainty in the planning provisions. The Operative District Plans contain provisions that are relevant to the proposal, and there is no evidence to suggest the relevant provisions are invalid, incomplete or present uncertainty in making any decision. No assessment of the Part 2 provisions is therefore required.

15.0 OVERALL CONCLUSION

The applicants, Fiona and Shaun Kehely, propose to establish and operate a self-service laundromat, along with formalising the existing café/takeaway activity currently operating from the site (Honeybees). The subject site is located at 4238K Far North Road (SH1) within the Coastal Residential Zone. Under the Operative District Plan (ODP), resource consent is required under the following provisions:

- 10.8.5.1.3 Scale of Activities
- 10.8.5.1.6 Stormwater Management
- 10.8.5.1.12 Hours of Operation – Non-Residential Activities
- 15.1.6A.2.1 Traffic Intensity
- 12.8.6.1.1 Hazardous Substances – Consent Status Indices for Permitted Activities

Under the Proposed Northland Regional Plan (PRP), a discharge consent is also required under *Rule C.6.1.3 Other Onsite Treated Domestic Wastewater Discharge*, due to wastewater/greywater discharge exceeding 2m³ per day.

Overall, the application has been assessed as a **Discretionary activity**.

A TIA and Stormwater Management Report, along with all relevant written approvals, have been provided in support of the proposal.

Based on the assessment of effects above, it is concluded that any potential adverse effects on the existing environment and potentially affected parties would be no more than minor and can be managed in terms of appropriate conditions of consent.

It is therefore concluded that the proposal satisfies all matters the consent authority is required to assess, and that the application for resource consent can be granted on a non-notified basis.

AUTHOR



Nina Pivac

Director | BAppSC | PGDipPlan | Assoc. NZPI

Date: 14 July 2026

APPENDICES:

Appendix A – Site, Floor and Elevation Plans

Appendix B – Certificate of Title

Appendix C – Stormwater Management Report

Appendix D – Traffic Impact Assessment

Appendix E – NZTA Correspondence

Appendix F – TP58 Report

Appendix G – Approved Form 4 Letter (EBC/2026-300-00)

Appendix A – Site, Floor and Elevation Plans

commercial & industrial development – structural design – residential design – new homes – alterations – extensions – garages

Proposed New Commercial Building

For KFCS Farms Ltd

4238 Far North Road Pukenui
Lot 5, DP 107403

SH1 Houhora

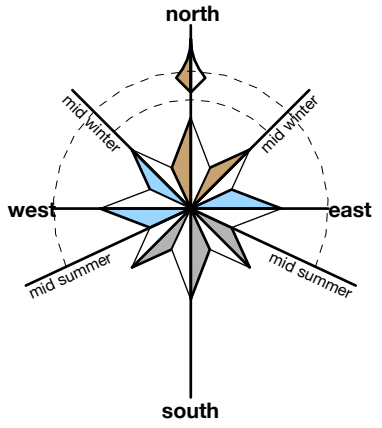
**As of 27 July 2022 The
Proposed District Plan requires
that this consent complies with
The Auckland Council Guidance
Document GD005 for Erosion
and Silt Control and Rule
EW-S3 Accidental Discovery
Protocol**



DRAWING SCHEDULE		
Sheet No.	Sheet Name	Rev. No.
1	SCHEDULE OF NOTES-1	None
2	SCHEDULE OF NOTES-2	None
3	SCHEDULE OF NOTES-3	None
A01	SITE PLAN	None
A02	ENLARGED SITE/PARKING PLAN	None
A03	FLOOR PLAN	None
A03.1	ACCESSIBLE WC-CLOSE UP	None
A03.2	ACCESSIBLE WC DETAILS	None
A03.3	ACCESSIBLE SIGNAGE	None
A04	WALL FRAMING PLAN	None
A05	FOUNDATION/SLAB PLAN	None
A05.1	ENGINEERS DRGS S01	None
A05.2	ENGINEERS DRGS S02	None
A05.3	ENGINEERS DRGS S03	None
A05.4	ENGINEERS DRGS S04	None
A05.5	ENGINEERS DRGS S05	None
A05.6	ENGINEERS DRGS S06	None
A05.7	ENGINEERS DRGS S07	None
A05.8	ENGINEERS DRGS S08	None
A05.9	ENGINEERS DRGS S09	None
A06	PLUMBING & DRAINAGE LAYOUT	None
A06.1	GREASE TRAP	None
A07	PLUMBING LAYOUT	None
A08	GULLY TRAP BEDDING DETAILS	None
A10	HANDBRAC DETAIL	None
A11	ROOF FRAMING PLAN	None
A12	LINTEL/STUD FIXINGS-CONCRETE	None
A13	TRUSS DESIGN	None
A14	TRUSS DESIGN	None
A15	TRUSS PS1	None
A47	TRUSS FIXING REPORT	None
A16	DESIGN IT	None
A17	DESIGN IT	None
A18	DESIGN IT	None
A19	DESIGN IT	None
A20	ROOF PLAN	None
A21	ELECTRICAL PLAN	None
A21.1	GENERAL LIGHTING PLAN	None
A21.2	LUMINAIRE SCHEDULE OF NOTES/TYPICAL DETAILS	None
A21.3	EMERGENCY LIGHTING PLAN	None
A21.4	PS1 EMERGENCY LIGHTING PLAN	None
A22	ELEVATIONS	None
A23	ELEVATIONS	None
A24	RISK MATRIX	None
A25	CROSS SECTION A-A	None
A26	ARCHITECTURAL DETAILS A-A	None
A27	CROSS SECTION B-B	None
A28	ARCHITECTURAL DETAILS B-B	None
A29	INTERTENACY WALL 60 FRR	None
A30	EXHAUST DUCTING - DRYERS	None
A31	LONG SECTION 1-1	None
A32	ARCHITECTURAL DETAILS 1-1	None
A33	GARAGE DOOR DETAIL	None
A34	CEILING HATCH DETAIL	None
A35	HEAD, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A36	SILL, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A37	JAMB, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A38	EXTERNAL CORNER, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A39	SOFFIT, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A40	BASE, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A41	METERBOX HEAD, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A42	METERBOX SILL, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A43	METERBOX JAMB, VERTICAL TRIMLINE /CAVITY CLADDING DETAIL	None
A44	CLADDING PENETRATION DETAIL	None
A45	WINDOW SCHEDULE	None
A46	DOOR SCHEDULE	None
A48	GENERAL PAINT SPEC	None
A49	CEILING PAINT SPEC	None
A50	FIRE RATED PAINT SPEC	None
B03	BATHROOM TILED DETAILS	None
M02	BOWMAC BOTTOM PLATE FIXING	None
M04	BEDDING AND BACKFILLING	None
M05	WATER FILTRATION DEVICE	None
M07	PIPE PENETRATION UNDER SLAB	None
M12	BOWMAC STUD/TOP PLATE FIXING	None
M13	MITEK LINTEL/STUD FIXINGS	None
M12.1	MITEK-OPTIONAL STUDLOCK LINTEL FIXINGS	None
M12.2	MITEK-OPTIONAL STUDLOCK LINTEL FIXINGS	None
M14	DEKTTITE DETAIL	None



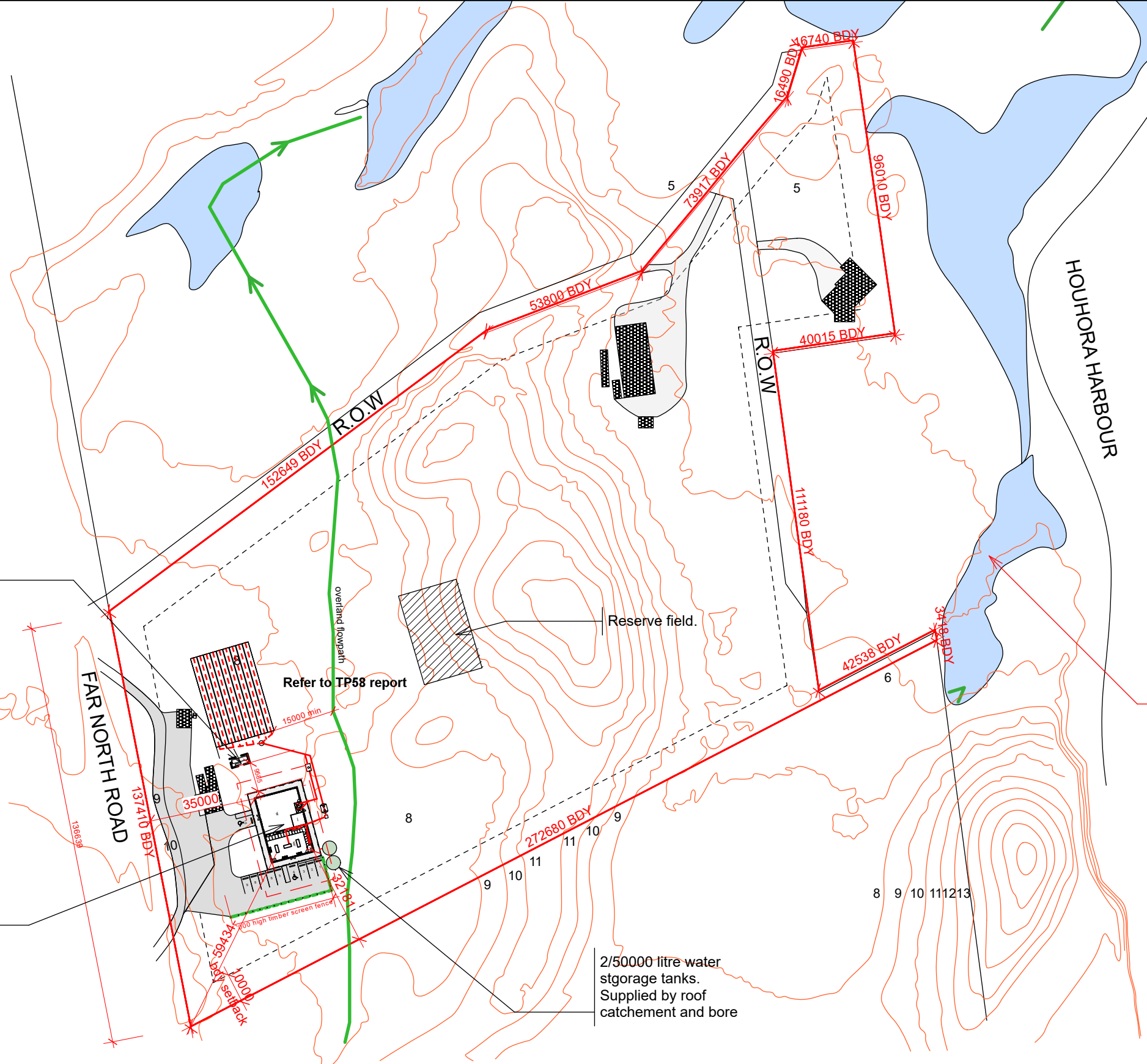
DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.



2000 LITRE LPG STORAGE TANK
(1000 KG)
with vaporiser rated $\geq 30\text{kg/hr}$.
Design/Installation to AS/NZS
5601. To be sited 3000 min from
any building.
2000 Anti Climb Security fence to
contain vessel

The base that will support the LPG
tank will be of reinforced concrete
with a continuous perimeter footing
200w x 600d reinforced with 2/D12
rebars with R10 ties @ 600 crs. The
soils in this area are well drained
sand. The final design of the tank
support will be supplied by the
installer to council along with any
other required producers statement
& this will be provide prior to any
installation work being carried out.

Proposed Building
Location.



SITE NOTES:
4238 FAR NORTH ROAD, PUKENUI

LEGAL DESCRIPTION
LOT 5
DP 107403
VALUATION NUMBER: 00011-50001
TOTAL LAND AREA: 40058.76 m2

SITE COVERAGE
EXISTING BUILDING FLOOR AREA: 586m2
EXISTING GRAVEL AREA: 1689m2
NEW IMPERMEABLE AREA-PARKING: 687m2
PROPOSED BUILDING FLOOR AREA: 299.6 m2
PROPOSED ROOF TOTAL AREA: 457.2 m2
EXISTING BUILDING FLOOR AREAS + PROPOSED
BUILDING FLOOR AREA: 886m2

TOTAL AREA OF IMPERMEABLE SURFACES: 3469.2
TOTAL % OF IMPERMEABLE SURFACES: <9%

FNDC ZONE GENERAL RESIDENTIAL
SETBACK TO BOUNDARIES 3 metres from road boundary
then 1.2 metres from any other boundary.

EARTHQUAKE ZONE 1
EXPOSURE **ZONE D**
CLIMATE ZONE 1
WIND REGION A
RAINFALL 90-100
WIND ZONE-**VERY HIGH**
SNOW ZONE NO
LEE ZONE NO

From NRC Flood
Maps.

As of 27 July 2022 The
Proposed District Plan requires
that this consent complies with
The Auckland Council Guidance
Document GD005 for Erosion
and Silt Control and Rule
EW-S3 Accidental Discovery
Protocol

All dimensions to be checked on site prior to commencement of work.
Work only to figured dimensions, in the event of a discrepancy contact the Designer.
Do not change any details without prior consent from the Designer.
Building Contractor to check all levels, dimensions, connections & manufacturers
specifications before beginning or manufacturing any work to ensure that all materials &
labour necessary to complete the project has been allowed for, whether inferred, drawn on
plans or not.
Liability will not be accepted by Designer for any materials or labour not shown on
drawings or required by council or during construction.

CLIENT:	FIONA & SHAUN KEHELY			PROJECT #	FSK-0725	
PROJECT:	SH10 PUKENUI			DATE #	22/09/2025	
DWG	SITE PLAN			SCALE @ A3	1:1500	
				DRAWN	KB/TB/DB	
				CHKD	KB/TB/DB	



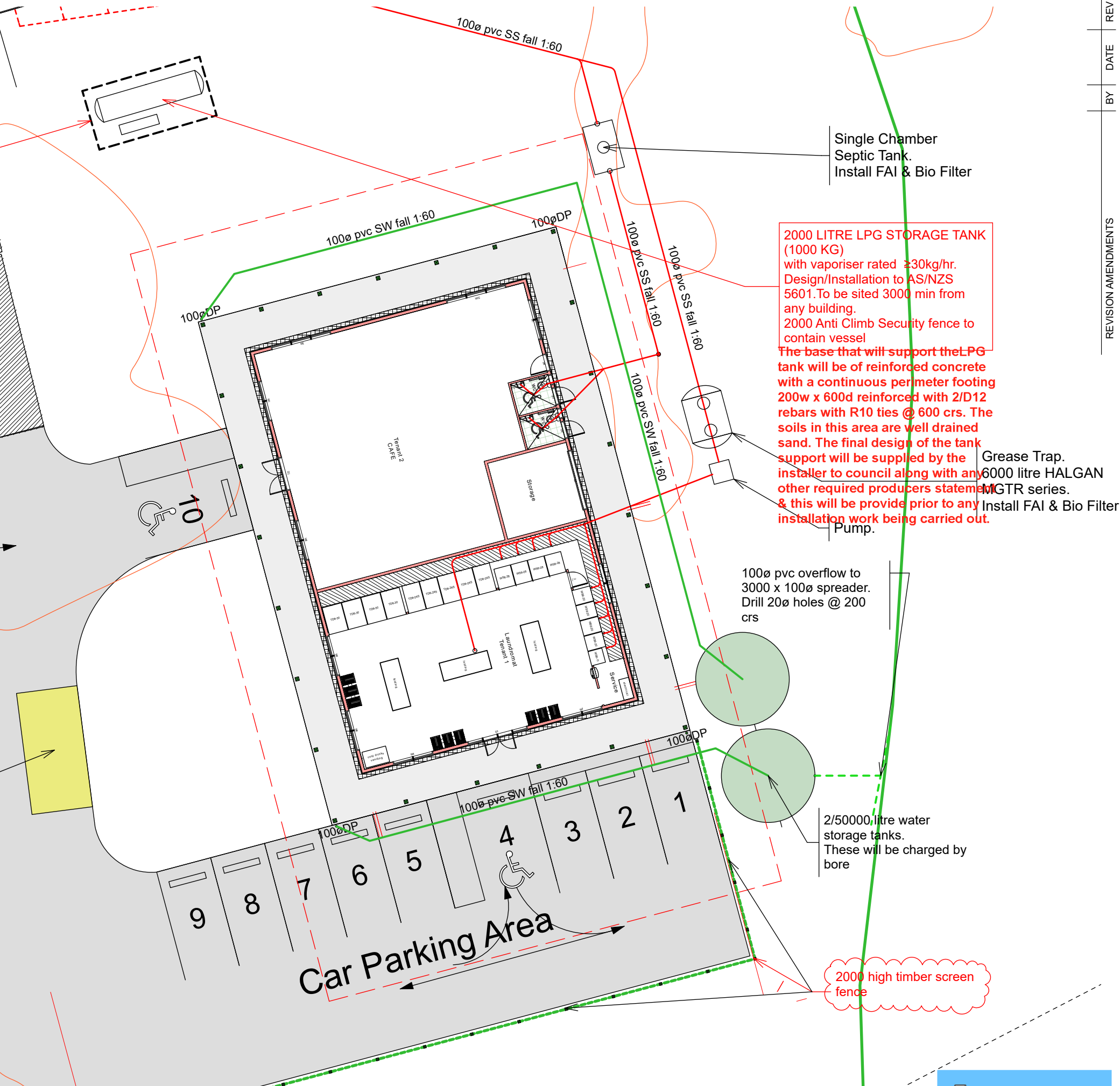
REVISION AMENDMENTS	BY	DATE	REV
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DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

FNDC - Approved Building Consent Document - EBC-2026-300-0 - Pg 6 of 74 - 02/12/2025 - NZBTC

2.5 Explicit Compliance Statement – F8.2(c)
Compliance with NZBC F8.2(c) – Bulk LPG Tank
Hazchem / Flammable Signage
Signs are provided in accordance with F8/AS1 section 7.1 (hazardous substances), HSNO Code of Practice 2-1 09-04 and HSW (Hazardous Substances) Regulations 2017 for bulk LPG installations. A Hazchem 2YE LPG sign (UN 1075) and associated flammable gas / no-ignition signs are mounted on the LPG tank compound fence at 1.5–2.0 m mounting height, oriented toward normal approach paths, and sized to ensure legibility from at least 10 m. Additional Hazchem signage is provided at the main site entrance. The signage is clearly visible, readily understandable, and encountered before people reach the LPG tank or associated hazardous area, thereby satisfying NZBC F8.3.1 and F8.3.2 and demonstrating compliance with F8.2(c) for identification of potential hazards.

6000 x 3000 Loading Zone
for a light delivery van

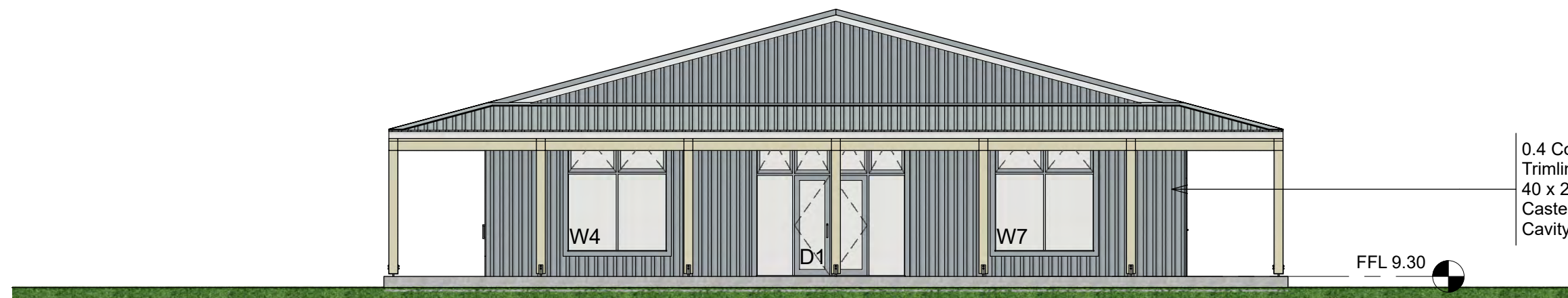


0.55 Colorsteel 175 box gutter with galv. external brackets @ 300 crs.



North Wall	Risk Severity				Sub Totals
	Low	Medium	High	Very High	
Wind Zone	0	0	1	2	2
Number of Storeys	0	1	2	4	0
Roof/Wall junctions	0	1	3	5	0
Eave width	0	1	2	5	0
Envelope complexity	0	1	3	6	0
Decks	0	2	4	6	0
				Total Risk Factor	2

A	NORTH
WALL	ELEVATION



East Wall	Risk Severity				Sub Totals
	Low	Medium	High	Very High	
Wind Zone	0	0	1	2	2
Number of Storeys	0	1	2	4	0
Roof/Wall junctions	0	1	3	5	5
Eave width	0	1	2	5	5
Envelope complexity	0	1	3	6	0
Decks	0	2	4	6	0
				Total Risk Factor	12

B	EAST
WALL	ELEVATION

CLIENT:	FIONA & SHAUN KEHELY		PROJECT #	FSK-0725
PROJECT:	SH10 PUKENUI	DATE #	22/09/2025	DWG #
		SCALE @ A3	1:100	
DWG	ELEVATIONS	DRAWN	KB/TB/DB	
		CHKD	KB/TB/DB	A22





VERY HIGH WIND ZONE

0.4 Colorsteel Trimline
ALTIMATE longrun
roofing over COVERTEK
407 & safety netting.

0.55 Colorsteel 175 box
gutter with galv. external
brackets @ 300 crs.

REVISION AMENDMENTS

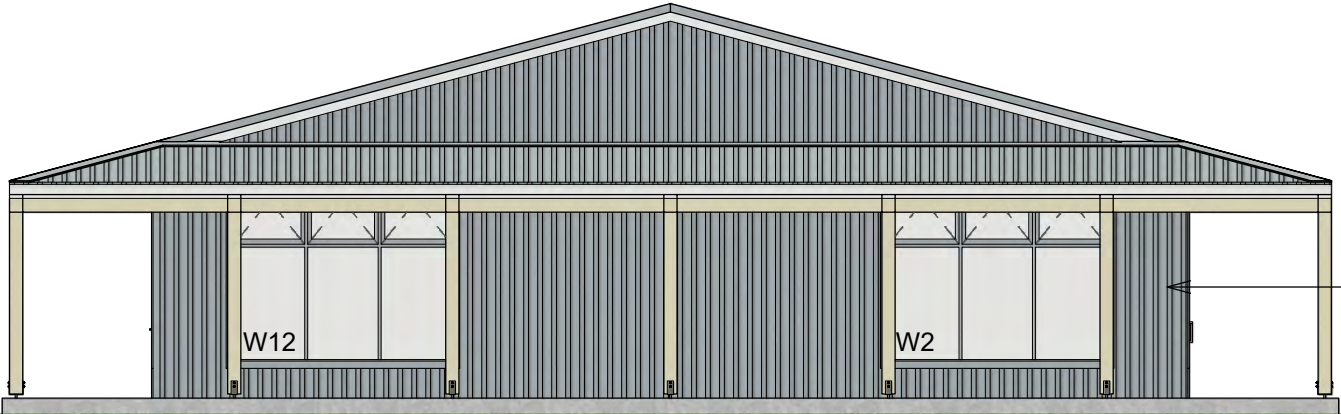
DATE

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REV

South Wall	Risk Severity				Sub Totals	
	Low	Medium	High	Very High		
Wind Zone	0	0	1		2	2
Number of Storeys	0	1	2		4	0
Roof/Wall junctions	0	1	3		5	0
Eave width	0	1	2		5	0
Envelope complexity	0	1	3		6	0
Decks	0	2	4		6	0
				Total Risk Factor		2

C SOUTH
WALL ELEVATION



0.4 Colorsteel ALTIMATE
Trimline Vertical Cladding over
40 x 20 H3.1 Horizontal
Castellated
Cavity Batten 750 max crs.

West Wall	Risk Severity				Sub Totals	
	Low	Medium	High	Very High		
Wind Zone	0	0	1		2	2
Number of Storeys	0	1	2		4	0
Roof/Wall junctions	0	1	3		5	5
Eave width	0	1	2		5	5
Envelope complexity	0	1	3		6	0
Decks	0	2	4		6	0
				Total Risk Factor		12

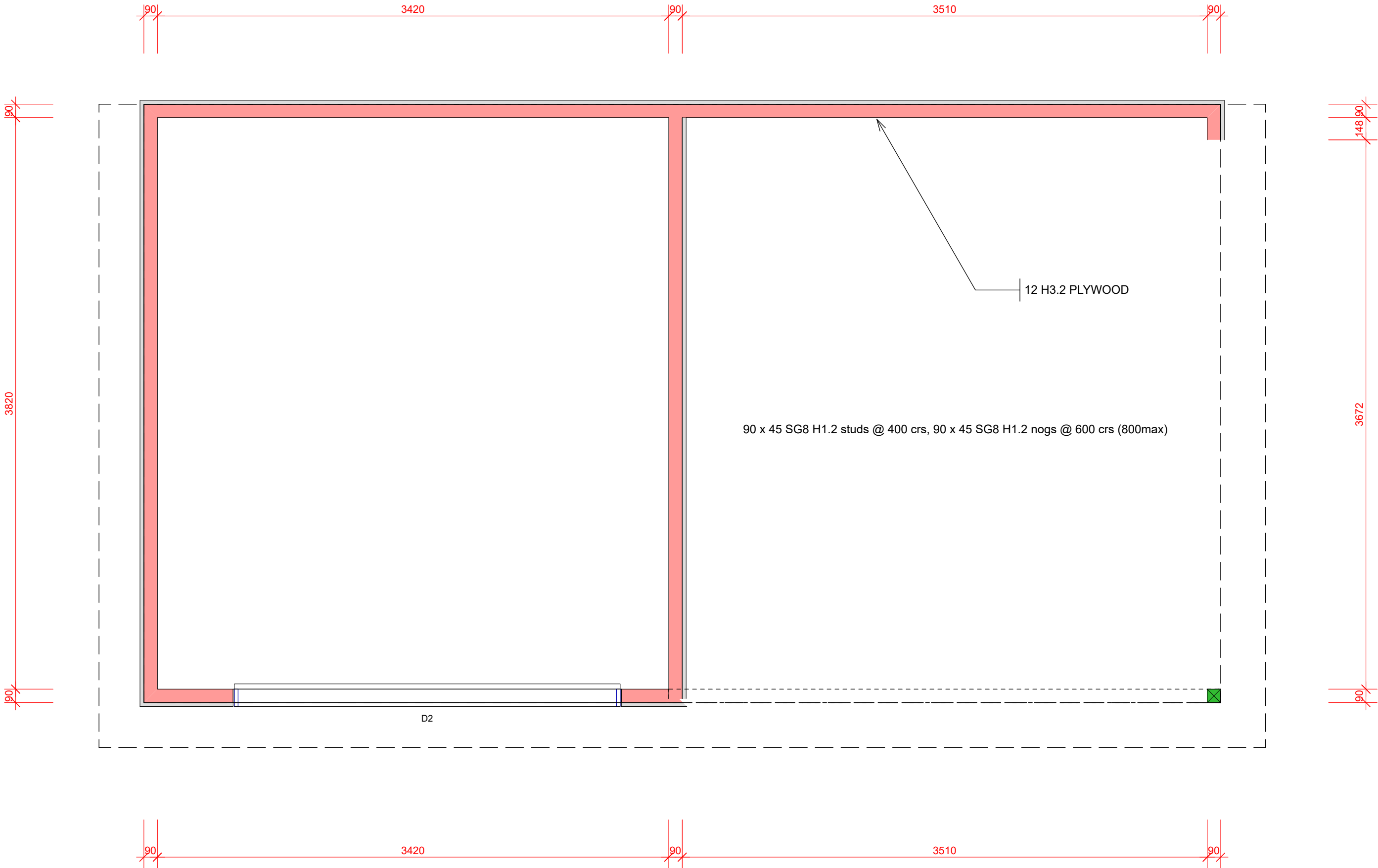
D WEST
WALL ELEVATION

CLIENT:	FIONA & SHAUN KEHELY	PROJECT #	FSK-0725
PROJECT:	SH10 PUKENUI	DATE #	22/09/2025
DWG	ELEVATIONS	SCALE @ A3	1:100
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	

A23



DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.



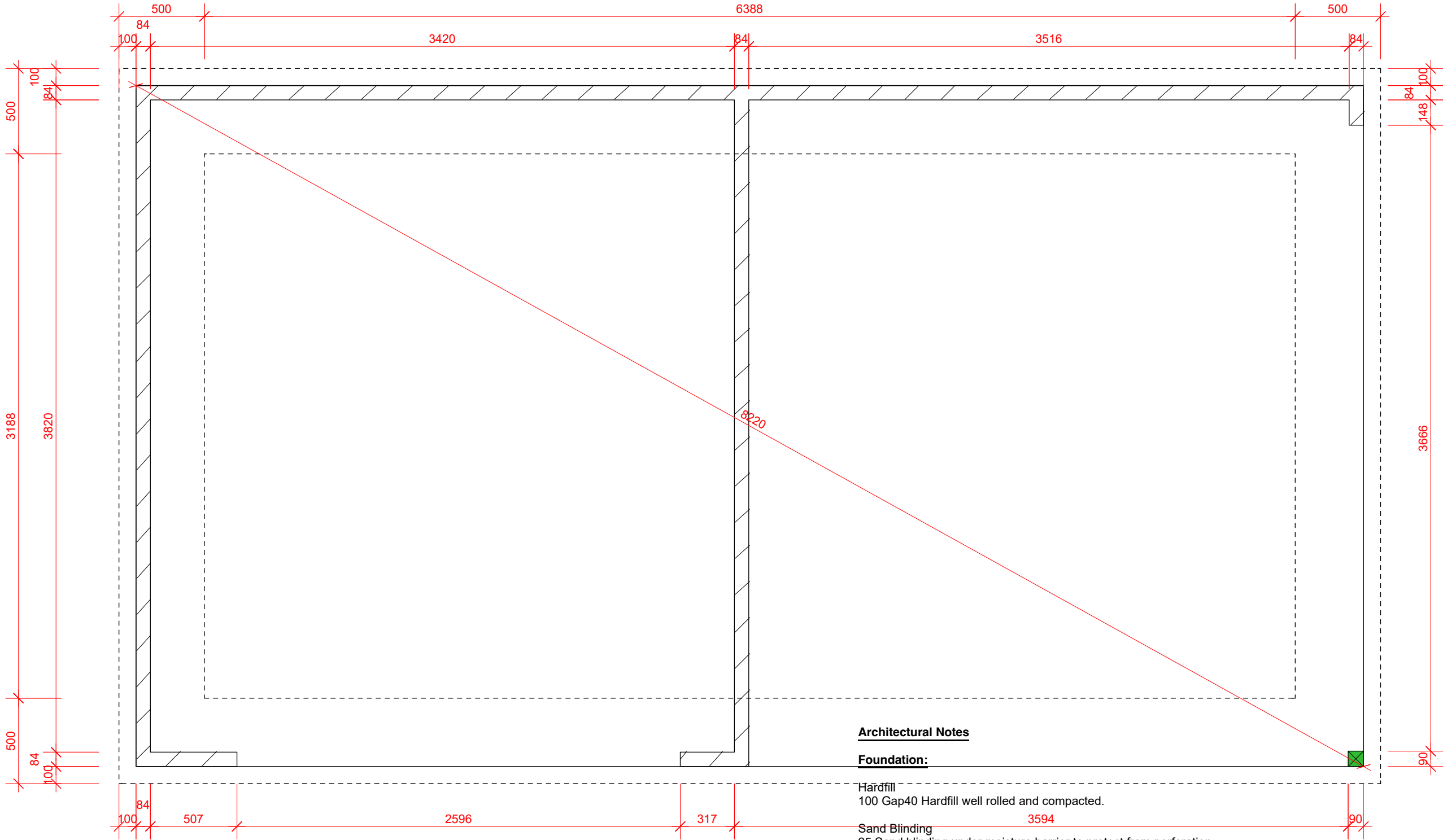
FLOOR PLAN NOTES
Contractor is to check all dimensions on site before commencing work.
Confirm kitchen layout with owner & kitchen manufacturer before commencing pipework.
All dimensions to timber framing not finished room sizes.
All framing & bottom plates to be H1.2 treated unless specified otherwise.
All structural timber has been designed using SG8 timber unless otherwise specified.
See foundation plan for loaded bearings walls.

CLIENT: KEHLEY		PROJECT # LPG-SHE D	
PROJECT: PUKENUI		DATE # 08/07/2025	DWG # A02
DWG FLOOR PLAN		SCALE @ A3 1:25	
		DRAWN KB/TB/DB	
		CHKD KB/TB/DB	



ISSUE NO.	DATE	DESCRIPTION	REVISION AMENDMENTS	BY	DATE	REV
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DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.



Architectural Notes

Foundation:

- Hardfill**
100 Gap40 Hardfill well rolled and compacted.
- Sand Blinding**
25 Sand blinding under moisture barrier to protect from perforation.
- Moisture Barrier**
0.25 polyethelene moisture barrier, lap 200 and tape seams continously with 50 polyethelene tape, tape all cuts and penetrations. Use THERMATHENE Black..
- Concrete/Mesh**
100 concrete floor slab with SE62 mesh. 30 top cover. Conc strength to be 25MPa.
- Saw Cuts**
25 x 3 deep saw cuts @ 5000 crs max.
- Connections**
50 x 50 x 3 Flat washers to all concealed timber faces, 50 x 50 x 3 SS flat washers to all exposed timber faces.

NOTE:
1. THE SITE SUITABILITY REPORT IS BASED OF A MAXIMUM OF 4 SCALA-PENETROMETER TEST SITES.
2. ALL PILE FOOTINGS/FOUNDATIONS ARE TO BE EXCAVATED TO THE DEPTHS AS DIMENSIONED OR NOTED ON THE FOUNDATION PLAN AND DETAILS.
3. THEY SHOULD BE AT LEAST 450mm INTO "GOOD GROUND" AS DETERMINED IN NZS3604:2011.
4. IF FOR ANY REASON DURING PILE/FOOTING EXCAVATION SOFT GROUND IS OBSERVED/ENCOUNTERED THEN THE DESIGNER SHOULD IMMEDIATELY BE CONTACTED PRIOR TO ANY FURTHER PILE EXCAVATION SO THAT FURTHER INVESTIGATION CAN BE CARRIED OUT AND THIS MAY MEAN THAT A REGISTERED STRUCTURAL ENGINEER WILL BE REQUIRED TO BECOME INVOLVED.
5. THE SITE SUITABILITY REPORT IS A GENERAL ASSESSMENT (BASED ON NZS3604:2011) OF THE EXPECTATIONS OF WHERE GOOD GROUND SHOULD BE ENCOUNTERED, HOWEVER THERE COULD BE PILE EXCAVATIONS THAT MAY NEED BE DEEPER TO ENCOUNTER GOOD GROUND AS PER NUMBER 4. ABOVE.

Beard Online Architecture 106 Arawhata Road Kaingaroa 0483 E: beardarc48@gmail.com
D M Beard Structural LTD Doug: 022 454 9863 Tyler: 021 247 7232 Kirsty: 022 167 9900

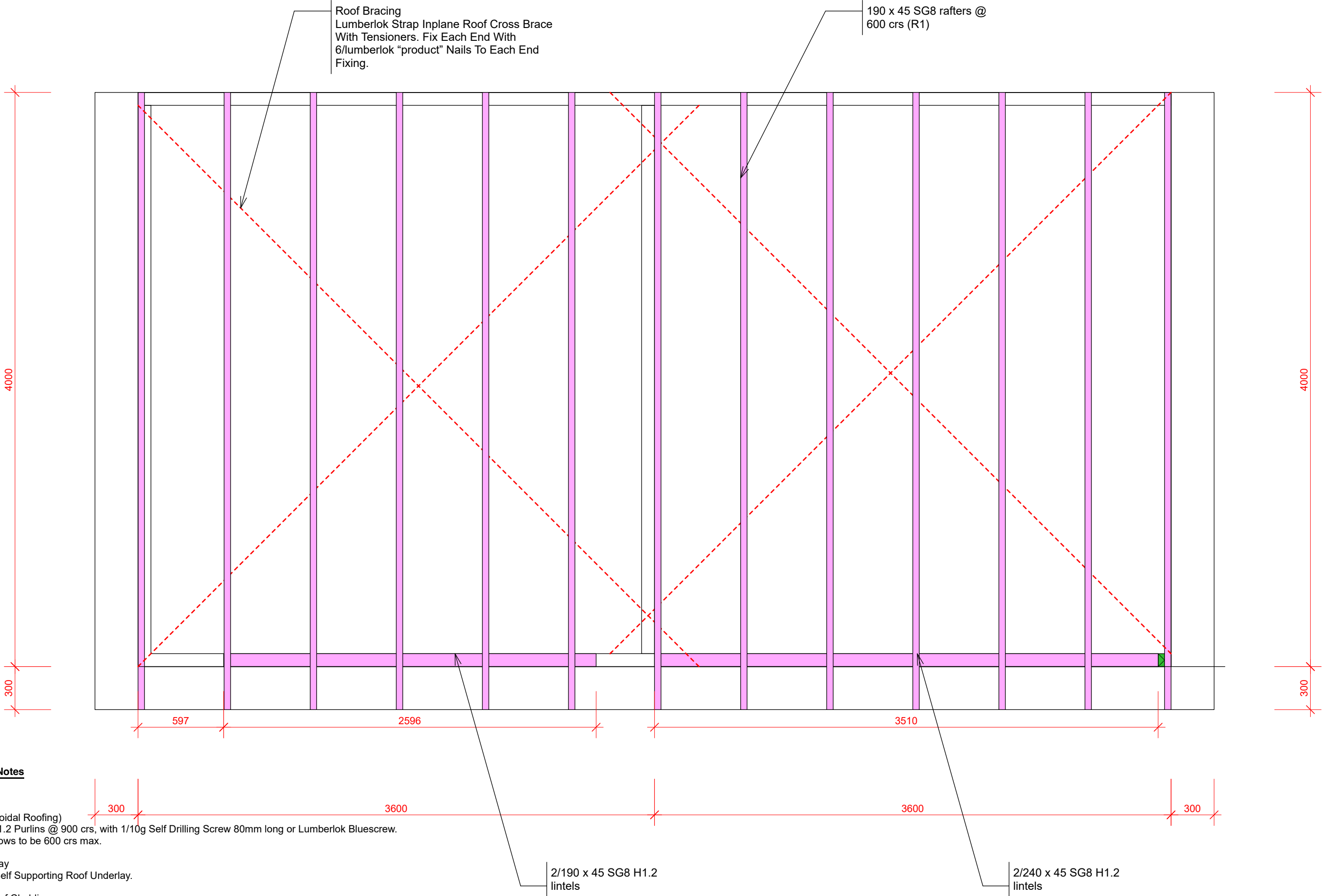
NOTE ALL DIMENSION MUST BE CONFIRMED ON SITE PRIOR TO SETTING OUT PILES

CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	FOUNDATION/SLAB	SCALE @ A3	1:25
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A03



ISSUE NO.	DATE	DESCRIPTION	REVISION AMENDMENTS	BY	DATE	REV
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DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.



Architectural Notes

- Roof:**
- Purlins (Trapezoidal Roofing)
70 x 45 SG8 H1.2 Purlins @ 900 crs, with 1/10g Self Drilling Screw 80mm long or Lumberlok Bluescrew.
Top & Bottom rows to be 600 crs max.
 - Roofing Underlay
Covertex 407 Self Supporting Roof Underlay.
 - Trapezoidal Roof Cladding
0.4 Coloursteel Trimline MAXAM Roofing.
 - Roof Bracing
Lumberlok Strap Inplane Roof Cross Brace With Tensioners. Fix Each End With 6/lumberlok "product" Nails To Each End Fixing.

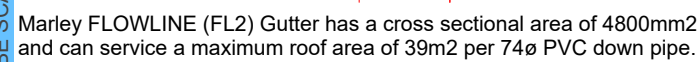
CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	ROOF FRAMING PLAN	SCALE @ A3	1:25
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A05



ISSUE NO.	DATE	DESCRIPTION	REVISION AMENDMENTS	BY	DATE	REV
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Trapezoidal Roof Cladding

0.4 Coloursteel MAXAM Trimline Roofing



Spouting Capacity:

Beard Online Architecture 106 Arawhata Road Kaingaroa 0483 E: beardarc48@gmail.com
D M Beard Structural LTD Doug: 022 454 9863 Tyler: 021 247 7232 Kirsty: 022 167 9900

DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

Architectural Notes

Foundation:

Hardfill.
100 Gap40 Hardfill well rolled and compacted.

Sand Blinding.
25 Sand Blinding under Moisture Barrier to protect from perforation.

Moisture Barrier.
0.25 Polyethelene Moisture Barrier, Lap 200 and tape seams continuously with 50 Polyethelene Tape, tape all cuts and penetrations. Use Thermathene Black.

Concrete/Mesh.
100 Concrete Floor Slab with SE62 Mesh. 30 Top Cover. Concrete strength to be 25mpa.

Saw Cuts.
25 x 3 deep Saw Cuts @ 5000 crs max.

Walls:

Bottom Plate (Concrete).
90 x 45 SG8 H1.2 Bottom Plate On DPM, Bowmac Blue Head Screw Bolt (M10 X 140) Embedded 95 @ 600 crs Or
90 x 45 SG8 H1.2 Bottom Plate On DPM, (M12 x 120) Truebolts Embed 75, 55 from Slab Edge or Bowmac M12 X 150 Screw Bolts @ 600 crs, Embed 95, 55 from Slab Edge.

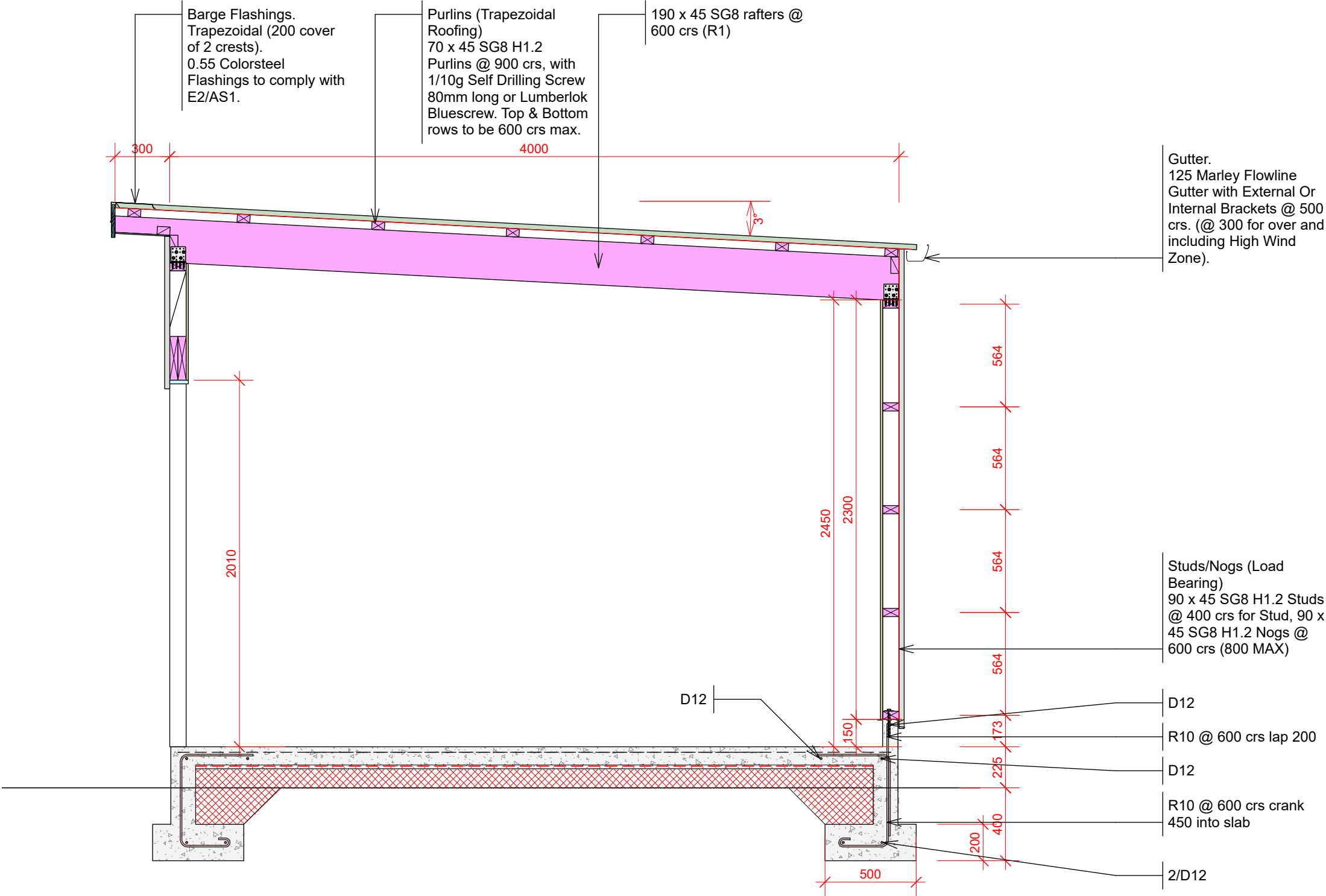
Studs/Nogs (Load Bearing)
90 x 45 SG8 H1.2 Studs @ 400 crs for Stud lengths up to 2400, 90 x 45 SG8 H1.2 Nogs @ 800 crs.

Building Underlay.
BAYOWRAP Building Wrap.

Roofing Underlay
Covertek 407 Self Supporting Roof Underlay.

Roof Envelope:

Barge Flashings.
Trapezoidal (200 cover of 2 crests).
0.55 Colorsteel Flashings to comply with E2/AS1.



A-A Cross Section
000

CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	CROSS SECTION A-A	SCALE @ A3	1:5
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A09



REVISION AMENDMENTS

DESCRIPTION

DATE

ISSUE NO.

BY

DATE

REV

DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

Architectural Notes

Foundation:

Hardfill.
100 Gap40 Hardfill well rolled and compacted.

Sand Blinding.
25 Sand Blinding under Moisture Barrier to protect from perforation.

Moisture Barrier.
0.25 Polyethelene Moisture Barrier, Lap 200 and tape seams continuously with 50 Polyethelene Tape, tape all cuts and penetrations. Use Thermathene Black.

Concrete/Mesh.
100 Concrete Floor Slab with SE62 Mesh. 30 Top Cover. Concrete strength to be 25mpa.

Saw Cuts.
25 x 3 deep Saw Cuts @ 5000 crs max.

Walls:

Bottom Plate (Concrete).
90 x 45 SG8 H1.2 Bottom Plate On DPM, Bowmac Blue Head Screw Bolt (M10 X 140) Embedded 95 @ 600 crs Or
90 x 45 SG8 H1.2 Bottom Plate On DPM, (M12 x 120) Truebolts Embed 75, 55 from Slab Edge or Bowmac M12 X 150 Screw Bolts @ 600 crs, Embed 95, 55 from Slab Edge.

Studs/Nogs (Load Bearing)
90 x 45 SG8 H1.2 Studs @ 400 crs for Stud lengths up to 2400, 90 x 45 SG8 H1.2 Nogs @ 800 crs.

Building Underlay.
BAYOWRAP Building Wrap.

Roof:

Roofing Underlay
Covertek 407 Self Supporting Roof Underlay.

Roof Envelope:

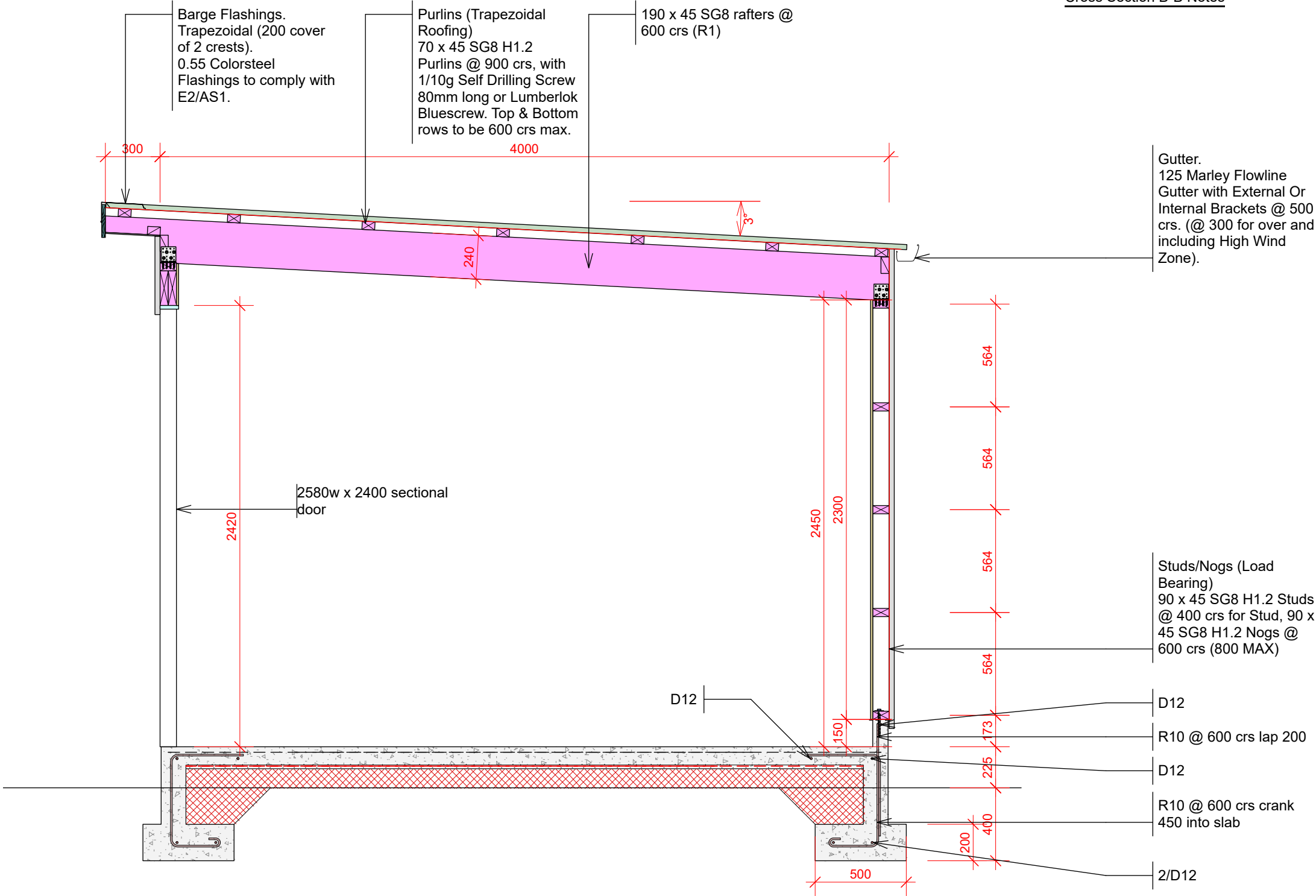
Barge Flashings.
Trapezoidal (200 cover of 2 crests).
0.55 Colorsteel Flashings to comply with E2/AS1.

FOR LOADED DIMENSIONS AFFECTING LINTELS, BEARERS & FLOOR JOISTS-REFER TO NZS3604:2011 SECTION 1

TYPICAL NOTE:

All piles are to go through existing fill and into good ground.

Cross Section B-B Notes



B-B Cross Section
000

CLIENT:	KEHLEY	PROJECT #	LPG-SHE
PROJECT:	PUKENUI	DATE #	08/07/2025
DWG	CROSS SECTION B-B	SCALE @ A3	1:5
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A10



REV
DATE
BY
REVISION AMENDMENTS

DESCRIPTION

DATE
ISSUE NO.

Appendix B – Certificate of Title



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD**

**Guaranteed Search Copy issued under Section 60 of the Land
Transfer Act 2017**




R.W. Muir
Registrar-General
of Land

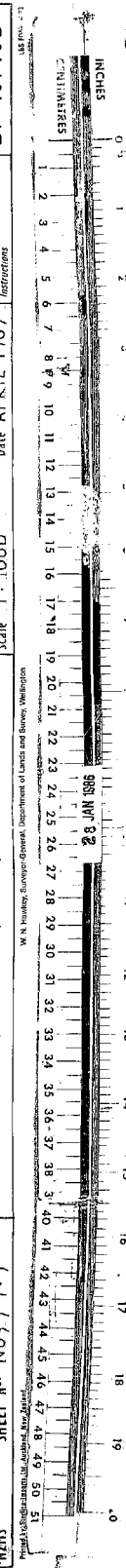
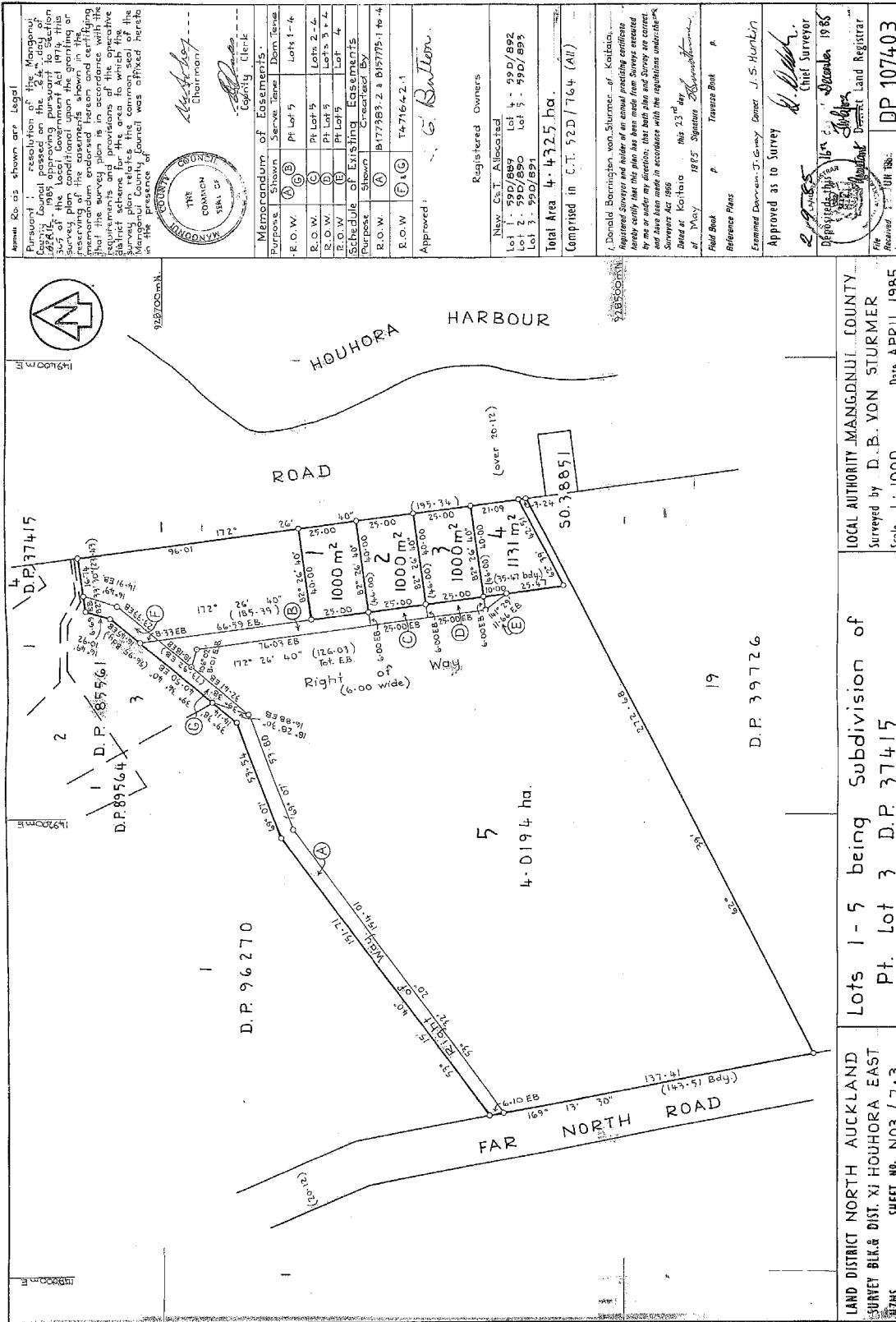
Identifier **NA59D/893**
Land Registration District **North Auckland**
Date Issued 16 December 1985

Prior References
NA52D/764

Estate Fee Simple
Area 4.0194 hectares more or less
Legal Description Lot 5 Deposited Plan 107403
Registered Owners
KFCS Farms Limited

Interests

Subject to rights of way over parts marked F and G on DP 107403 created by Transfer 471642.1
Subject to a right of way over parts marked F and G on DP 107403 created by Transfer 522807.1
Subject to rights of way over part marked A on DP 107403 specified in Easement Certificate B177383.1
The easements specified in Easement Certificate B177383.1 are subject to Section 309 (1) (a) Local Government Act 1974
Subject to rights of way over parts marked A, B, C, D, E and G on DP 107403 specified in Easement Certificate B492357.3 - 16.12.1985 at 11.23 am
The easements specified in Easement Certificate B492357.3 are subject to Section 309 (1) (a) Local Government Act 1974
D574558.1 Gazette Notice (N.Z Gazette No.46 page 1021) declaring the adjoining State Highway No.1F to be a limited access road - 25.1.2001 at 12.09 pm
D575052.1 Notice pursuant to Section 91 Transit New Zealand Act 1989 - 25.1.2001 at 3.31 pm
Subject to a right to convey electricity easement (in gross) over part marked B on DP 426402 in favour of Top Energy Limited created by Easement Instrument 8467291.1 - 20.7.2010 at 4:01 pm



Appendix C – Stormwater Management Report

SITE 4238 Far North Road, Pukenui
LEGAL DESCRIPTION Lot 5 DP 107403
PROJECT Proposed Building & Parking
CLIENT Fiona & Shaun Kehely
REFERENCE NO. 145652
DOCUMENT Stormwater Mitigation Report
STATUS/REVISION No. 01
DATE OF ISSUE 28th April 2026

Report Prepared For	Email
Fiona & Shaun Kehely	Houhorahoneybees@gmail.com

Authored by	G.Brant (BE(Hons) Civil)	Civil Engineer	Gustavo@wjl.co.nz	
Reviewed & Approved by	B. Steenkamp (CPEng, BEng Civil, CMEngNZ, BSc (Geology))	Senior Civil Engineer	BenS@wjl.co.nz	

1. EXECUTIVE SUMMARY

The following table is intended to be a concise summary which must be read in conjunction with the relevant report sections as referenced herein.

Legal Description:	Lot 5 DP 107403
Site Area:	40,059m ²
Development Type:	Proposed Laundromat Building & Parking Area
Development Proposals Supplied:	Plan Set by Beard Architecture Ltd (Ref No: FSK-0725, dated: 22.09.2025)
District Plan Zone:	Coastal Residential Zone
Permitted Activity Coverage:	<u>1000m²</u>
Impermeable Coverage:	Post-Development Impermeable Areas Post-Development Total = 3,469.2m² or 8.7% of the site area Total Impermeable Area Increase = 1,144.2m²
Activity Status:	<u>Discretionary Activity</u> Attenuation is to be provided in accordance with the requirements outlined in Section 5 via the dual-purpose rainwater tank.
Proposed Laundromat Roof Attenuation:	Proposed Tanks – 3 x 25,000 litre Rainwater Tank (or approved equivalent) Dimensions – 3600mmØ x 2600mm high (or greater) 1% AEP Control Orifice – 43mmØ orifice; <u>located >560mm below the overflow outlet</u> Overflow – 100mmØ at the top of the tank
Existing Shed Roof Mitigation:	A proprietary guttering system is required to be installed to collect roof runoff from the existing shed and direct runoff via sealed pipes to the existing open drain to the northeast of the existing shed.
Hardstand Mitigation:	It is recommended to shape the proposed metal parking area to shed runoff to two minimum 200mm deep x 500mm wide grassed v-channel swales (minimum 0.5% grade) along the southern and eastern side of the proposed parking area. Each swale is to have a silt trap with a scruffy dome or grated inlet at a low point. Each silt trap is to be fitted with a 150mmØ outlet pipe (minimum 1% grade) directed runoff to the discharge point. Alternatively, the metal parking area can be shaped to shed to the existing overland flow path via even sheet flow, if unconcentrated flows are achievable and won't affect any structures. If the parking area is sealed, runoff shall be collected by appropriately positioned catchpits and conveyed via sealed pipes. The piped drainage shall discharge to a dispersal trench or similar device, allowing initial flows to be dispersed and partially treated prior to overflow as sheet flow across pasture. This provides passive mitigation and treatment before runoff enters the existing overland flow path. Catchpits shall include suitable sumps for sediment capture and shall be designed and installed in accordance with NZBC E1 Surface Water.

2. SCOPE OF WORK

Wilton Joubert Ltd. (WJL) was engaged by the client to produce an on-site stormwater mitigation assessment at the above site.

At the time of report writing, we have been supplied the following documents:

- Plan Set by Beard Architecture Ltd (Ref No: FSK-0725, dated: 22.09.2025)

Should any changes be made to the provided plans with stormwater management implications, WJL must be contacted for review.

3. SITE DESCRIPTION

The proposed development will be constructed within the following property, which is located off the eastern side of Far North Road, accessed 100m north of the northern Far North Road and Harbour View Road intersection:

- Legally described as Lot 5 DP 107403.



Figure 1: Aerial view with the subject property highlighted in cyan (from FNDC Regulator Map)

The surface area of the subject site is 40,059m² and is accessed at the northwestern and southwestern corners via a metal ROW from Far North Road.

Existing container shops are present within the western end of the property. A dwelling and a large shed are located within the eastern third of the property. Aside from the existing structures and metalled areas, the remaining ground cover consists predominantly of pasture, with trees concentrated around the southern boundary and to the west of the avocado orchard which covers the eastern edge of the property.

Topographically speaking, the property generally falls at gentle grades to the east and west from a high point within the centre of the property.

The Far North District Council (FNDC) GIS Water Services Map indicates that the property is not serviced by public stormwater, wastewater or potable water reticulation.

4. DEVELOPMENT PROPOSALS

The development proposal, obtained from the client, is to construct a laundromat building and parking area on-site as depicted in the plan set by Beard Architecture Ltd (Ref No: FSK-0725, dated: 22.09.2025).

The principal objective of this assessment is to provide an indicative stormwater disposal design which will manage runoff generated from the increased impermeable areas associated with the proposed development.

5. ASSESSMENT CRITERIA

Impermeable Areas

The calculations for the stormwater system for the development are based on a gross site area of 40,059m² and the below areas *extracted from the supplied plans*:

The total amount of impermeable area on-site, post-development, equates to 3,469.2m² or 8.7% of the site area. The total increase in impermeable area on-site, post-development, equates to 1,144.2m². Should any changes be made to the current proposal, the on-site stormwater mitigation design must be reviewed.

District Plan Rules

The site is zoned Coastal Residential. The following rules apply under the FNDC District Plan:

10.8.5.1.6 – **Permitted Activities – Stormwater Management** - The maximum proportion or amount of the gross site area covered by buildings and other impermeable surfaces shall be 50% or 1,000m², whichever is the lesser.

10.8.5.2.8 – **Restricted Discretionary Activities – Stormwater Management** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 60%, unless Low Impact Design has been used to reduce site impermeability and consent has been obtained from the Northland Regional Council for any stormwater discharge from any area of more than 1,000m².

The total proposed impermeable area exceeds 1,000m² and does not comply with Permitted Activity Rule (10.8.5.1.6) nor Restricted Discretionary Activity (10.8.5.2.8). Therefore, the proposal is considered a **Discretionary Activity**. Additional considerations for stormwater management as outlined in the FNDC District Plan Section 11.3 are required. A District Plan Assessment has been included in Section 8 of this report.

Design Requirements

The site is under the jurisdiction of the Far North District Council. The design has been completed in accordance with the recommendations and requirements contained within the Far North District Council Engineering Standards, the Far North District Council District Plan and Clause E1 of the New Zealand Building Code.

The northeastern portion of the site, including the existing dwelling and shed, is located immediately adjacent to Houhora Harbour within a coastal environment identified as being subject to coastal inundation (as mapped by the Northland Regional Council Natural Hazards Map). This part of the site is therefore effectively at the downstream extent of the contributing catchment, where receiving water levels are predominantly controlled by tidal influences rather than upstream runoff processes.

Given this context, attenuation of stormwater runoff from this portion of the site is not considered necessary. Any reduction or delay in peak flows achieved through on-site attenuation would have a negligible effect on downstream conditions, as discharge enters a tidally influenced receiving environment with substantial storage and conveyance capacity.

Furthermore, introducing attenuation in this location has the potential to alter the timing of runoff discharge relative to the wider catchment response. In a fully developed catchment, this could result in peak flows from the site coinciding with peak flows from upstream areas, thereby reducing any marginal benefit of attenuation and potentially contributing to localised increases in water levels.

On this basis, stormwater from the northeastern portion of the site can be appropriately managed via sheet flow or channel flow to the receiving coastal environment without attenuation, subject to appropriate erosion and sediment control measures. The existing channels and sheet flow will provide some pre-treatment prior to entering the tidal zone.

Given the above and in accordance with Table 4-1 of the Engineering Standards Flood Control will be provided for the proposed impermeable areas in excess of the permitted activity threshold, excluding the existing dwelling and shed roof areas.

Provided that the recommendations within this report are adhered to, the effects of stormwater runoff resulting from the unattenuated existing / proposed impermeable areas (1,636m² total) are considered to have less than minor effects on the receiving environment, equivalent to conditions that would result from development proposals falling within the Permitted Activity coverage threshold.

The Type IA storm profile was utilised for attenuation calculations in accordance with TR-55. HydroCAD® software has been utilised in design for a 1% AEP rainfall value of 241mm with a 24-hour duration. Rainfall data was obtained from HIRDS and increased by 20% to account for climate change.

6. STORMWATER MITIGATION ASSESSMENT

To meet the requirements outlined in Section 5, the following must be provided:

Potable Water Supply

It is recommended that a rainwater tank is utilised to provide the proposed laundromat with a potable water supply. The tank type is at the discretion of the client. A proprietary guttering system is required to collect roof runoff from the proposed laundromat's roof. A first flush diverter and/or leaf filters may be installed in-line between the gutters and the tank inlet. The tank inlet level should be at least 600mm below the gutter inlet and any in-line filters. Any filters will require regular inspection and cleaning to ensure the effective operation of the system. The frequency of cleaning will depend on current and future plantings around the proposed roof area. Provision should be made by the homeowner for top-up of the tank via water tankers in periods of low rainfall.

Due to inadequate water quality concerns, runoff from hardstand areas should not be allowed to drain to the potable water tanks.

The upper section of the potable water tank is to act as a detention volume to achieve stormwater neutrality for the proposed / future impermeable areas in excess of the permitted activity threshold. The tank is to be fitted with a 100mmØ overflow outlet with a flow attenuation outlet as specified below.

Potable Tanks Detention Volume

As per the attached design calculations, the design elements of the detention volume are as follows:

Proposed Tanks	3 x 25,000L litre Rainwater Tanks (or approved equivalent)
Tank dimensions	3600mmØ (or greater) x 2600mm high (or greater)
Outlet orifice (1% AEP Control)	43mm diameter orifice ; located <u>>560mm below the overflow outlet</u> - 554mm water elevation - 16.9m³ storage
Overflow Outlet	100mm diameter ; located at the top of the tank

Discharge from the potable water / detention tanks must be transported via sealed pipes to the dispersal trench specified below. Refer to the appended Proposed Laundromat & Parking Area Site Plan (145652-C200), Tank Detail (145652-C210) and calculation set for clarification.

The tank must be installed in accordance with the tank suppliers' details and specifications. Levels are to be confirmed by the contractor on-site prior to construction. Adequate fall (minimum 1% grade) from the tank's outlet to the discharge point is required. If this is not achievable, WJL must be contacted for review of the design.

Stormwater Mitigation – Hardstand

It is recommended to shape the proposed metal parking area to shed runoff to two **minimum** 200mm deep x 500mm wide grassed v-channel swales (minimum 0.5% grade) along the southern and eastern side of the proposed parking area. Each swale is to have a silt trap with a scruffy dome or grated inlet at a low point. Each silt trap is to be fitted with a 150mmØ outlet pipe (minimum 1% grade) directing runoff to the dispersal trench specified below. Refer to the appended Proposed Laundromat & Parking Area Site Plan (145652-C200) and calculation set for clarification.

The parking area must be shaped to direct stormwater away from all structures, thereby preventing ponding or nuisance effects adjacent to buildings. Any concentrated flows must be adequately piped and managed.

The drainage line to the discharge point must have a minimum 2% grade downslope of the joint with the tank outlet line. Where this is not achievable, WJL must be contacted for review of the design.

The proposed grassed swales and silt traps provide basic pre-treatment for sediment-laden runoff from the metalled parking area prior to discharge. These devices are not intended to manage chemical spills, washdown water or other contaminated flows. No contaminated washwater shall be discharged to the stormwater system.

As an alternative to the swale and silt trap arrangement, the metalled parking area may be shaped to discharge as even sheet flow toward the existing overland flow path, provided runoff remains unconcentrated, does not cause erosion or scour, and does not create ponding or nuisance effects around existing or proposed structures. This arrangement shall be confirmed on-site by the contractor / designer prior to construction.

If the parking area is sealed, runoff shall be collected by appropriately positioned catchpits and conveyed via sealed pipes. The piped drainage shall discharge to a dispersal trench or similar device, allowing initial flows to be dispersed and partially treated prior to overflow as sheet flow across pasture. This provides passive mitigation and treatment before runoff enters the existing overland flow path. Catchpits shall include suitable sumps for sediment capture and shall be designed and installed in accordance with NZBC E1 Surface Water.

Stormwater Mitigation – Dispersal Trench

It is recommended that discharge from the potable water / detention tanks and hardstand silt traps / catchpits be directed via sealed pipes to an underground spreader pipe in dispersal trench, as shown in the appended Site Plan (145652-C200) and Dispersal Trench Detail (145652-C211). The trench is recommended to be 10m long, with novacoil snaked inside the trench to provide a total 20m long underground spreader pipe. The dispersal device must be installed parallel to the property's topography.

Stormwater Mitigation – Existing Shed

A proprietary guttering system is required to be installed to collect roof runoff from the existing shed and direct runoff via sealed pipes to the existing open drain to the northeast of the existing shed. First flush diverters or other adequate pre-treatment measures may be installed in-line between the gutters and the proposed discharge point. It is recommended that a minimum 1m length of minimum 150mm aggregate riprap be installed in the open drain downslope of the discharge point. Refer to the appended Existing Shed Site Plan (145652-C201) for clarification.

7. STORMWATER RUNOFF SUMMARY

Refer to the appended HydroCAD Calculation output.

Maximum Permitted Peak Flows – 1% AEP Storm Events + CCF

Surface	Area	Runoff CN	1% AEP Peak Flow Rate
Maximum Permitted Impermeable Area (includes existing roof areas)	1,636 m ²	98	48.32ℓ/s
Remaining Greenfields Area	1,833.2 m ²	74	

Post-Development Scenario – 1% AEP Storm Events + CCF

Surface	Area	Runoff CN	1% AEP Peak Flow Rate
Proposed laundromat building roof area via potable water / detention tanks	457.2 m ²	98	48.31ℓ/s
Proposed parking area to be 'over-mitigated'	687 m ²	98	
Existing metal areas to be 'over-mitigated'	1,689 m ²	89	
Existing roof areas (passive mitigation)	636 m ²	98	

Given the design parameters, peak flows resulting from the proposed development will be attenuated back to permitted activity threshold peak flows for the 1% AEP storm events, adjusted for climate change.

8. DISTRICT PLAN ASSESSMENT

As the proposed development is not compliant with Permitted Activity Rule 10.8.5.1.6, nor Restricted Discretionary Activity Rule 10.8.5.2.8, it is therefore regarded as a Discretionary Activity.

In assessing an application under this provision, the Council will exercise its discretion to review the following matters below, (a) through (m) of FNDCCP Section 11.3.

In respect of matters (a) through (m), we provide the following comments:

<i>(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;</i>	Total post-development impermeable areas amount to 3,469.2m ² , with an impermeable area increase of 1,144.2m ² post-development. Through tank attenuation, runoff is to be attenuated back to the permitted activity peak flow for the 1% AEP storm event, adjusted for climate change. Part of the existing impermeable areas discharge directly to Houhora Harbour and are therefore excluded from the attenuation calculations. Given the site's proximity to the coastal receiving environment, which is tidally influenced and located at the downstream extent of the contributing catchment, it is considered that attenuation of runoff from these areas would provide negligible hydraulic benefit and is not necessary.
<i>(b) the extent to which Low Impact Design principles have been used to reduce site impermeability;</i>	The proposal incorporates Low Impact Design principles by minimising new impermeable surfaces, retaining existing pervious areas, and utilising dual-purpose rainwater tanks for both water reuse and stormwater detention. These measures reduce runoff volumes and attenuate peak flows to levels consistent with the permitted activity threshold, representing an appropriate LID response for the site.
<i>(c) any cumulative effects on total catchment impermeability;</i>	Total post-development impermeable areas amount to 3,469.2m ² , representing an increase of 1,144.2m ² compared with the pre-development scenario. The proposed mitigation measures are intended to manage this increase and limit peak flows to the permitted activity threshold, based on our recommendations.
<i>(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;</i>	Runoff resulting from the existing / proposed impermeable areas is to be collected and directed to stormwater management devices and then to the existing OLFPs / channels. This should not worsen the ability of natural ground to absorb water in normal conditions.
<i>(e) the physical qualities of the soil type;</i>	SILT – moderate drainage. Soakage testing was done and found not to be sufficient for stormwater soakage disposal.
<i>(f) any adverse effects on the life supporting capacity of soils;</i>	Runoff resulting from the existing / proposed impermeable areas is to be collected and directed to stormwater management devices and then to the existing OLFPs / channels, mitigating the potential for contamination of surrounding soils and harm to the life supporting capacity of soils.
<i>(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;</i>	Runoff resulting from the existing / proposed impermeable areas is to be collected and directed to stormwater management devices and then to the existing OLFPs / channels, mitigating the potential for contamination of surrounding soils and harm to the life supporting capacity of soils.

<i>(h) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity;</i>	The existing / proposed driveway & parking area is necessary to provide access to the proposed laundromat/shops and is not considered excessive.
<i>(i) the extent to which land scaping and vegetation may reduce adverse effects of run-off;</i>	Existing vegetation and any plantings introduced by the owner during occupancy will aid in reducing surface water velocity and providing treatment. No specific landscaping scheme is proposed as part of the stormwater management system described herein.
<i>(j) any recognised standards promulgated by industry groups;</i>	Not applicable.
<i>k) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold;</i>	Through tank attenuation runoff resulting from the proposed development is to be attenuated back to permitted activity peak flows for the 1% AEP storm events, adjusted for climate change.
<i>(l) the extent to which the proposal has considered and provided for climate change;</i>	Rainfall data was obtained from HIRDS and increased by 20% to account for climate change.
<i>(m) the extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.</i>	Through tank attenuation runoff resulting from the proposed development is to be attenuated back to permitted activity peak flows for the 1% AEP storm events, adjusted for climate change.

9. NOTES

If any of the design specifications mentioned in the previous sections are altered or found to be different than what is described in this report, Wilton Joubert Ltd will be required to review this report. Indicative system details have been provided in the appendices of this report (145652-C200, 145652-C201, 145652-C210 & 145652-C211).

Care should be taken when constructing the discharge point to avoid any siphon or backflow effect within the stormwater system.

Subsequent to construction, a programme of regular inspection / maintenance of the system should be initiated by the Owner to ensure the continuance of effective function, and if necessary, the instigation of any maintenance required.

Wilton Joubert Ltd recommends that all contractors keep a photographic record of their work.

10. OPERATION & MAINTENANCE

The owner shall be responsible for the ongoing inspection and maintenance of the stormwater mitigation system to ensure it continues to operate as intended. This shall include periodic inspection and cleaning of roof gutters, leaf guards, first-flush devices, rainwater tanks, flow-control orifices, swales, silt traps, scruffy domes/grated inlets, riprap outlets and open drains to prevent blockage, sediment build-up, erosion or bypassing. The attenuation orifice shall be checked regularly to confirm it remains unobstructed, particularly following heavy rainfall events. Sediment accumulated within silt traps, swales or open drains shall be removed as required. Any damaged, blocked or eroded components shall be repaired promptly to maintain system performance and prevent adverse downstream effects.

11. LIMITATIONS

The recommendations and opinions contained in this report are based on information received and available from the client at the time of report writing.

This assignment only considers the primary stormwater system. Secondary stormwater system, Overland Flow Paths (OLFP), geotechnical requirements, vehicular access and the consideration of road/street water flooding is not included in this assessment.

The potable / reuse water supply arrangement, including treatment, filtration, pump sizing, backflow prevention and compliance with any applicable plumbing or public health requirements, is outside the scope of this stormwater report.

All drainage design is up to the connection point for each building face of any new structures/slabs; no internal building plumbing or layouts have been undertaken.

During construction, an engineer competent to judge whether the conditions are compatible with the assumptions made in this report should examine the site. In all circumstances, if variations occur which differ from that described or that are assumed to exist, then the matter should be referred to a suitably qualified and experienced engineer.

The performance behaviour outlined by this report is dependent on the construction activity and actions of the builder/contractor. Inappropriate actions during the construction phase may cause behaviour outside the limits given in this report.

This report has been prepared for the particular project described to us and no responsibility is accepted for the use of any part of this report in any other context or for any other purpose.

Wilton Joubert Ltd.



Gustavo Brant
Civil Engineer
BE(Hons)

REPORT ATTACHMENTS

- Proposed Laundromat & Parking Area Site Plan - C200 (1 sheet)
- Existing Shed Site Plan – C201 (1 sheet)
- Tank Detail – C210 (1 sheet)
- Dispersal Trench Detail – C211 (1 sheet)
- Calculation Set



- NOTES:**
1. SITE PLAN IS ONLY INDICATIVE FOR CONCEPT DESIGN. NO MEASUREMENTS MAY BE TAKEN FROM DRAWING.
 2. BACKGROUND INFORMATION, CONTOURS & LOCAL SERVICES PROVIDED BY THE CLIENT & EXTRACTED FROM LOCAL COUNCIL GIS.
 3. ALL DIMENSION AND LEVELS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND MUST BE UNDERTAKEN IN ACCORDANCE WITH THE HEALTH AND SAFETY AT WORK ACT 2015.
 5. IMPERVIOUS SURFACES FOR MITIGATION:
SITE AREA = 40,059m²
PROPOSED LAUNDROMAT ROOF COVER = 457.2m²
PROPOSED PARKING AREA = 687m²



WILTON JOUBERT
Consulting Engineers

Northland: 09 945 4188 Auckland: 09 527 0196
Christchurch: 021 824 063 Wanaka: 03 443 6209

www.wiltonjoubert.co.nz

ISSUE / REVISION			
No.	DATE	BY	DESCRIPTION
01	APR '26	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY: GMB

DRAWN BY: GMB

CHECKED BY: BGS

SURVEYED BY: N/A

SERVICES NOTE

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BUILDING CONSENT

DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

DRAWING TITLE:

PROPOSED LAUNDROMAT & PARKING AREA SITE PLAN

PROJECT DESCRIPTION:

STORMWATER MITIGATION REPORT

PROJECT TITLE:

**LOT 5 DP 107403
4238 FAR NORTH ROAD
PUKENUI
NORTHLAND**

ORIGINAL DRAWING SIZE: A3	OFFICE: OREWA
DRAWING SCALE: 1:250	CO-ORDINATE SYSTEM: NOT COORDINATED
DRAWING NUMBER: 145652-C200	ISSUE: 01
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- NOTES:**
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 2. BACKGROUND INFORMATION, CONTOURS & LOCAL SERVICES PROVIDED BY THE CLIENT & EXTRACTED FROM LOCAL COUNCIL GIS.
 3. ALL DIMENSION AND LEVELS TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE RELEVANT STANDARDS AND MUST BE UNDERTAKEN IN ACCORDANCE WITH THE HEALTH AND SAFETY AT WORK ACT 2015.
 5. IMPERVIOUS SURFACES FOR MITIGATION:
SITE AREA = 40,059m²
PROPOSED SHED ROOF COVER = 307.5m²

INDICATIVE GUTTERS & DOWNPIPES TO BE INSTALLED

EXISTING ROOF COVERAGE
~307.5m²

DRAINAGE LINE FROM GUTTERS TO OUTLET TO EXISTING OPEN DRAIN. 100Ø uPVC @ >1%

INDICATIVE OUTLET TO EXISTING OPEN DRAIN. EXISTING OPEN DRAIN TO BE LINED WITH MINIMUM 150mm AGGREGATE FOR 1m LENGTH DOWNSLOPE OF DISCHARGE POINT

EXISTING OPEN DRAIN



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ISSUE / REVISION			
No.	DATE	BY	DESCRIPTION
01	APR '26	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY:
GMB

DRAWN BY:
GMB

CHECKED BY:
BGS

SURVEYED BY:
N/A

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BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

DRAWING TITLE:
EXISTING SHED SITE PLAN

PROJECT DESCRIPTION:
STORMWATER MITIGATION REPORT

PROJECT TITLE:
**LOT 5 DP 107403
4238 FAR NORTH ROAD
PUKENUI
NORTHLAND**

ORIGINAL DRAWING SIZE: A3	OFFICE: OREWA
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1. NOT TO SCALE. DRAWN INDICATIVELY ONLY.
2. ALL LEVELS & DIMENSIONS TO BE CONFIRMED ON SITE & ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. TANK TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS & RELEVANT COUNCIL STANDARDS.
4. REGULAR INSPECTION & CLEANING IS REQUIRED TO ENSURE THE EFFECTIVE OPERATION OF THE SYSTEM.
5. ALL ORIFICE OUTLETS TO BE COVERED WITH STAINLESS STEEL OR NYLON MESH.
6. ASSUMED USE OF EXISTING 3 x 25,000 LITRE PLASTIC WATER TANKS OR APPROVED EQUIVALENT.

7. ALL OUTLETS / PENETRATIONS UNDER PRESSURE TO BE INSTALLED BY THE MANUFACTURER.
8. TANKS TO BE CONNECTED AT BASE VIA FLEXIBLE THREADED CONNECTIONS ONLY.

43mmØ ORIFICE PIPE TO BE FITTED WITH INSPECTION CAP. SEE NOTE 7

>560

1% AEP CONTROL

POTABLE WATER SUPPLY

>200mm SLUDGE ZONE

100Ø PVC BALANCING PIPE

1% AEP CONTROL

POTABLE WATER SUPPLY

100Ø PVC BALANCING PIPE

1% AEP CONTROL

POTABLE WATER SUPPLY

>2600

100Ø UPVC INLET PIPE

>600

INDICATIVE PUMP - ALTERNATIVE SOLUTIONS ACCEPTABLE

REMAIN 1V:1.5H AWAY OR IMPLEMENT ADDITIONAL SUPPORT TO ADJACENT STRUCTURES

PUMP EXTRACTING WATER ABOVE SLUDGE ZONE.

>3600

FLEXIBLE BASE BALANCING PIPES - MINIMUM 2 x 40mm FLEXIBLE THREADED CONNECTIONS. SEE NOTE 8

FLEXIBLE BASE BALANCING PIPES - MINIMUM 2 x 40mm FLEXIBLE THREADED CONNECTIONS. SEE NOTE 8

100mmØ OUTLET PIPE DISCHARGE TO BE DIRECTED TO PROPOSED DISPERSAL TRENCH. TANK BURIAL DEPTH & LOCATION TO ACCOMMODATE FOR GUTTER TO INLET CLEARANCE & FALL TO DISCHARGE POINT

01 TANK DETAIL

01 TANK DETAIL
C200 N.T.S

[illegible]

DESIGNED BY:	GMB
DRAWN BY:	GMB
CHECKED BY:	BGS
SURVEYED BY:	N/A

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BUILDING CONSENT

DESIGN / DRAWING SUBJECT TO ENGINEER'S APPROVAL

DRAWING TITLE:

TANK DETAIL

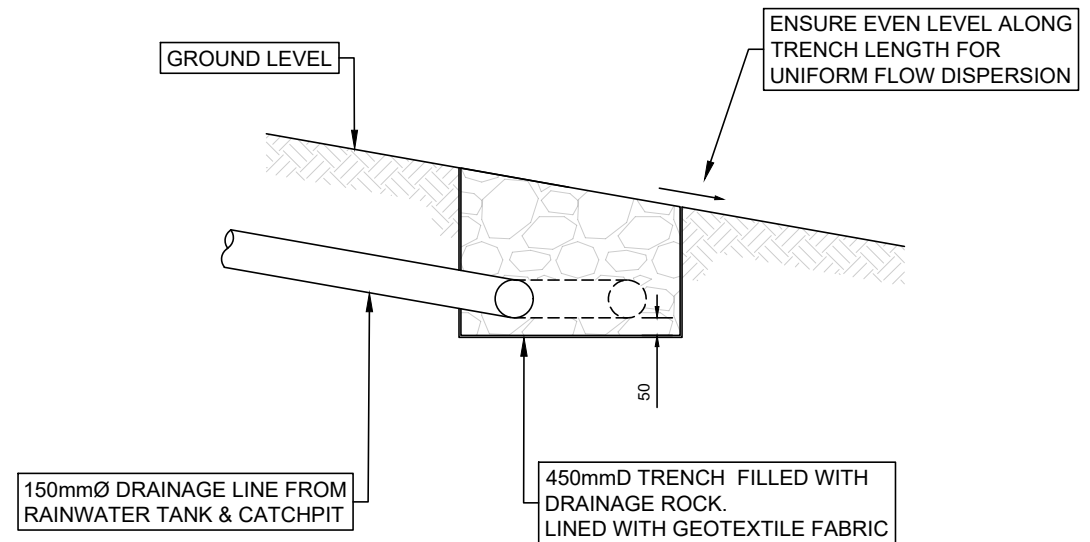
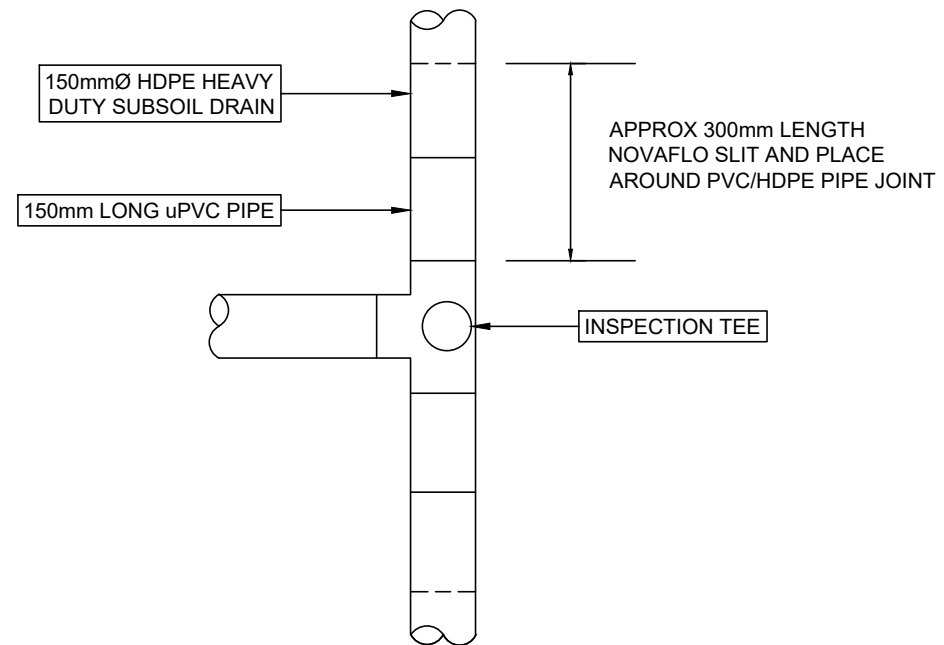
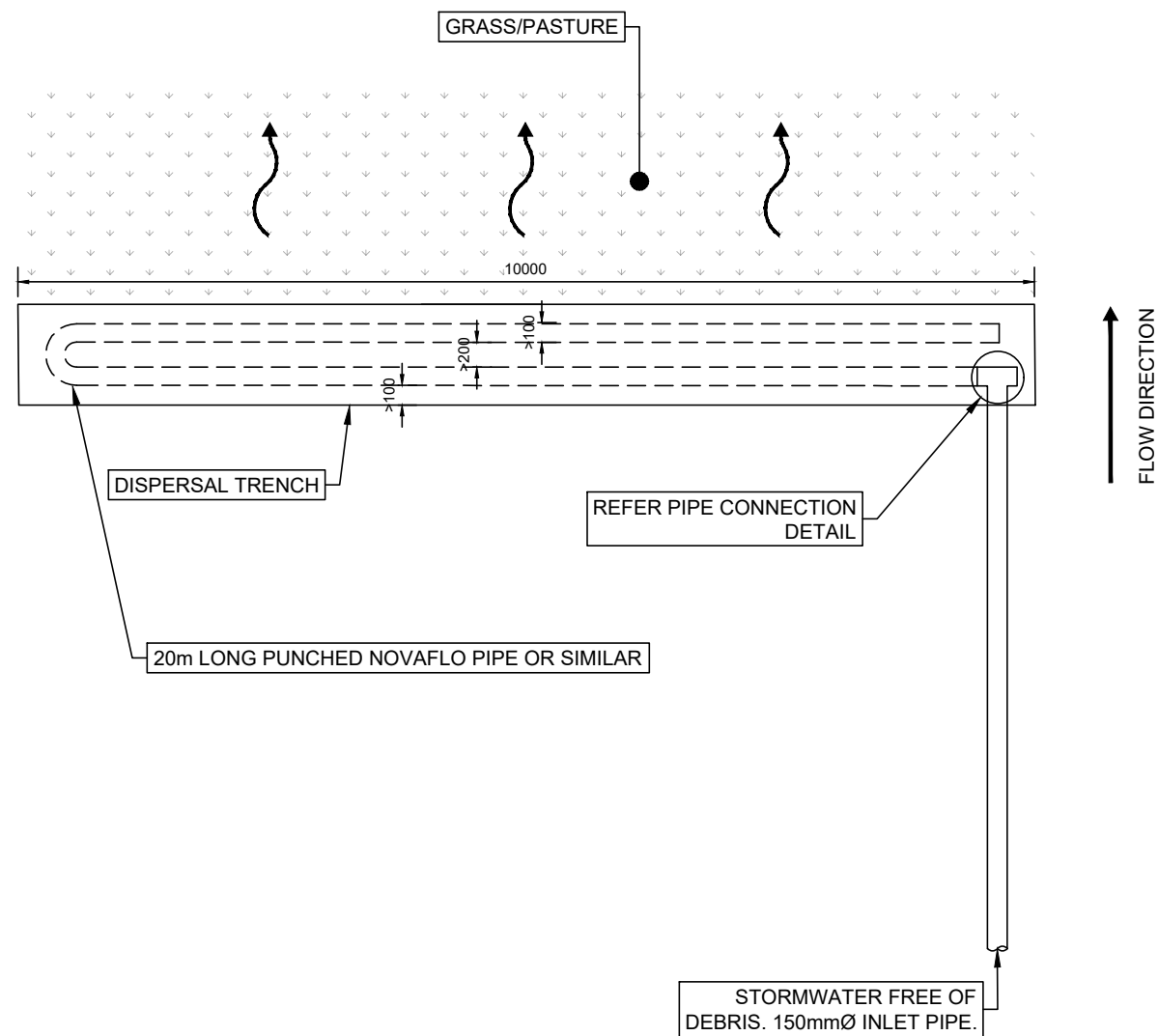
PROJECT DESCRIPTION:

STORMWATER MITIGATION REPORT

PROJECT TITLE:

**LOT 5 DP 107403
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NORTHLAND**

ORIGINAL DRAWING SIZE:		OFFICE:	
A3		OREWA	
DRAWING SCALE:		CO-ORDINATE SYSTEM:	
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02 **DISPERSAL TRENCH DETAIL**
C200 N.T.S

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01	APR '26	GMB	STORMWATER MITIGATION REPORT

DESIGNED BY:	GMB
DRAWN BY:	GMB
CHECKED BY:	BGS
SURVEYED BY:	N/A

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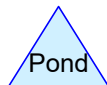
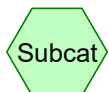
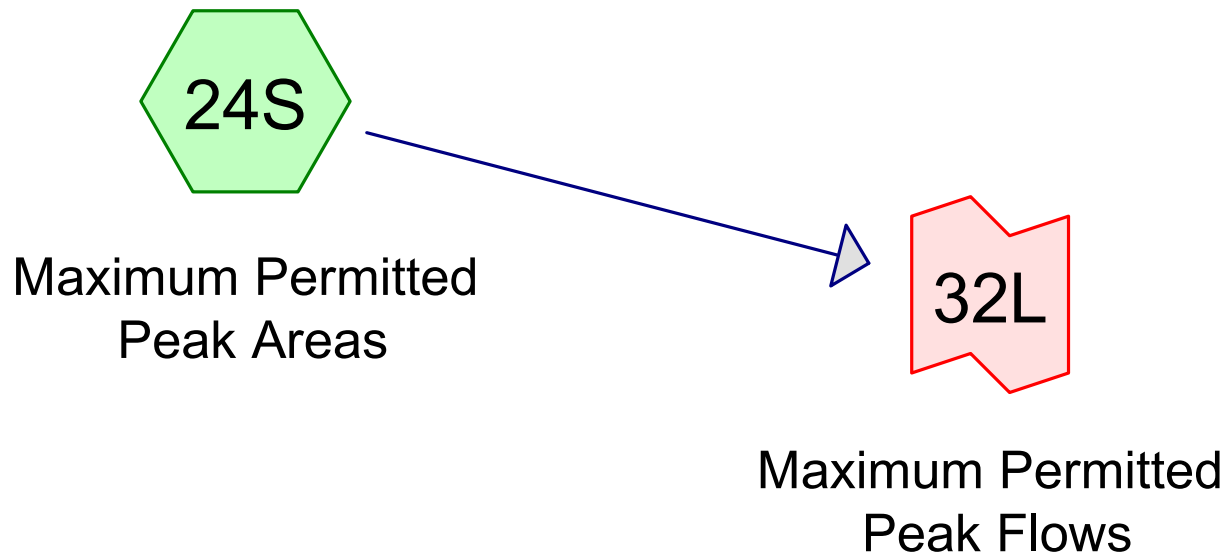
BUILDING CONSENT
DESIGN / DRAWING SUBJECT TO ENGINEERS APPROVAL

DRAWING TITLE:	DISPERSAL TRENCH DETAIL
PROJECT DESCRIPTION:	STORMWATER MITIGATION REPORT

PROJECT TITLE:	LOT 5 DP 107403 4238 FAR NORTH ROAD PUKENUI NORTHLAND
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ORIGINAL DRAWING SIZE:	OFFICE:
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DRAWING SCALE:	CO-ORDINATE SYSTEM:
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Permitted Activity Threshold



Routing Diagram for 145652 Attenuation

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145652 Attenuation

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Prepared by Wilton Joubert Limited

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 24S: Maximum

Runoff Area=3,469.2 m² 47.16% Impervious Runoff Depth>194 mm
Tc=10.0 min CN=85 Runoff=48.32 L/s 672.7 m³

Link 32L: Maximum Permitted Peak Flows

Inflow=48.32 L/s 672.7 m³
Primary=48.32 L/s 672.7 m³

145652 Attenuation

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Summary for Subcatchment 24S: Maximum Permitted Peak Areas

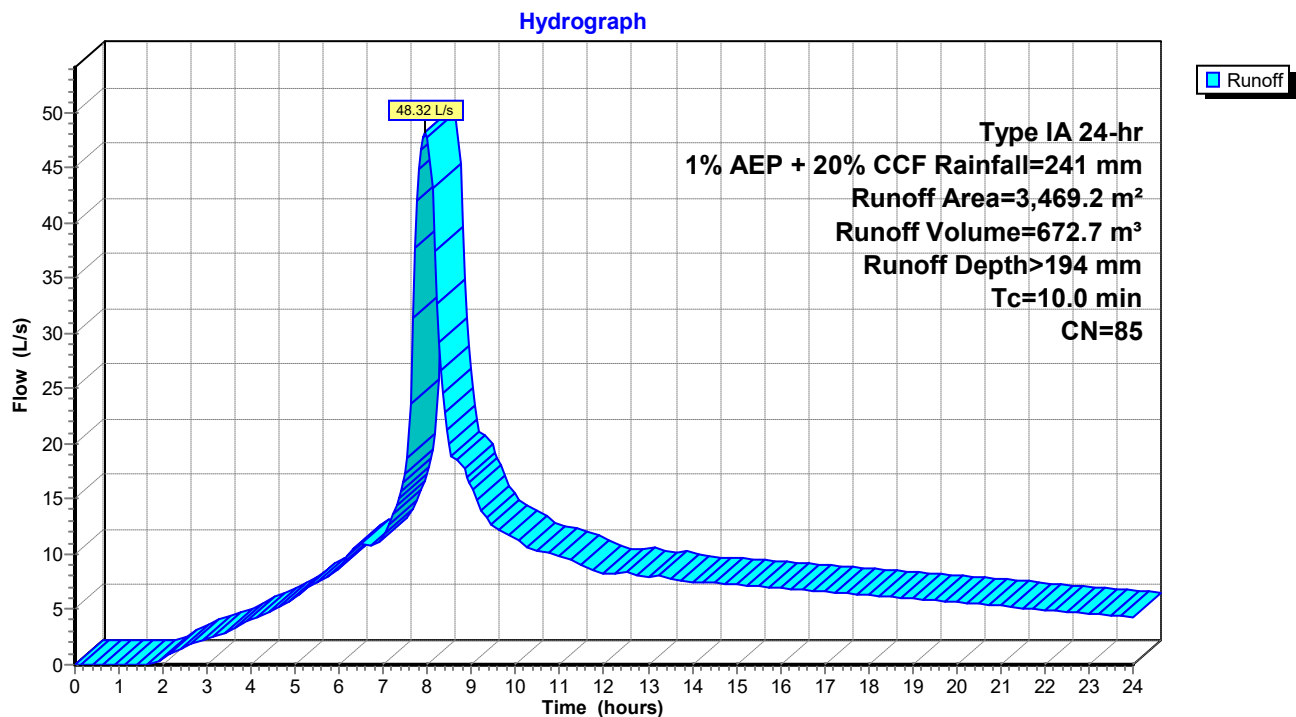
Runoff = 48.32 L/s @ 7.96 hrs, Volume= 672.7 m³, Depth> 194 mm

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
1,833.2	74	>75% Grass cover, Good, HSG C
1,636.0	98	Roofs, HSG C
3,469.2	85	Weighted Average
1,833.2		52.84% Pervious Area
1,636.0		47.16% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

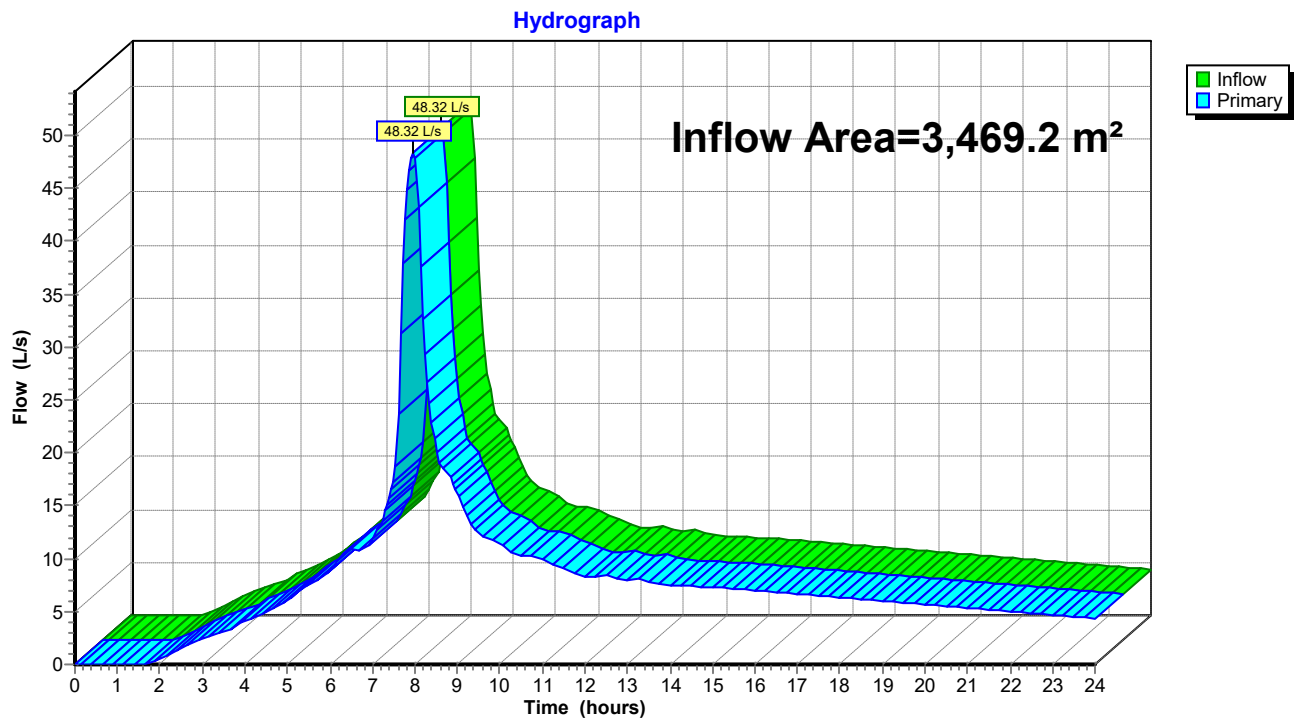
Subcatchment 24S: Maximum Permitted Peak Areas



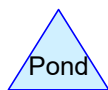
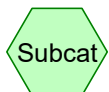
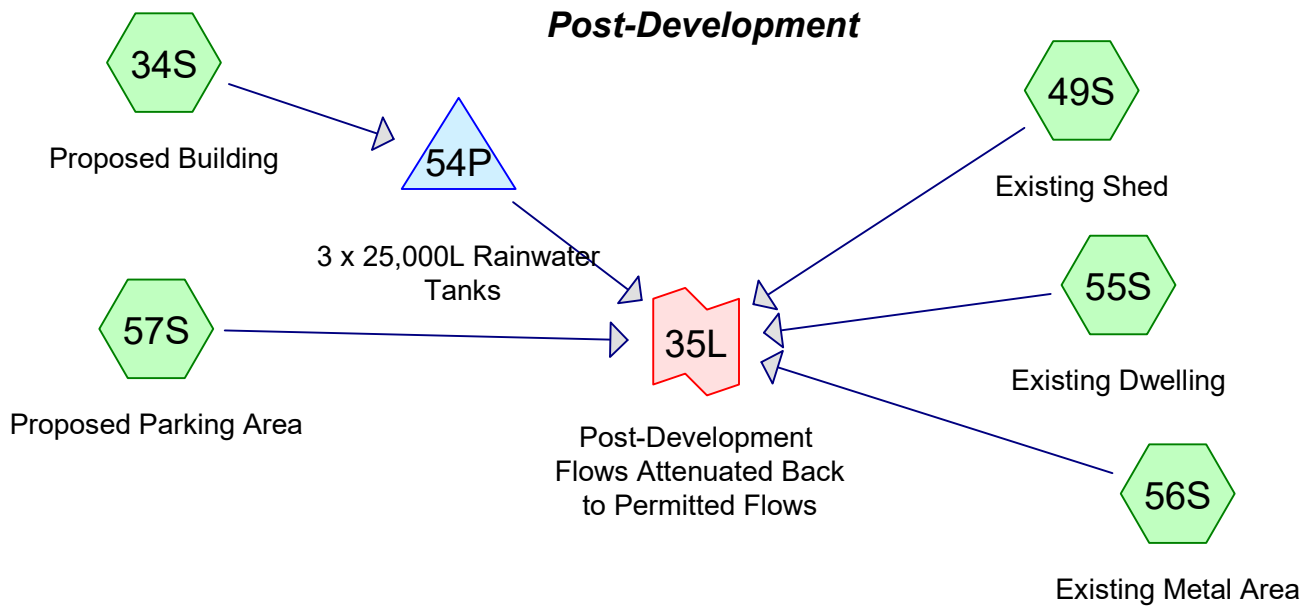
Summary for Link 32L: Maximum Permitted Peak Flows

Inflow Area = 3,469.2 m², 47.16% Impervious, Inflow Depth > 194 mm for 1% AEP + 20% CCF event
Inflow = 48.32 L/s @ 7.96 hrs, Volume= 672.7 m³
Primary = 48.32 L/s @ 7.96 hrs, Volume= 672.7 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 32L: Maximum Permitted Peak Flows

Post-Development



Routing Diagram for 145652 Attenuation

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145652 Attenuation*Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm*

Prepared by Wilton Joubert Limited

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 34S: Proposed Building Runoff Area=457.2 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=7.26 L/s 107.1 m³

Subcatchment 49S: Existing Shed Runoff Area=307.5 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=4.88 L/s 72.0 m³

Subcatchment 55S: Existing Dwelling Runoff Area=328.5 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=5.21 L/s 77.0 m³

Subcatchment 56S: Existing Metal Area Runoff Area=1,689.0 m² 0.00% Impervious Runoff Depth>206 mm
Tc=10.0 min CN=89 Runoff=24.91 L/s 348.7 m³

Subcatchment 57S: Proposed Parking Runoff Area=687.0 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=10.91 L/s 161.0 m³

Pond 54P: 3 x 25,000L Rainwater Tanks Peak Elev=0.554 m Storage=16.9 m³ Inflow=7.26 L/s 107.1 m³
Outflow=2.82 L/s 105.7 m³

Link 35L: Post-Development Flows Attenuated Back to Permitted Flows Inflow=48.31 L/s 764.3 m³
Primary=48.31 L/s 764.3 m³

145652 Attenuation

Prepared by Wilton Joubert Limited

HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Printed 22/04/2026

Page 3

Summary for Subcatchment 34S: Proposed Building

Runoff = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³, Depth> 234 mm

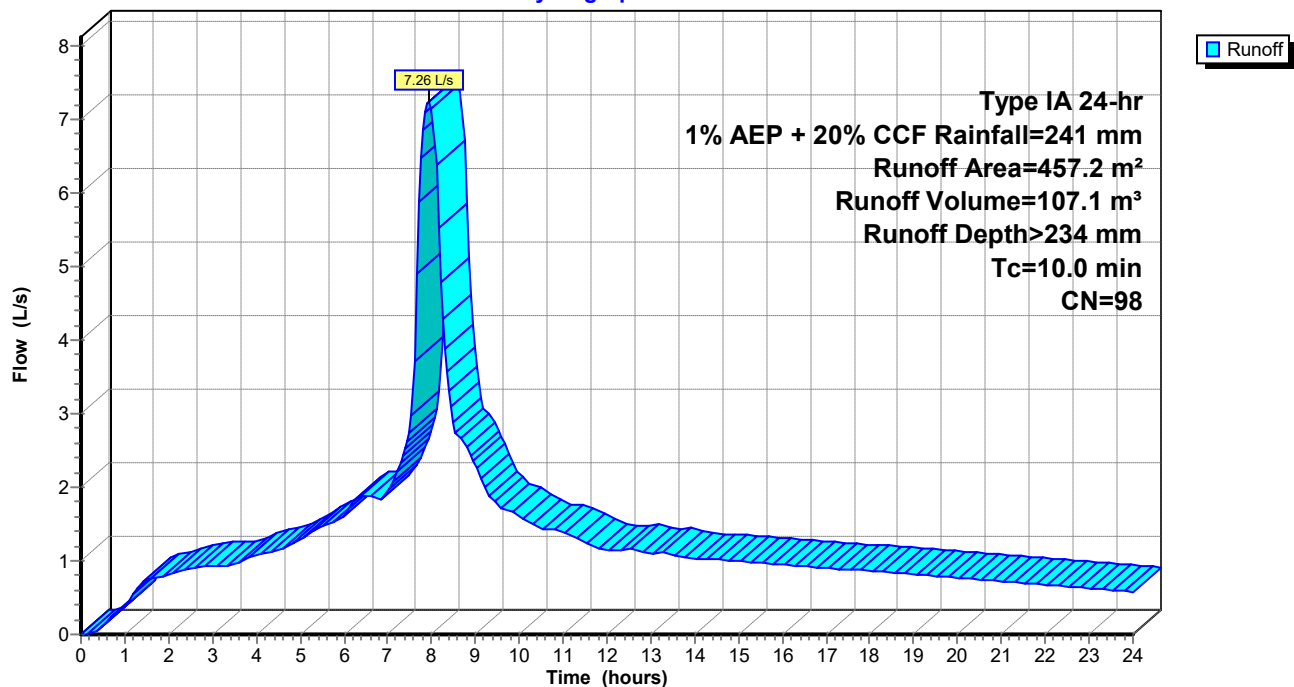
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
457.2	98	Roofs, HSG C
457.2		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 34S: Proposed Building

Hydrograph



145652 Attenuation

Prepared by Wilton Joubert Limited

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

Summary for Subcatchment 49S: Existing Shed

Runoff = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³, Depth> 234 mm

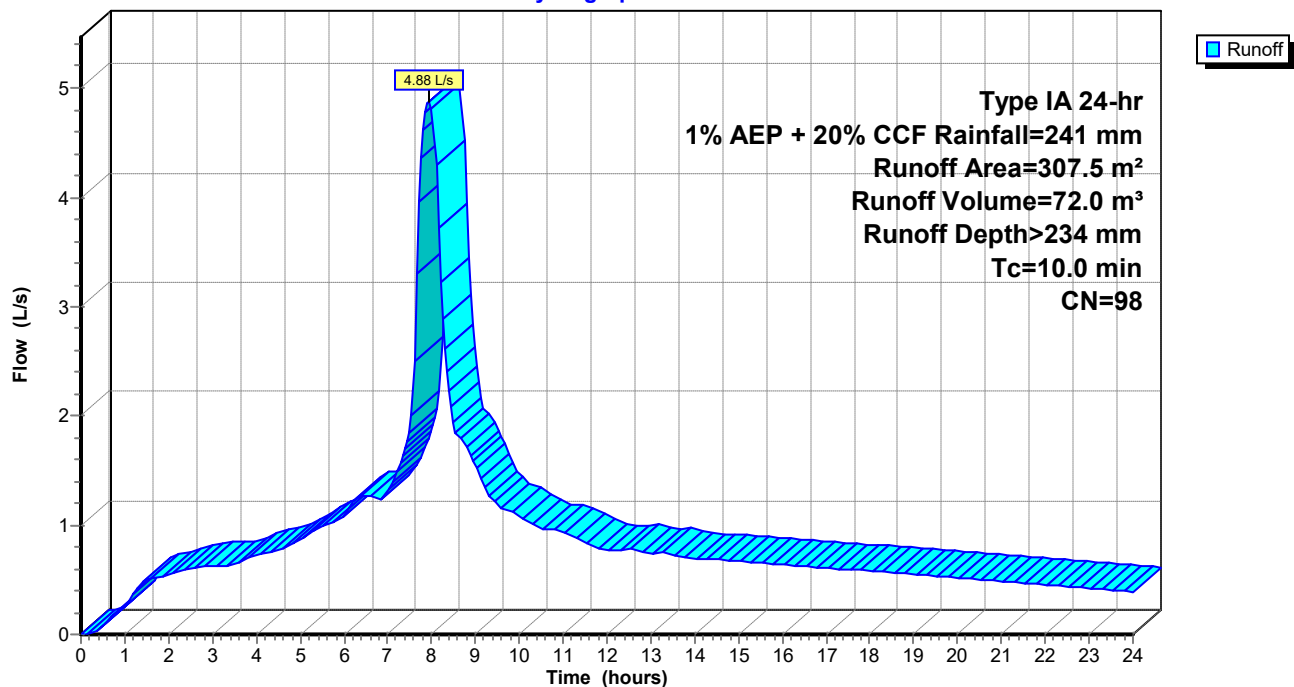
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
307.5	98	Paved parking, HSG C
307.5		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 49S: Existing Shed

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 5

Summary for Subcatchment 55S: Existing Dwelling

Runoff = 5.21 L/s @ 7.94 hrs, Volume= 77.0 m³, Depth> 234 mm

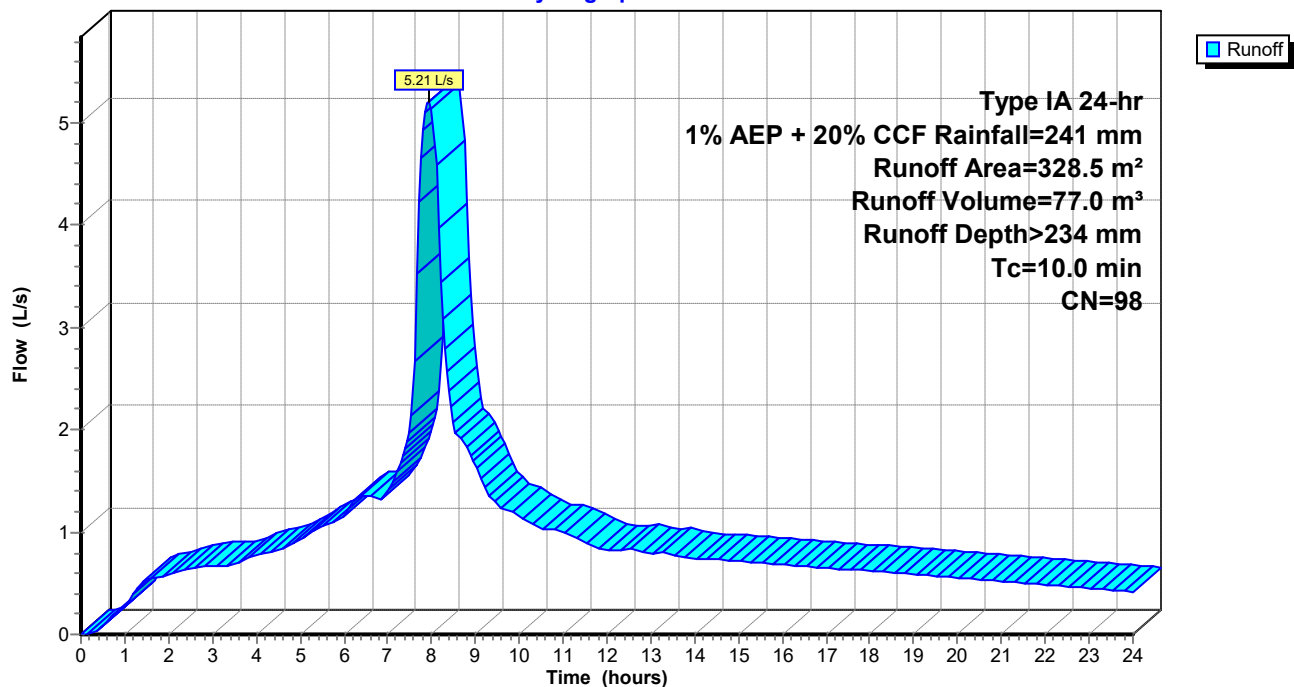
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
328.5	98	Paved parking, HSG C
328.5		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 55S: Existing Dwelling

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 6

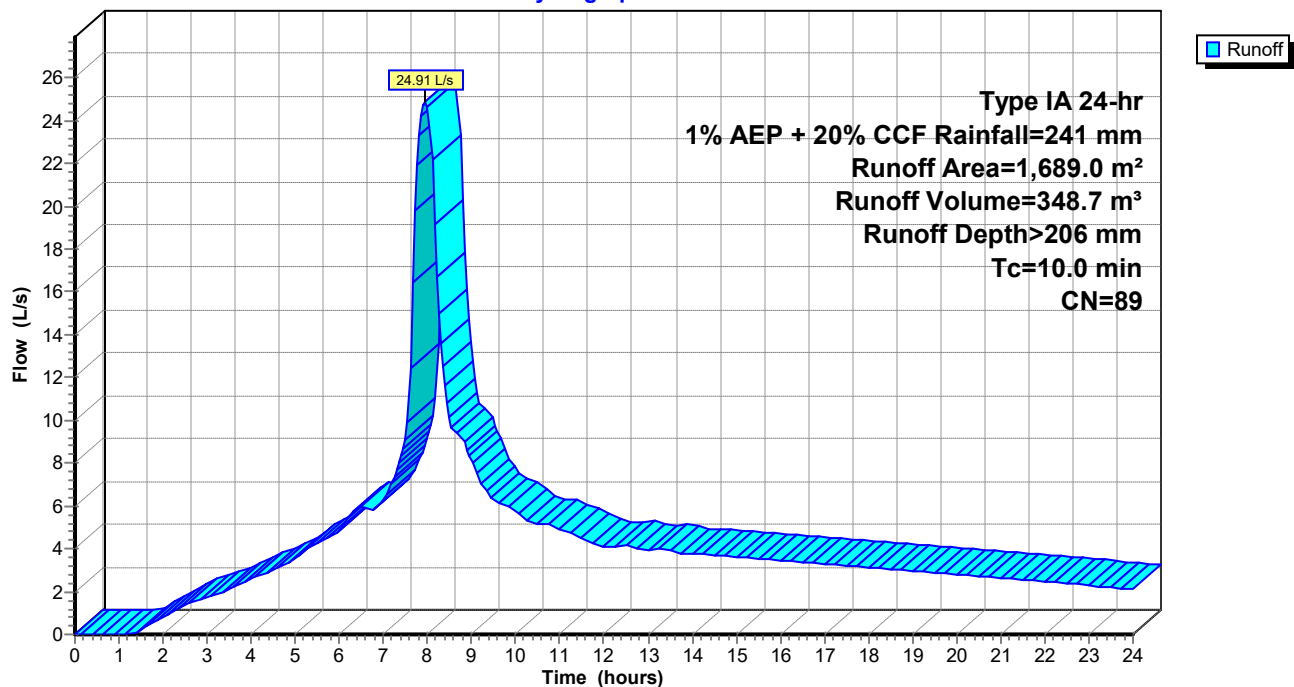
Summary for Subcatchment 56S: Existing Metal AreaRunoff = 24.91 L/s @ 7.95 hrs, Volume= 348.7 m³, Depth> 206 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
1,689.0	89	Gravel roads, HSG C
1,689.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 56S: Existing Metal Area

Hydrograph



145652 Attenuation

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 7

Summary for Subcatchment 57S: Proposed Parking Area

Runoff = 10.91 L/s @ 7.94 hrs, Volume= 161.0 m³, Depth> 234 mm

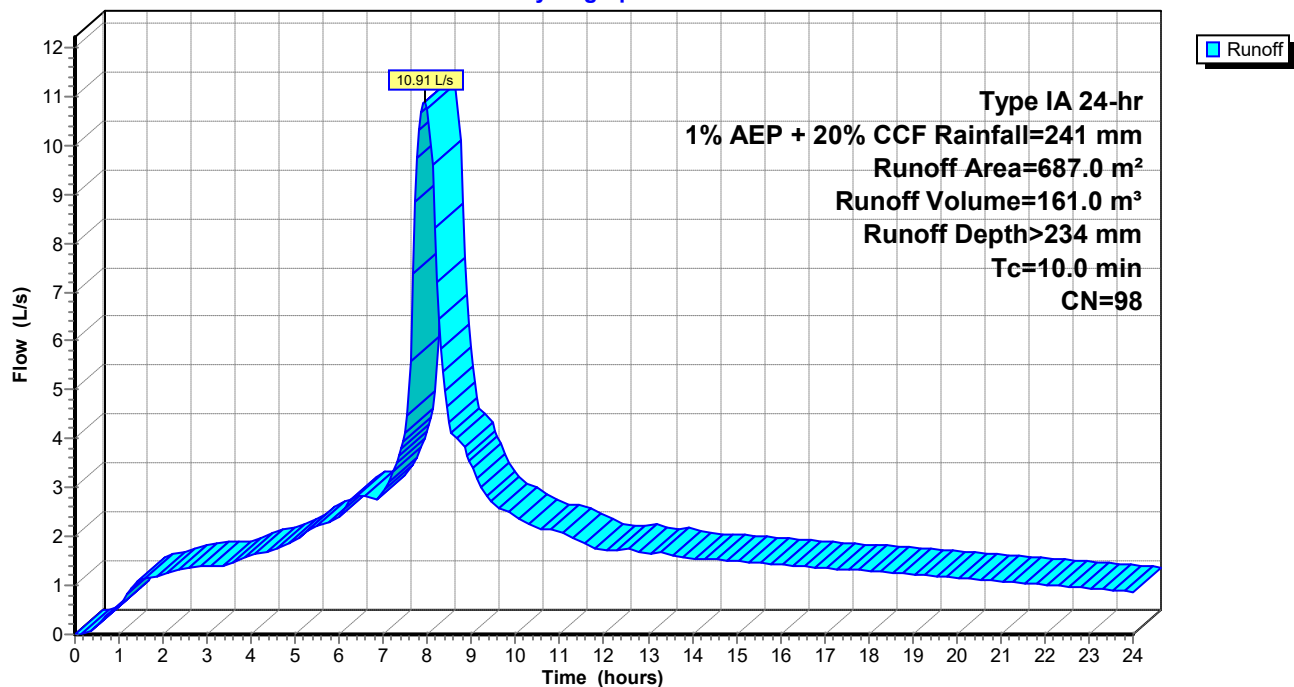
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
687.0	98	Paved roads w/curbs & sewers, HSG C
687.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 57S: Proposed Parking Area

Hydrograph



145652 Attenuation

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 8

Summary for Pond 54P: 3 x 25,000L Rainwater Tanks

Inflow Area = 457.2 m², 100.00% Impervious, Inflow Depth > 234 mm for 1% AEP + 20% CCF event
Inflow = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³
Outflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³, Atten= 61%, Lag= 35.3 min
Primary = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Peak Elev= 0.554 m @ 8.53 hrs Surf.Area= 30.5 m² Storage= 16.9 m³Plug-Flow detention time= 63.3 min calculated for 105.4 m³ (98% of inflow)

Center-of-Mass det. time= 52.5 min (699.1 - 646.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.000 m	79.4 m ³	3.60 mD x 2.60 mH Vertical Cone/Cylinder x 3

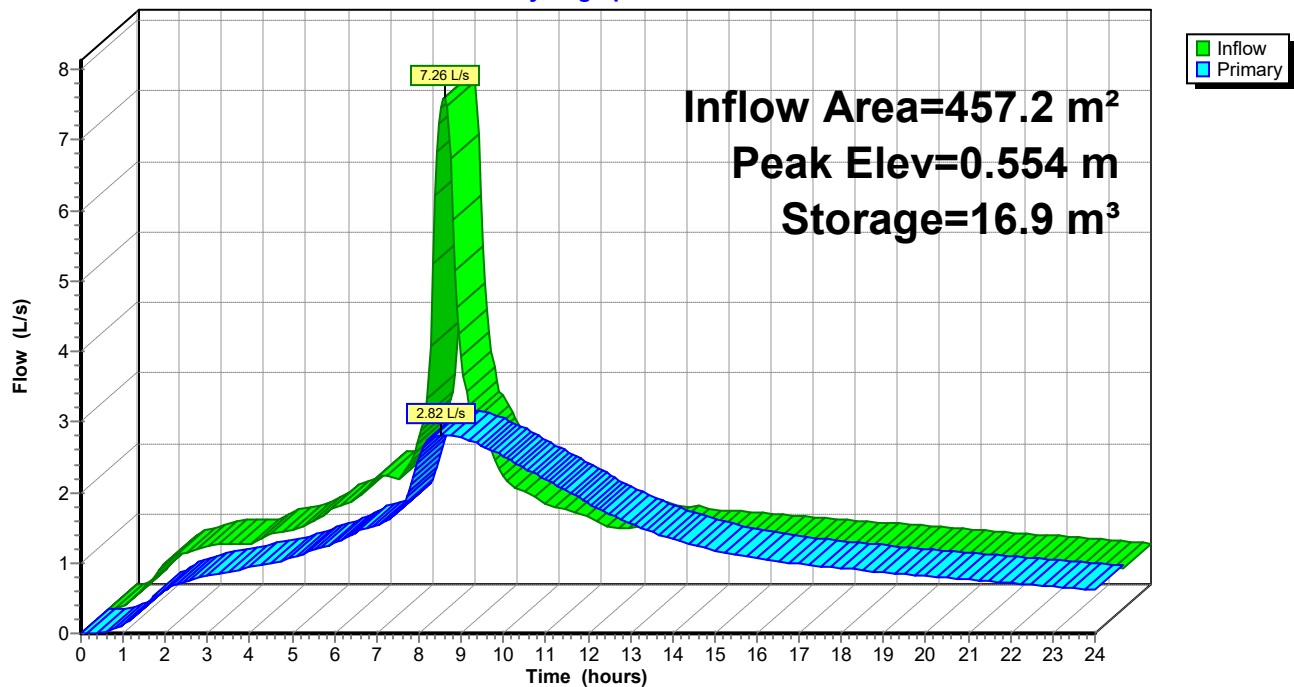
Device	Routing	Invert	Outlet Devices
#1	Primary	0.000 m	43 mm Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.82 L/s @ 8.53 hrs HW=0.554 m (Free Discharge)

↑1=Orifice/Grate (Orifice Controls 2.82 L/s @ 1.94 m/s)

Pond 54P: 3 x 25,000L Rainwater Tanks

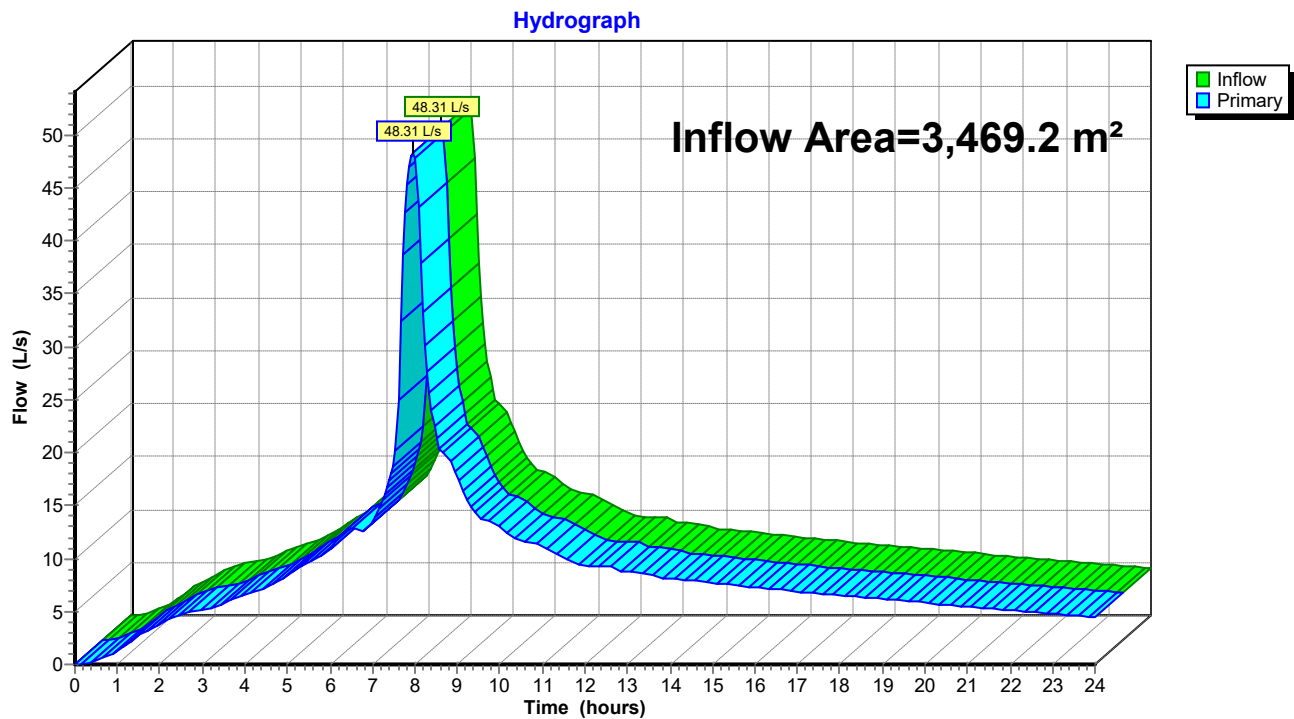
Hydrograph



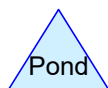
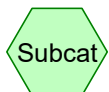
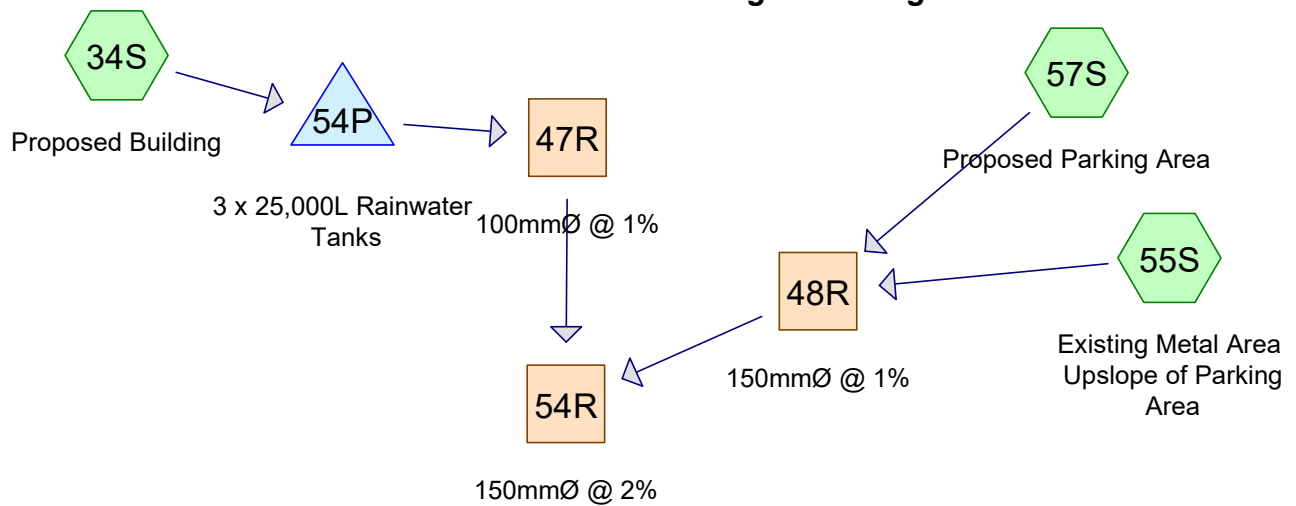
Summary for Link 35L: Post-Development Flows Attenuated Back to Permitted Flows

Inflow Area = 3,469.2 m², 51.31% Impervious, Inflow Depth > 220 mm for 1% AEP + 20% CCF event
Inflow = 48.31 L/s @ 7.95 hrs, Volume= 764.3 m³
Primary = 48.31 L/s @ 7.95 hrs, Volume= 764.3 m³, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Link 35L: Post-Development Flows Attenuated Back to Permitted Flows

Pipe Sizing - Proposed Building & Parking



Routing Diagram for 145652 Sizing

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145652 Sizing*Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm*

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 34S: Proposed Building Runoff Area=457.2 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=7.26 L/s 107.1 m³

Subcatchment 55S: Existing Metal Area Runoff Area=404.0 m² 0.00% Impervious Runoff Depth>206 mm
Tc=10.0 min CN=89 Runoff=5.96 L/s 83.4 m³

Subcatchment 57S: Proposed Parking Runoff Area=687.0 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=10.91 L/s 161.0 m³

Reach 47R: 100mmØ @ 1% Avg. Flow Depth=0.05 m Max Vel=0.76 m/s Inflow=2.82 L/s 105.7 m³
100 mm Round Pipe n=0.011 L=10.00 m S=0.0100 m/m Capacity=6.10 L/s Outflow=2.82 L/s 105.7 m³

Reach 48R: 150mmØ @ 1% Avg. Flow Depth=0.12 m Max Vel=1.16 m/s Inflow=16.86 L/s 244.4 m³
150 mm Round Pipe n=0.011 L=10.00 m S=0.0100 m/m Capacity=18.00 L/s Outflow=16.86 L/s 244.3 m³

Reach 54R: 150mmØ @ 2% Avg. Flow Depth=0.10 m Max Vel=1.58 m/s Inflow=19.27 L/s 350.0 m³
150 mm Round Pipe n=0.011 L=10.00 m S=0.0200 m/m Capacity=25.45 L/s Outflow=19.27 L/s 350.0 m³

Pond 54P: 3 x 25,000L Rainwater Tanks Peak Elev=0.554 m Storage=16.9 m³ Inflow=7.26 L/s 107.1 m³
Outflow=2.82 L/s 105.7 m³

145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 3

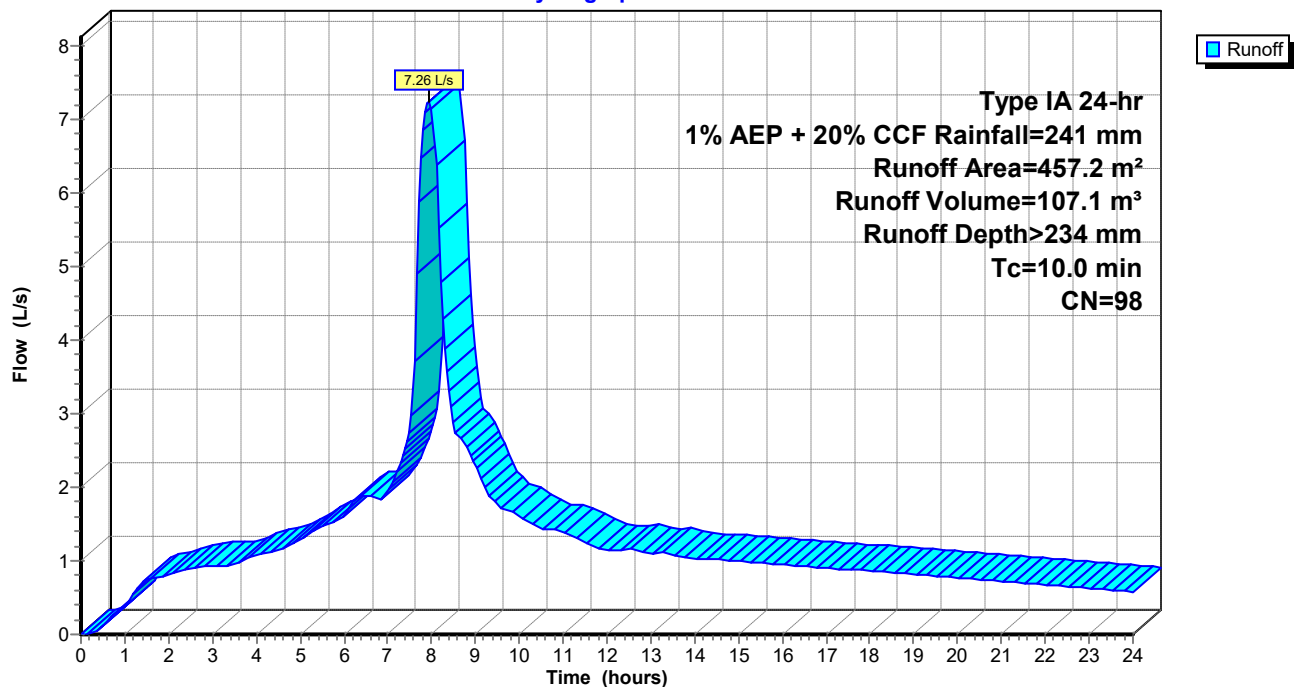
Summary for Subcatchment 34S: Proposed BuildingRunoff = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³, Depth> 234 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
457.2	98	Roofs, HSG C
457.2		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 34S: Proposed Building

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

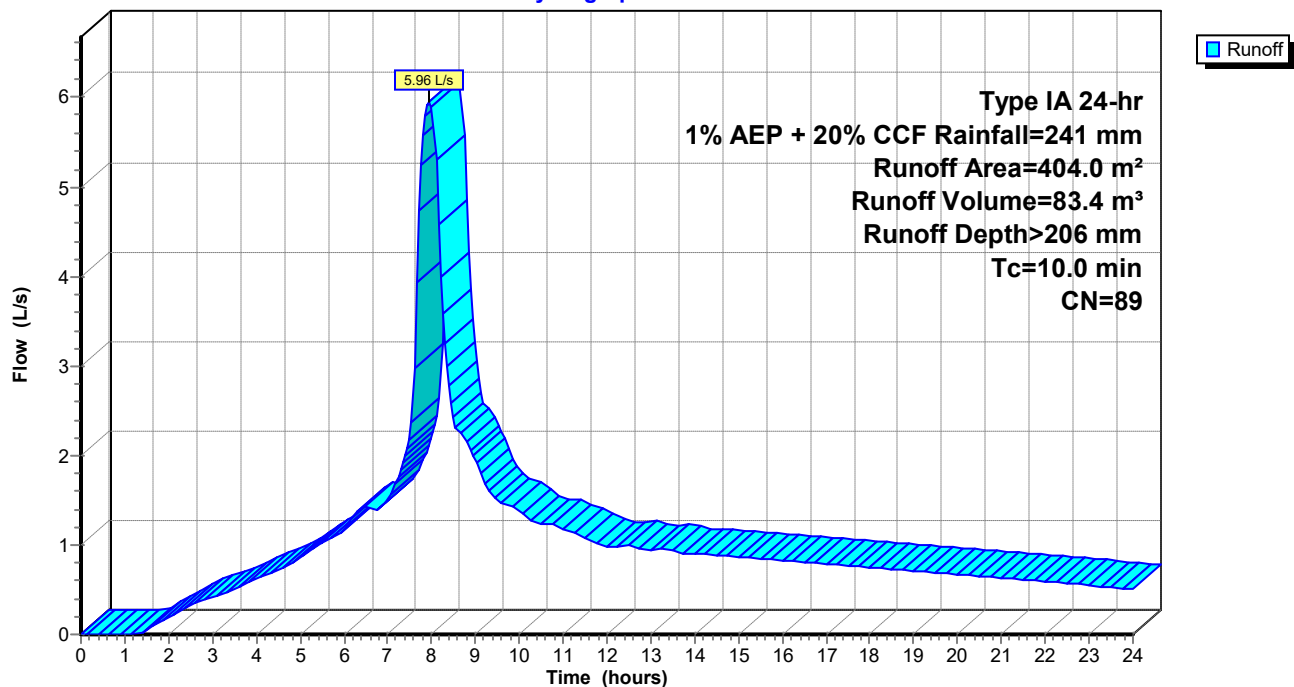
Summary for Subcatchment 55S: Existing Metal Area Upslope of Parking AreaRunoff = 5.96 L/s @ 7.95 hrs, Volume= 83.4 m³, Depth> 206 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
404.0	89	Gravel roads, HSG C
404.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 55S: Existing Metal Area Upslope of Parking Area

Hydrograph



Summary for Subcatchment 57S: Proposed Parking Area

Runoff = 10.91 L/s @ 7.94 hrs, Volume= 161.0 m³, Depth> 234 mm

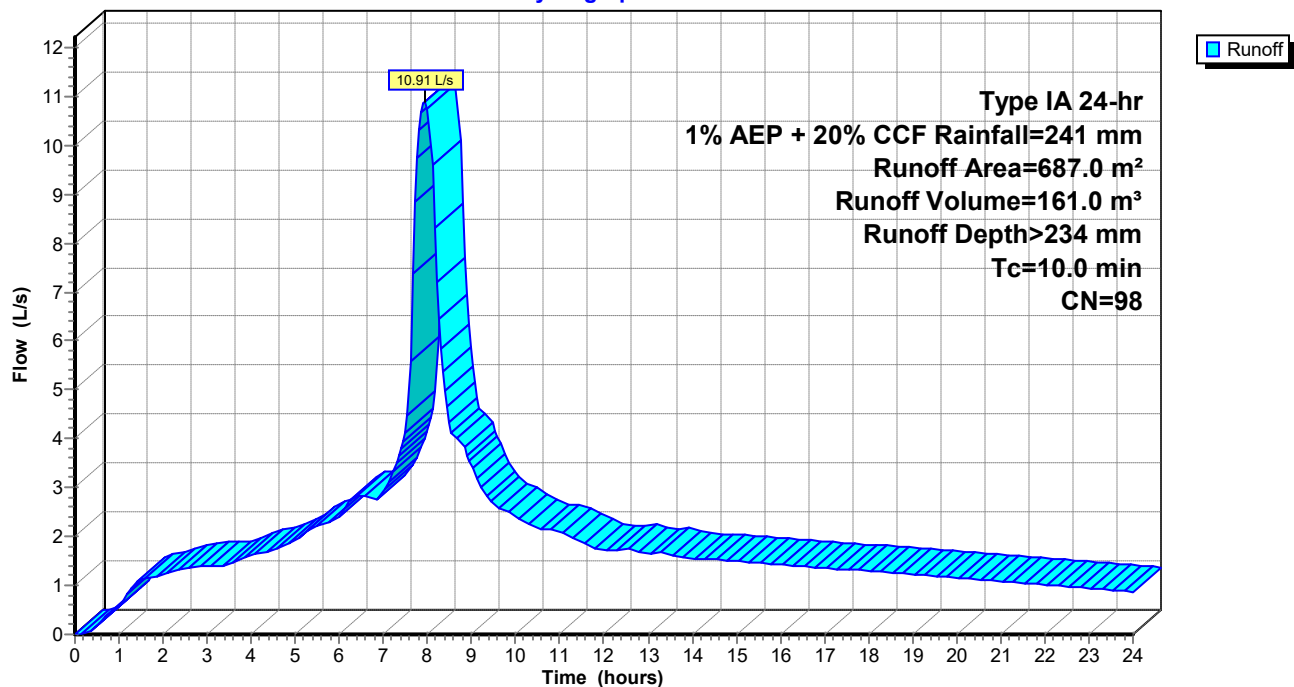
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
687.0	98	Paved roads w/curbs & sewers, HSG C
687.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 57S: Proposed Parking Area

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 6

Summary for Reach 47R: 100mmØ @ 1%

Inflow Area = 457.2 m², 100.00% Impervious, Inflow Depth > 231 mm for 1% AEP + 20% CCF event
Inflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³
Outflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.76 m/s, Min. Travel Time= 0.2 min

Avg. Velocity= 0.59 m/s, Avg. Travel Time= 0.3 min

Peak Storage= 0.0 m³ @ 8.53 hrs

Average Depth at Peak Storage= 0.05 m

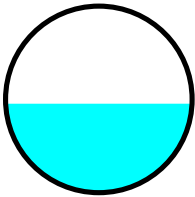
Bank-Full Depth= 0.10 m Flow Area= 0.01 m², Capacity= 6.10 L/s

100 mm Round Pipe

n= 0.011 PVC, smooth interior

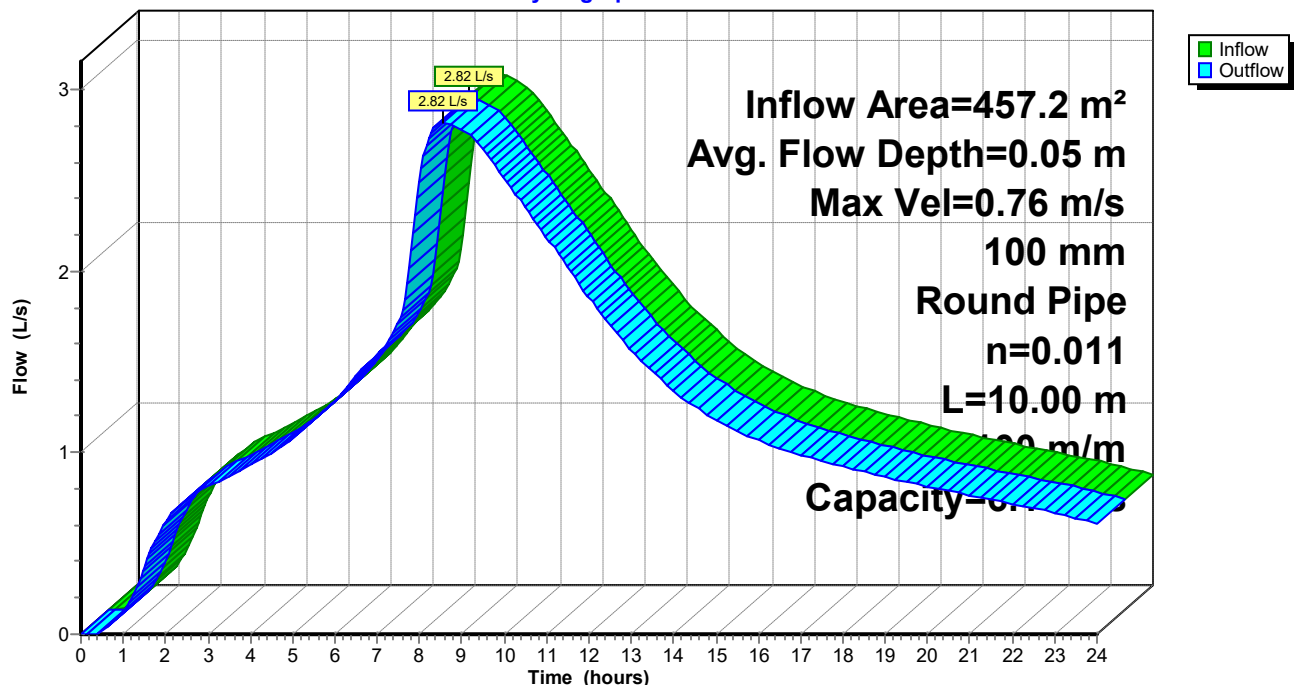
Length= 10.00 m Slope= 0.0100 m/m

Inlet Invert= -1.000 m, Outlet Invert= -1.100 m



Reach 47R: 100mmØ @ 1%

Hydrograph



145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 7

Summary for Reach 48R: 150mmØ @ 1%

Inflow Area = 1,091.0 m², 62.97% Impervious, Inflow Depth > 224 mm for 1% AEP + 20% CCF event
Inflow = 16.86 L/s @ 7.94 hrs, Volume= 244.4 m³
Outflow = 16.86 L/s @ 7.95 hrs, Volume= 244.3 m³, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.16 m/s, Min. Travel Time= 0.1 min

Avg. Velocity= 0.71 m/s, Avg. Travel Time= 0.2 min

Peak Storage= 0.1 m³ @ 7.95 hrs

Average Depth at Peak Storage= 0.12 m

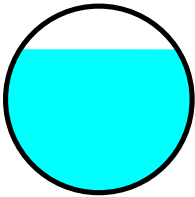
Bank-Full Depth= 0.15 m Flow Area= 0.02 m², Capacity= 18.00 L/s

150 mm Round Pipe

n= 0.011 PVC, smooth interior

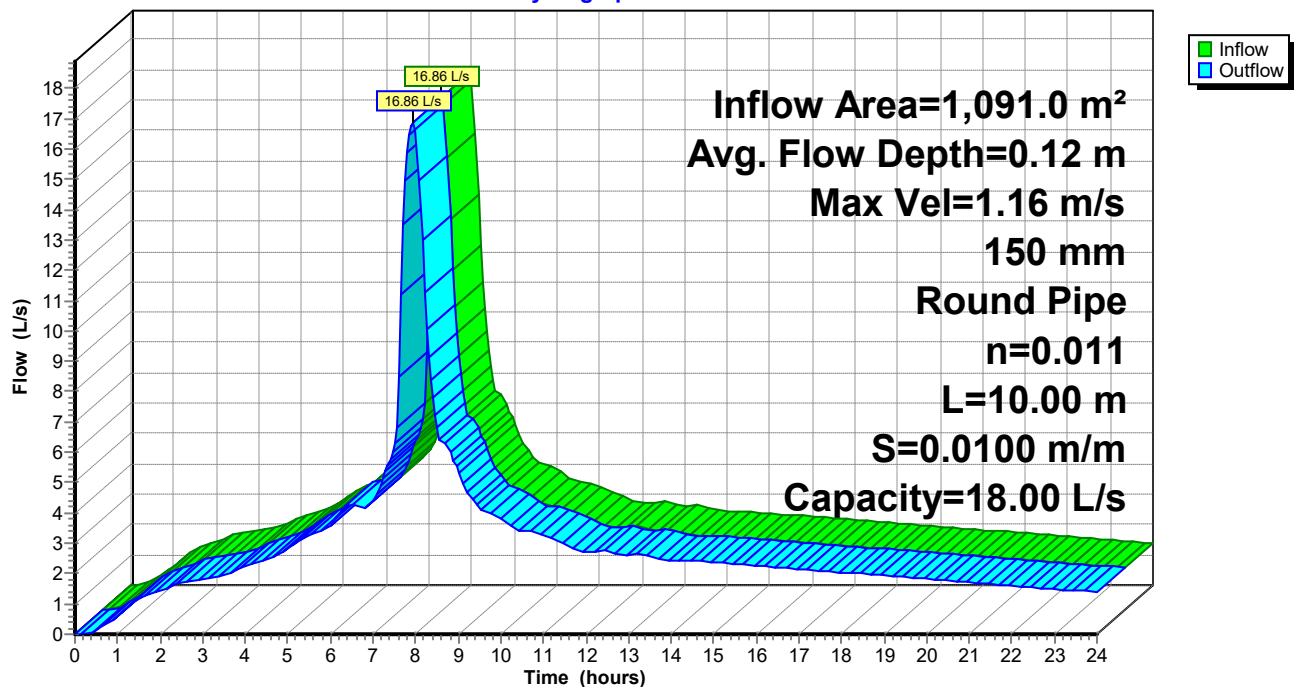
Length= 10.00 m Slope= 0.0100 m/m

Inlet Invert= -2.000 m, Outlet Invert= -2.100 m



Reach 48R: 150mmØ @ 1%

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 8

Summary for Reach 54R: 150mmØ @ 2%

Inflow Area = 1,548.2 m², 73.91% Impervious, Inflow Depth > 226 mm for 1% AEP + 20% CCF event
Inflow = 19.27 L/s @ 7.97 hrs, Volume= 350.0 m³
Outflow = 19.27 L/s @ 7.97 hrs, Volume= 350.0 m³, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.58 m/s, Min. Travel Time= 0.1 min

Avg. Velocity= 1.02 m/s, Avg. Travel Time= 0.2 min

Peak Storage= 0.1 m³ @ 7.97 hrs

Average Depth at Peak Storage= 0.10 m

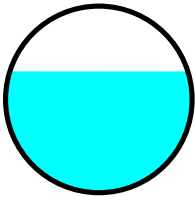
Bank-Full Depth= 0.15 m Flow Area= 0.02 m², Capacity= 25.45 L/s

150 mm Round Pipe

n= 0.011 PVC, smooth interior

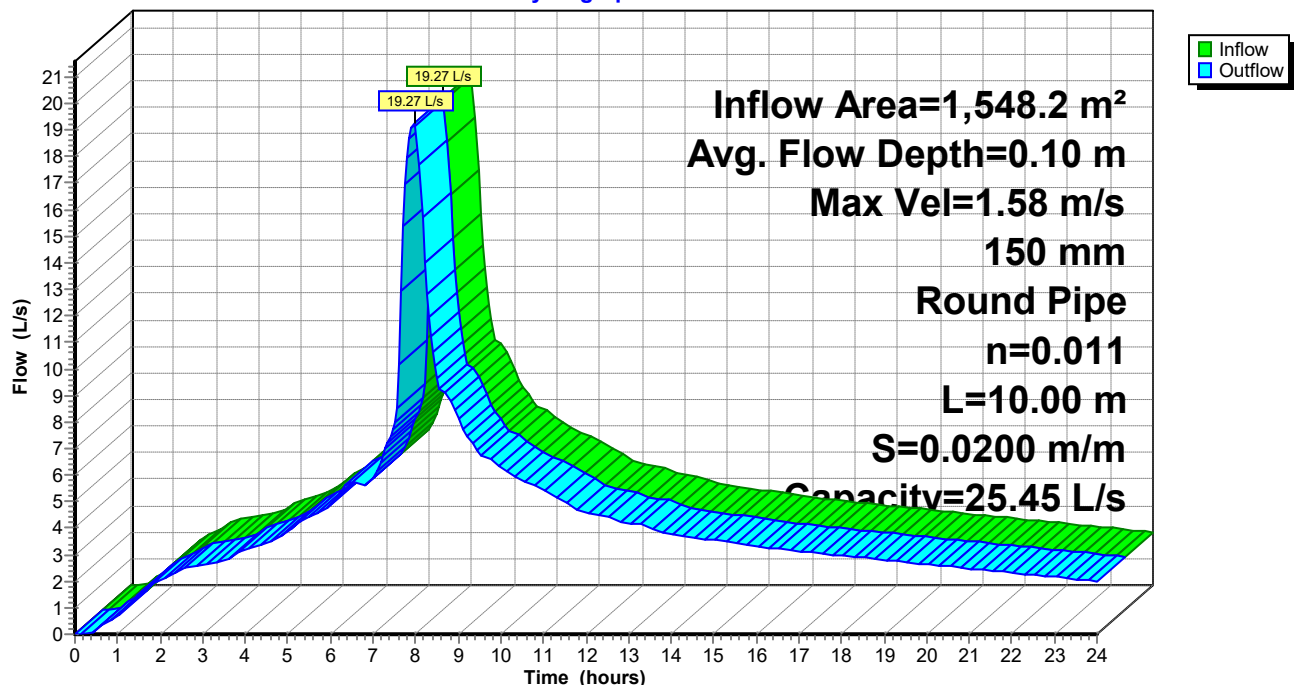
Length= 10.00 m Slope= 0.0200 m/m

Inlet Invert= -2.100 m, Outlet Invert= -2.300 m



Reach 54R: 150mmØ @ 2%

Hydrograph



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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 9

Summary for Pond 54P: 3 x 25,000L Rainwater Tanks

Inflow Area = 457.2 m², 100.00% Impervious, Inflow Depth > 234 mm for 1% AEP + 20% CCF event
 Inflow = 7.26 L/s @ 7.94 hrs, Volume= 107.1 m³
 Outflow = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³, Atten= 61%, Lag= 35.3 min
 Primary = 2.82 L/s @ 8.53 hrs, Volume= 105.7 m³

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Peak Elev= 0.554 m @ 8.53 hrs Surf.Area= 30.5 m² Storage= 16.9 m³Plug-Flow detention time= 63.3 min calculated for 105.4 m³ (98% of inflow)

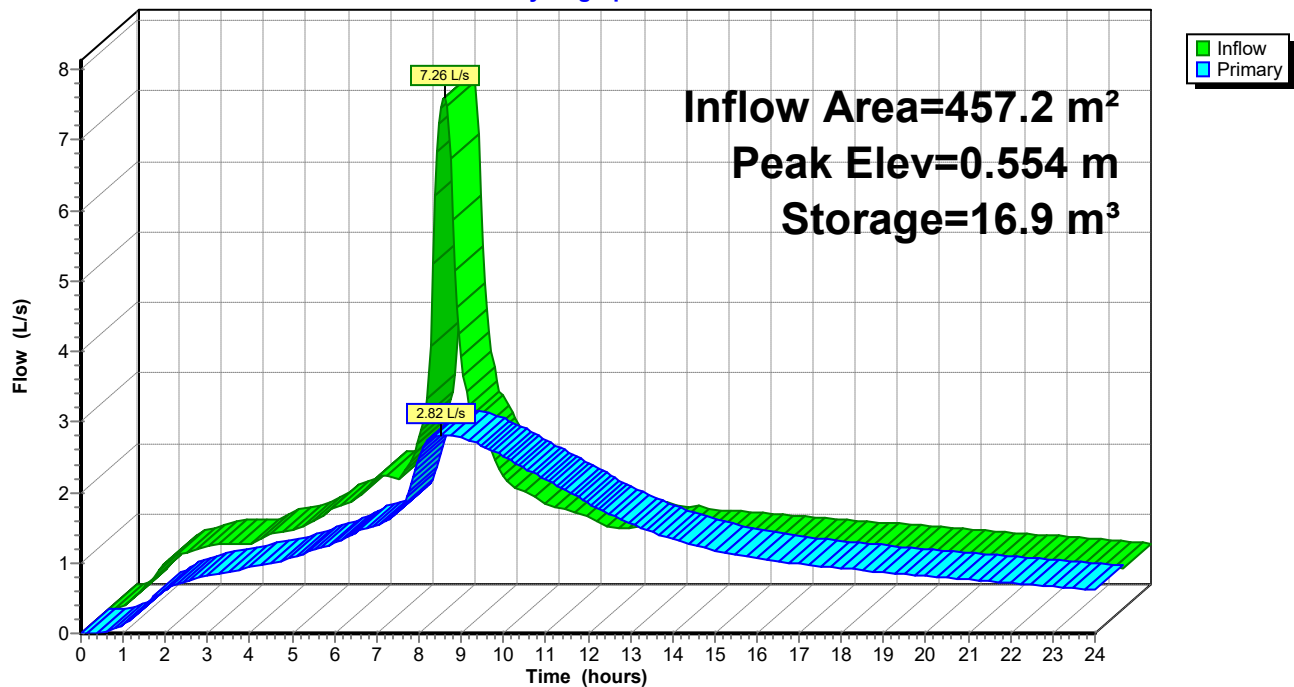
Center-of-Mass det. time= 52.5 min (699.1 - 646.6)

Volume	Invert	Avail.Storage	Storage Description
#1	0.000 m	79.4 m ³	3.60 mD x 2.60 mH Vertical Cone/Cylinder x 3

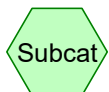
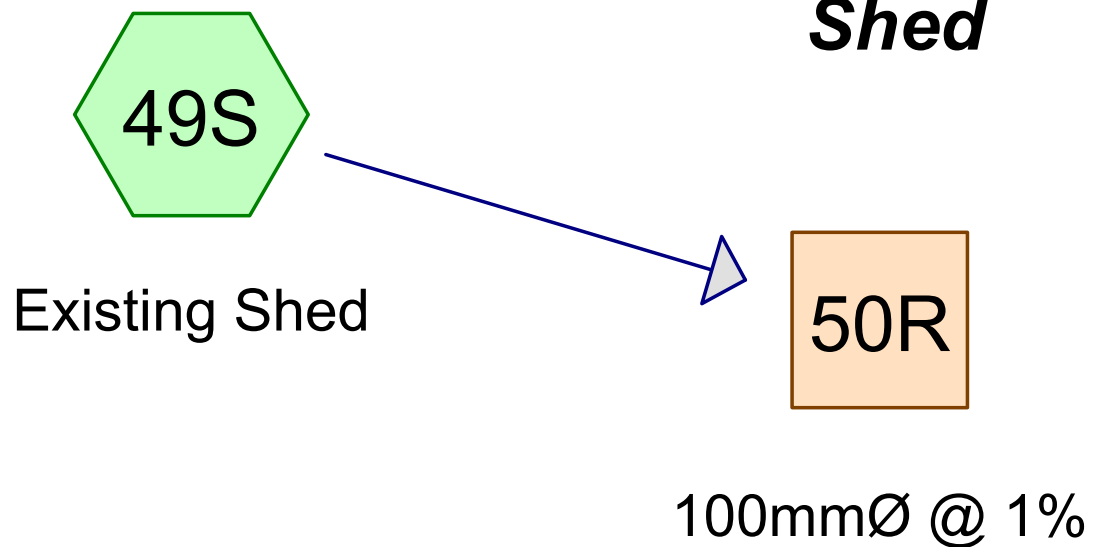
Device	Routing	Invert	Outlet Devices
#1	Primary	0.000 m	43 mm Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.82 L/s @ 8.53 hrs HW=0.554 m (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 2.82 L/s @ 1.94 m/s)**Pond 54P: 3 x 25,000L Rainwater Tanks**

Hydrograph



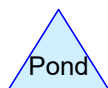
Pipe Sizing - Existing Shed



Subcat



Reach



Pond



Link

Routing Diagram for 145652 Sizing

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 49S: Existing Shed

Runoff Area=307.5 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=4.88 L/s 72.0 m³

Reach 50R: 100mmØ @ 1%

Avg. Flow Depth=0.07 m Max Vel=0.86 m/s Inflow=4.88 L/s 72.0 m³
100 mm Round Pipe n=0.011 L=10.00 m S=0.0100 m/m Capacity=6.10 L/s Outflow=4.88 L/s 72.0 m³

145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 3

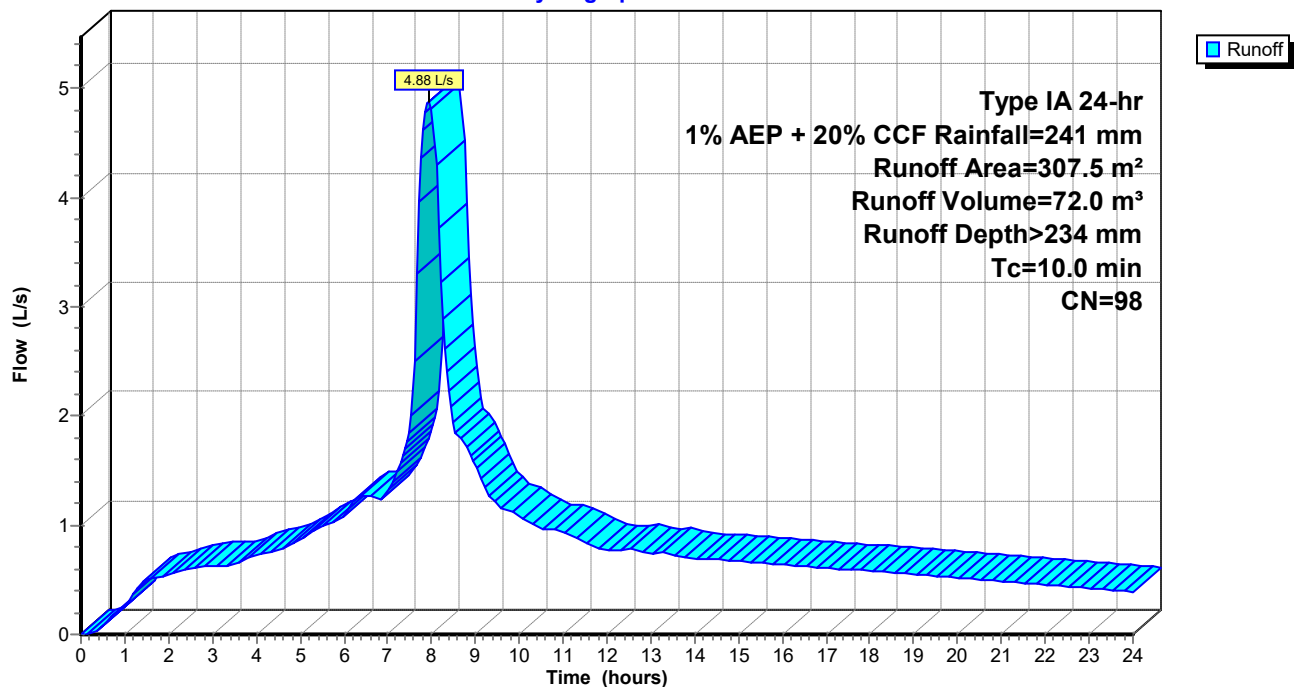
Summary for Subcatchment 49S: Existing ShedRunoff = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³, Depth> 234 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m²)	CN	Description
307.5	98	Paved parking, HSG C
307.5		100.00% Impervious Area

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

Subcatchment 49S: Existing Shed

Hydrograph



145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

Summary for Reach 50R: 100mmØ @ 1%

Inflow Area = 307.5 m², 100.00% Impervious, Inflow Depth > 234 mm for 1% AEP + 20% CCF event
Inflow = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³
Outflow = 4.88 L/s @ 7.94 hrs, Volume= 72.0 m³, Atten= 0%, Lag= 0.2 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.86 m/s, Min. Travel Time= 0.2 min

Avg. Velocity= 0.52 m/s, Avg. Travel Time= 0.3 min

Peak Storage= 0.1 m³ @ 7.94 hrs

Average Depth at Peak Storage= 0.07 m

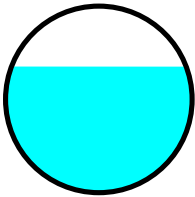
Bank-Full Depth= 0.10 m Flow Area= 0.01 m², Capacity= 6.10 L/s

100 mm Round Pipe

n= 0.011 PVC, smooth interior

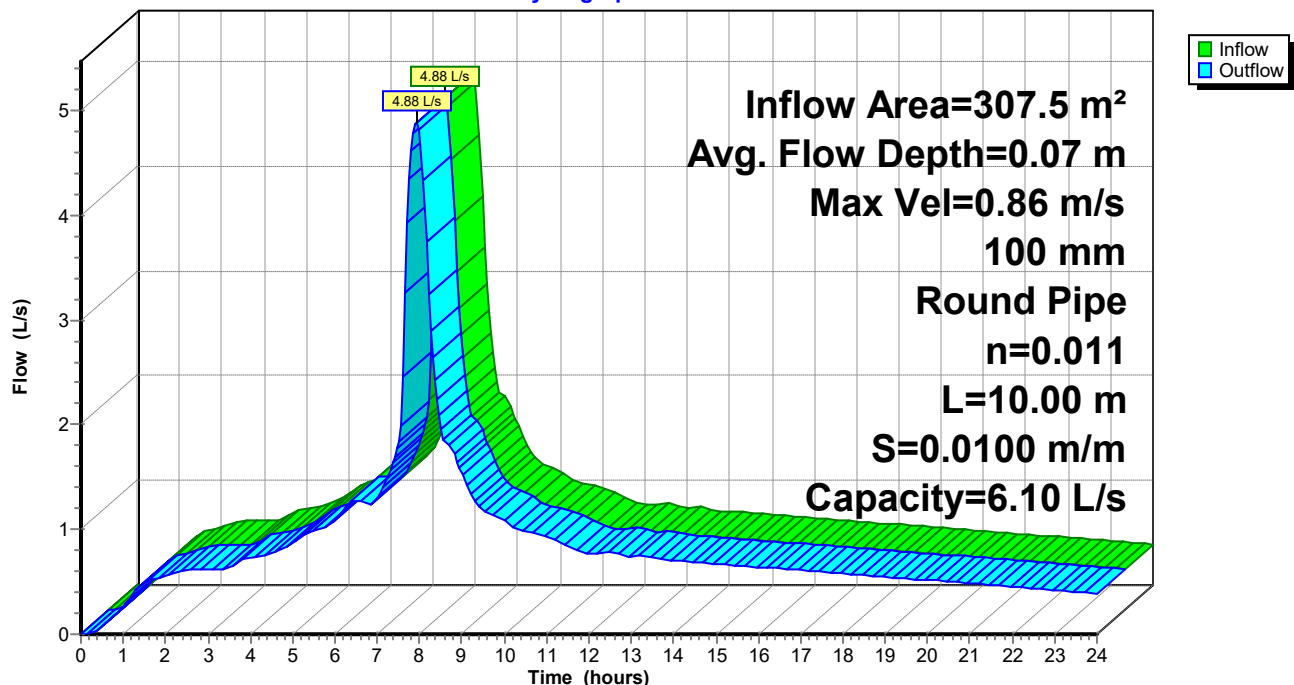
Length= 10.00 m Slope= 0.0100 m/m

Inlet Invert= 0.000 m, Outlet Invert= -0.100 m

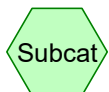
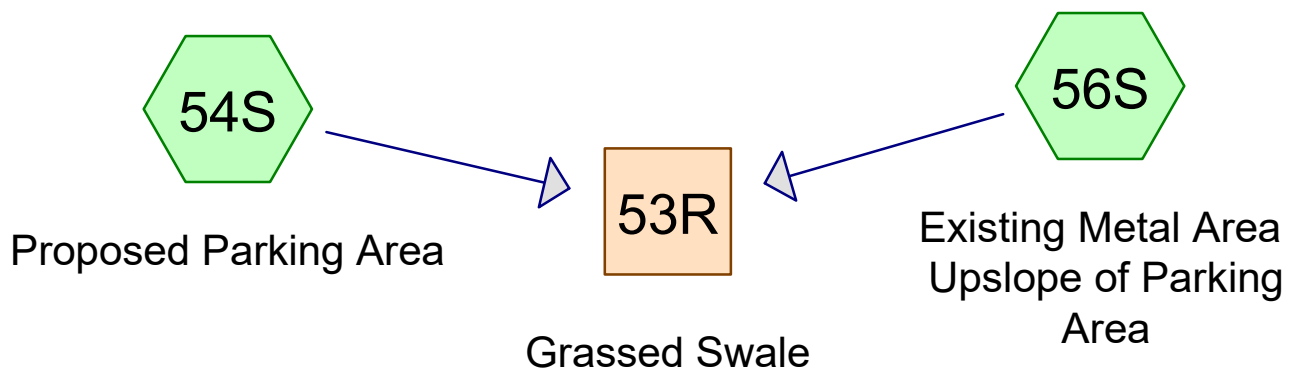


Reach 50R: 100mmØ @ 1%

Hydrograph



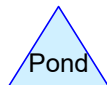
Swale Sizing



Subcat



Reach



Pond



Link

Routing Diagram for 145652 Sizing

Prepared by Wilton Joubert Limited, Printed 22/04/2026
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145652 Sizing

Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 2

Time span=0.00-24.00 hrs, dt=0.05 hrs, 481 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 54S: Proposed Parking Runoff Area=687.0 m² 100.00% Impervious Runoff Depth>234 mm
Tc=10.0 min CN=98 Runoff=10.91 L/s 161.0 m³

Subcatchment 56S: Existing Metal Area Runoff Area=404.0 m² 0.00% Impervious Runoff Depth>206 mm
Tc=10.0 min CN=89 Runoff=5.96 L/s 83.4 m³

Reach 53R: Grassed Swale Avg. Flow Depth=0.17 m Max Vel=0.47 m/s Inflow=16.86 L/s 244.4 m³
n=0.025 L=10.00 m S=0.0050 m/m Capacity=24.53 L/s Outflow=16.86 L/s 244.3 m³

Summary for Subcatchment 54S: Proposed Parking Area

Runoff = 10.91 L/s @ 7.94 hrs, Volume= 161.0 m³, Depth> 234 mm

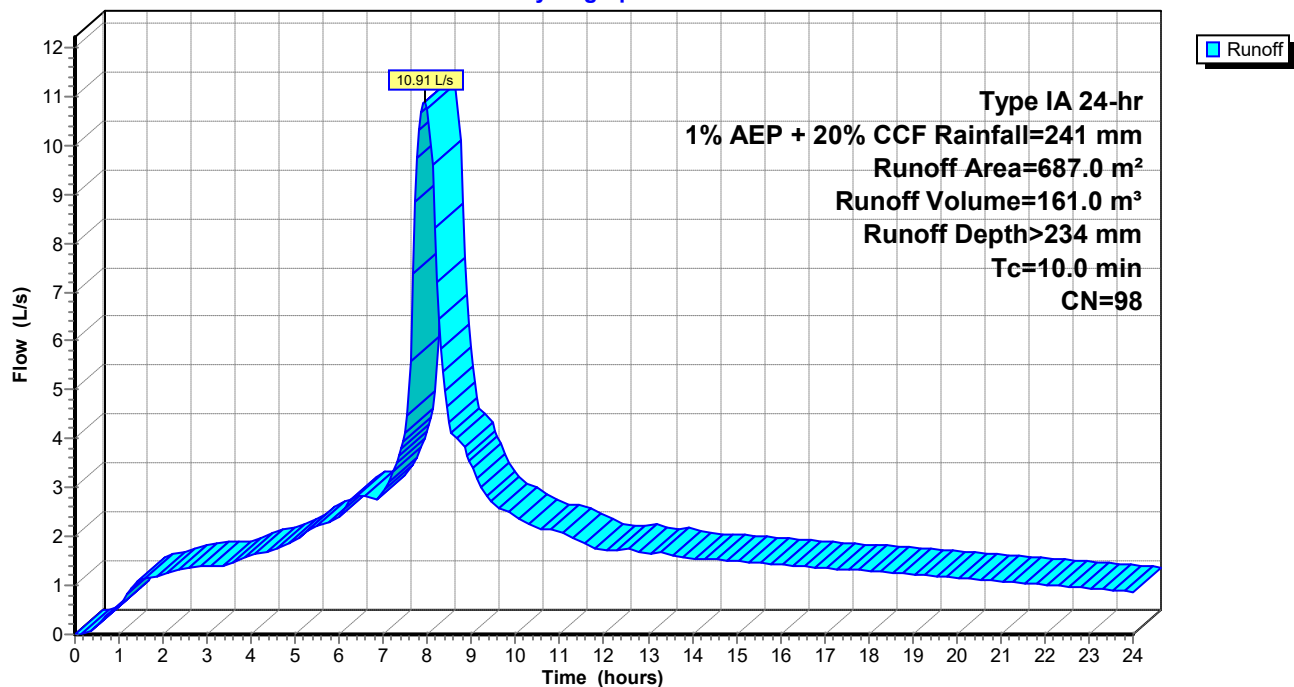
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
687.0	98	Paved roads w/curbs & sewers, HSG C
687.0		100.00% Impervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 54S: Proposed Parking Area

Hydrograph



145652 Sizing

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Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

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Page 4

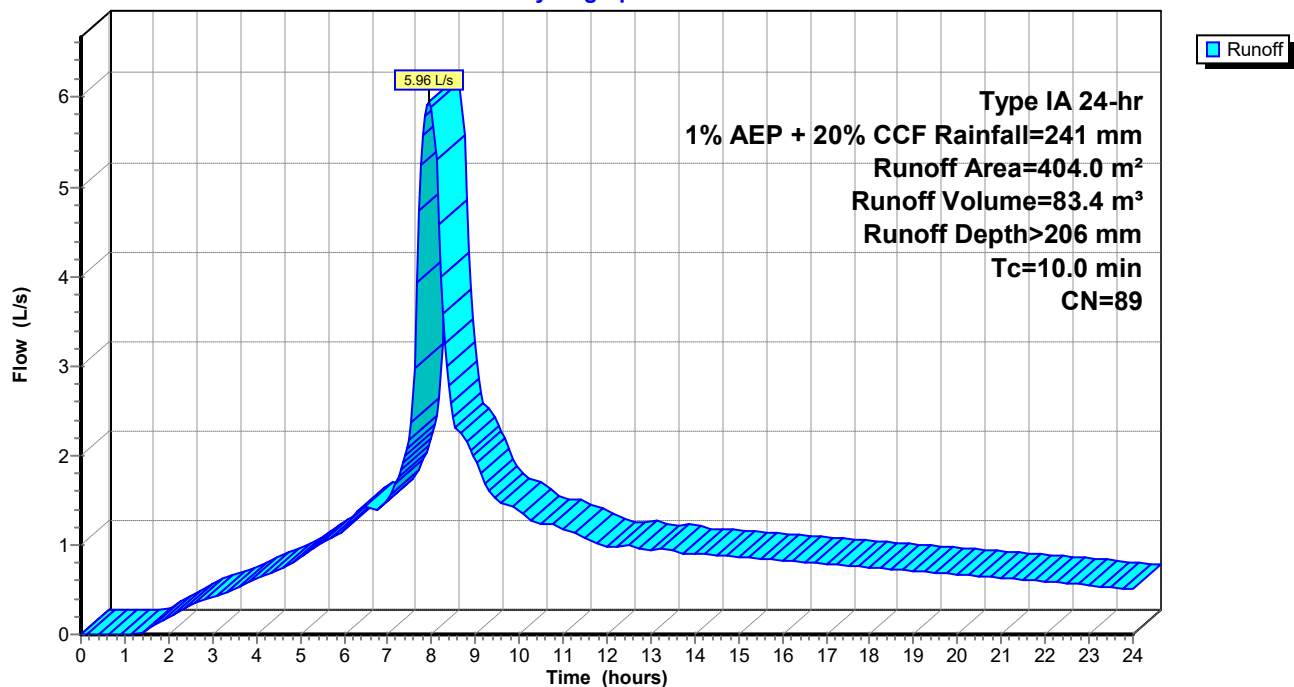
Summary for Subcatchment 56S: Existing Metal Area Upslope of Parking AreaRunoff = 5.96 L/s @ 7.95 hrs, Volume= 83.4 m³, Depth> 206 mmRunoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs
Type IA 24-hr 1% AEP + 20% CCF Rainfall=241 mm

Area (m ²)	CN	Description
404.0	89	Gravel roads, HSG C
404.0		100.00% Pervious Area

Tc (min)	Length (meters)	Slope (m/m)	Velocity (m/sec)	Capacity (m ³ /s)	Description
10.0					Direct Entry,

Subcatchment 56S: Existing Metal Area Upslope of Parking Area

Hydrograph



Summary for Reach 53R: Grassed Swale

Inflow Area = 1,091.0 m², 62.97% Impervious, Inflow Depth > 224 mm for 1% AEP + 20% CCF event
 Inflow = 16.86 L/s @ 7.94 hrs, Volume= 244.4 m³
 Outflow = 16.86 L/s @ 7.95 hrs, Volume= 244.3 m³, Atten= 0%, Lag= 0.3 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.47 m/s, Min. Travel Time= 0.4 min

Avg. Velocity = 0.29 m/s, Avg. Travel Time= 0.6 min

Peak Storage= 0.4 m³ @ 7.95 hrs

Average Depth at Peak Storage= 0.17 m

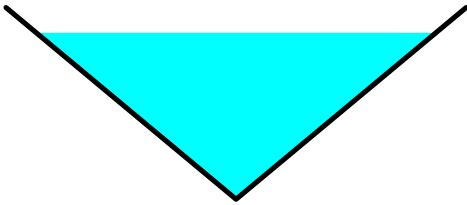
Bank-Full Depth= 0.20 m Flow Area= 0.05 m², Capacity= 24.53 L/s

0.00 m x 0.20 m deep channel, n= 0.025 Earth, clean & winding

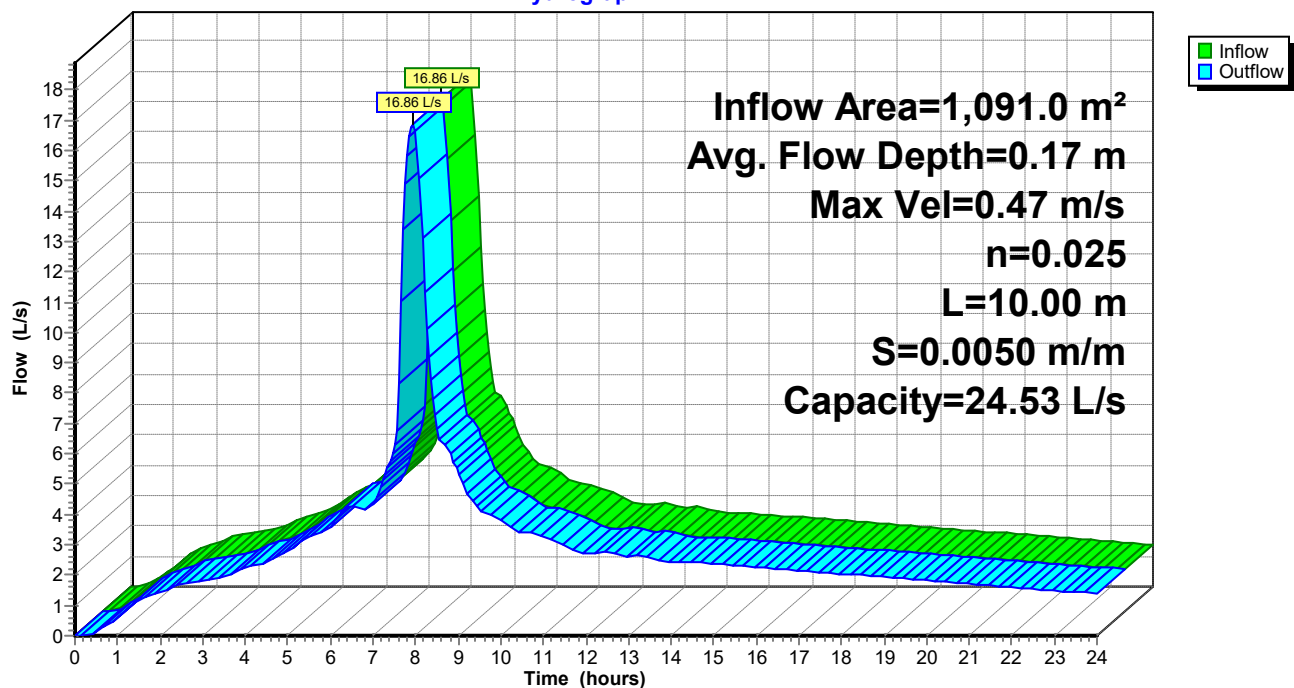
Side Slope Z-value= 1.2 m/m Top Width= 0.48 m

Length= 10.00 m Slope= 0.0050 m/m

Inlet Invert= 0.000 m, Outlet Invert= -0.050 m

**Reach 53R: Grassed Swale**

Hydrograph

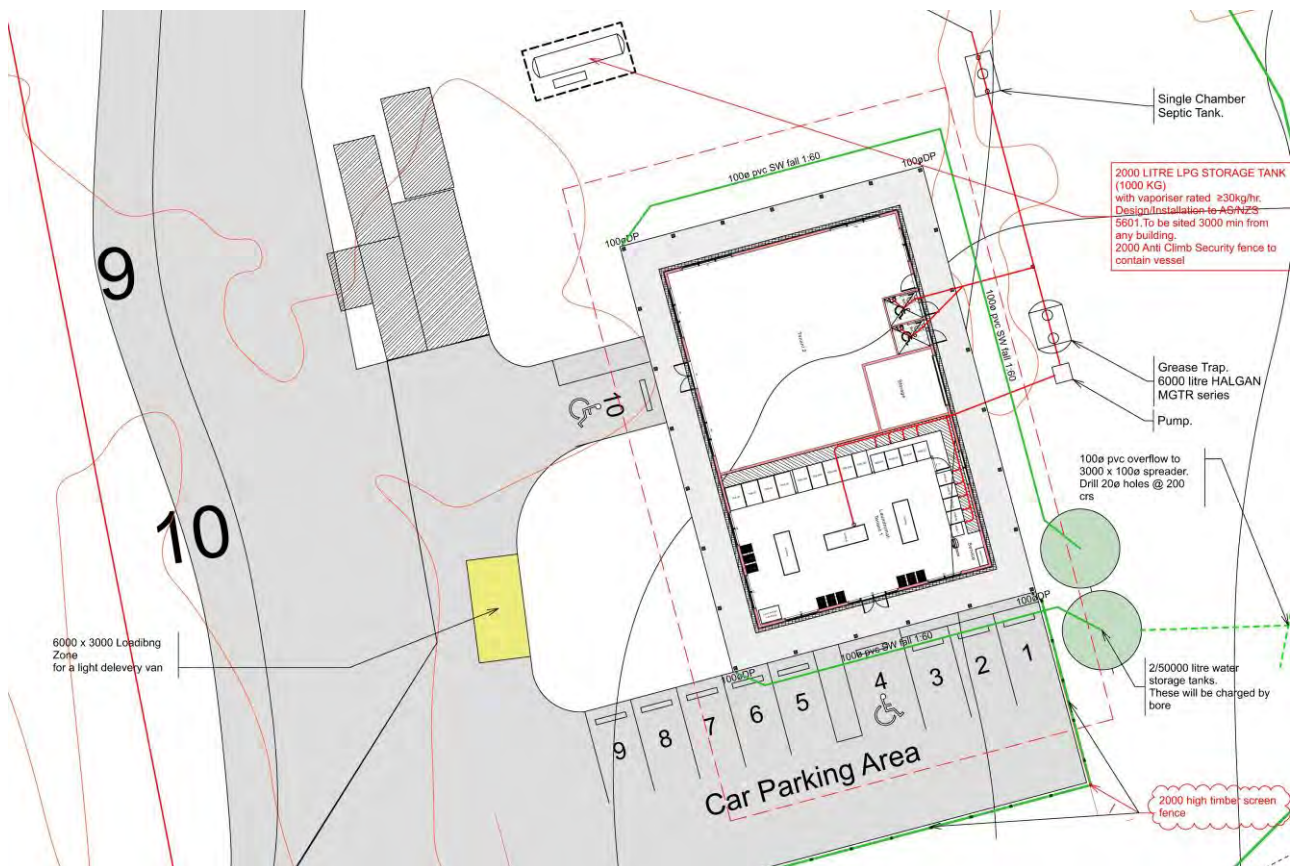


Appendix D – Traffic Impact Assessment



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PROPOSED COMMERCIAL & LAUNDRAMAT 4238 FAR NORTH RD/SH1 PUKENUI



ASSESSMENT OF TRAFFIC EFFECTS

Prepared by Engineering Outcomes Ltd
11 May 2026

Table of Contents

1. PURPOSE.....	1
2. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS.....	1
3. THE PROPOSAL AND EXISTING ACTIVITIES.....	1
4. THE EXISTING ROAD NETWORK	3
5. COUNCIL RULES AND STANDARDS	6
6. TRAFFIC.....	6
6.1 TRAFFIC GENERATION.....	6
6.2 TRAFFIC ON PUBLIC ROADS	7
6.3 PARKING DEMAND.....	7
6.4 CRASHES.....	8
7. ASSESSMENT OF TRAFFIC EFFECTS AND PROPOSED MITIGATION MEASURES	8
7.1 WIDTH OF FAR NORTH ROAD	8
7.2 PEDESTRIAN AND CYCLIST SAFETY	9
7.3 OTHER MATTERS.....	9
8. FAR NORTH DISTRICT PLAN – ASSESSMENT CRITERIA.....	10
8.1 RULE 15.1.6A.4.1: TRAFFIC INTENSITY MATTERS FOR CONSIDERATION.....	10
8.2 SECTION 15.1.6A.7: GENERAL ASSESSMENT CRITERIA, TRAFFIC	11
APPENDIX A: SITE PLAN.....	14
APPENDIX B: ANALYSIS OF WARRANTS FOR “TURN TREATMENTS” AND THEIR BASIS.....	15
 FIGURE 1. GENERAL PLAN OF THE SITE AND PROPOSAL INCLUDING THE CURRENT SITE PLAN	 2
FIGURE 2. SIGHTLINES NORTH OF THE NORTHERN CROSSING	2
FIGURE 3. AUSTROADS’ “TURN TREATMENT” WARRANTS FOR THE BUSIEST ENTRIES DURING HOLIDAYS.	8
 TABLE 1. DETAILS OF TYPE GA AND GD CRASHES ON SEALED RURAL ROADS IN THE FAR NORTH DISTRICT IN THE MOST RECENT 5 CALENDAR YEARS	 16

1. PURPOSE

This is a report covering the traffic effects of a proposed laundromat and existing commercial activity on a site known as “Houhora Honey Bees” at 4238 Far North Road/SH1, Pukenui. It covers the movement of generated traffic including internal vehicle movement, pedestrian safety, parking, loading and effects on the existing road network.

2. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Overall, it is concluded that the traffic effects and safety risks associated with the proposal will be well within acceptable limits and less than minor.

There is ample parking and loading space on the site to cater for the demand from all existing and proposed activities including associated turning/manoeuvring and internal movement, without any likelihood of overspill from the site. Despite the absence of turn treatments at the two crossings, entries are well managed/not resulting in risks that are outside acceptable limits and this will continue. The crossings are sealed and the sight distances associated with them are at least adequate.

Some walk-ins already occur but very few, quite likely none, are expected as a result of the laundromat and second tenancy. No crashes have been reported involving vehicles turning through the site crossings, nor vulnerable road users, since at least the start of 2016.

The effects on the wider road network are expected to be virtually negligible and no associated mitigation is warranted.

3. THE PROPOSAL AND EXISTING ACTIVITIES

The proposal is for a laundromat with nine washing machines and driers plus an industrial unit (150 sq.m GFA) and associated storage (16 sq.m) both intended at least initially for the use of the applicant. The laundromat will operate between 8am and 8pm with automated pay terminals and no staff. Existing activities on the site include a “container café” with some outdoor seating and a takeaway food service, plus an existing turning and parking area for school buses and the parents of pupils, which the applicant allows as a community service.

The activities are all located on Lot 5 DP 107403 on Far North Road/SH1, Pukenui, Northland.

The site will provide parking for more than forty cars plus a loading area, all outside of the bus turning and parking. A loading bay is proposed at a suitable location near the industrial unit.

All activities lead to two existing access connections on the eastern side of Far North Road at route positions 65/3.75 km (northern) and 65/3.83 km. There are three no-stopping signs on the berm of Far North Road nearly opposite the northern crossing. Those cover the only berms on which cars could park off the site in its vicinity.

There is a footpath along the site frontage, which ends at the northern crossing. It provides a continuous pathway to all parts of Pukenui settlement including the shopping centre and wharf.

Another private access leads to Far North Road at the location of the northern crossing and shares that with the activities on the subject site. It leads to fourteen dwellings including one on the site.

The activities, parking loading and crossings are depicted in Figure 1 and sightlines are shown in Figure 2.

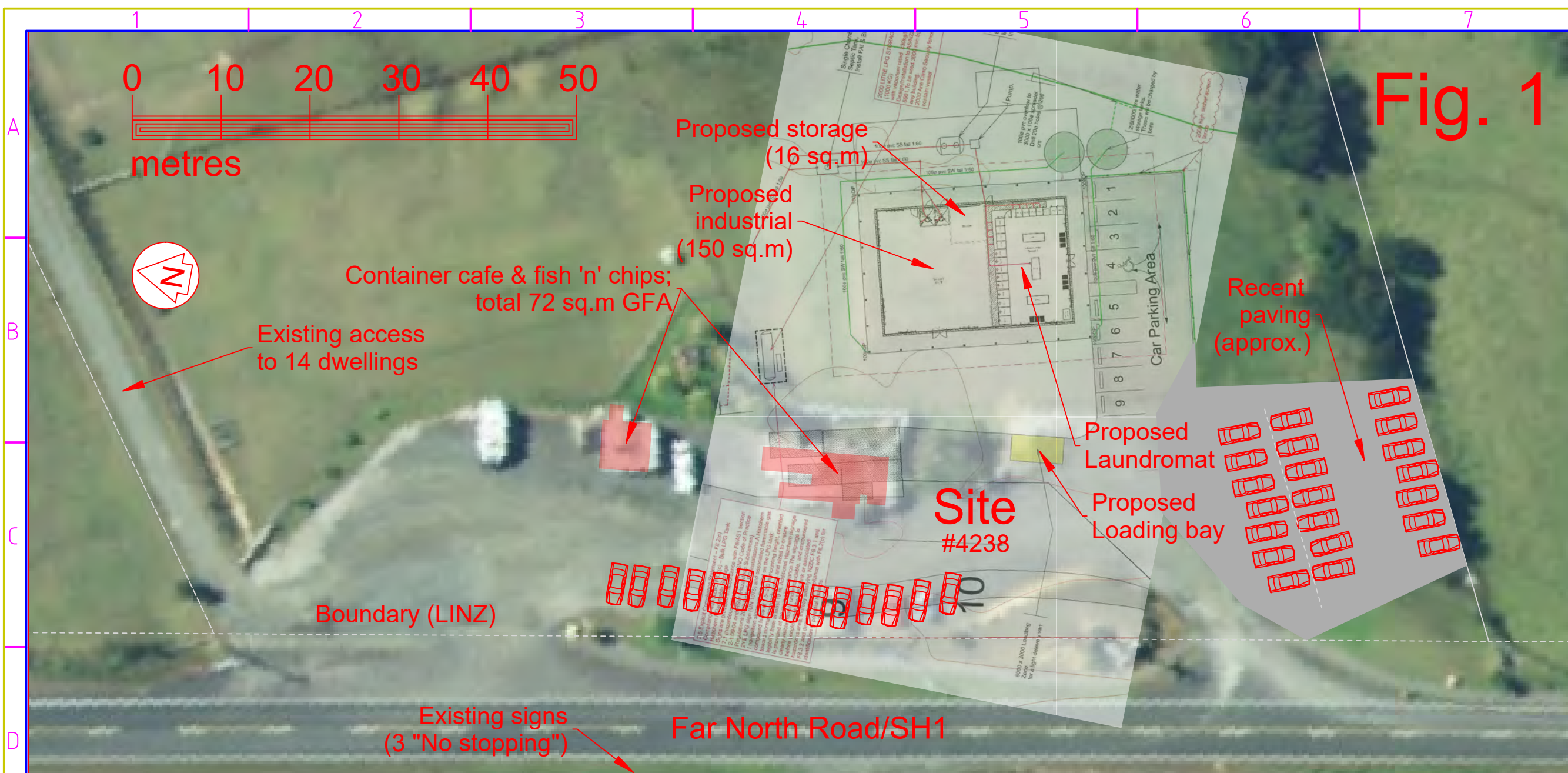


Fig. 1

Plans

Parking Sightlines

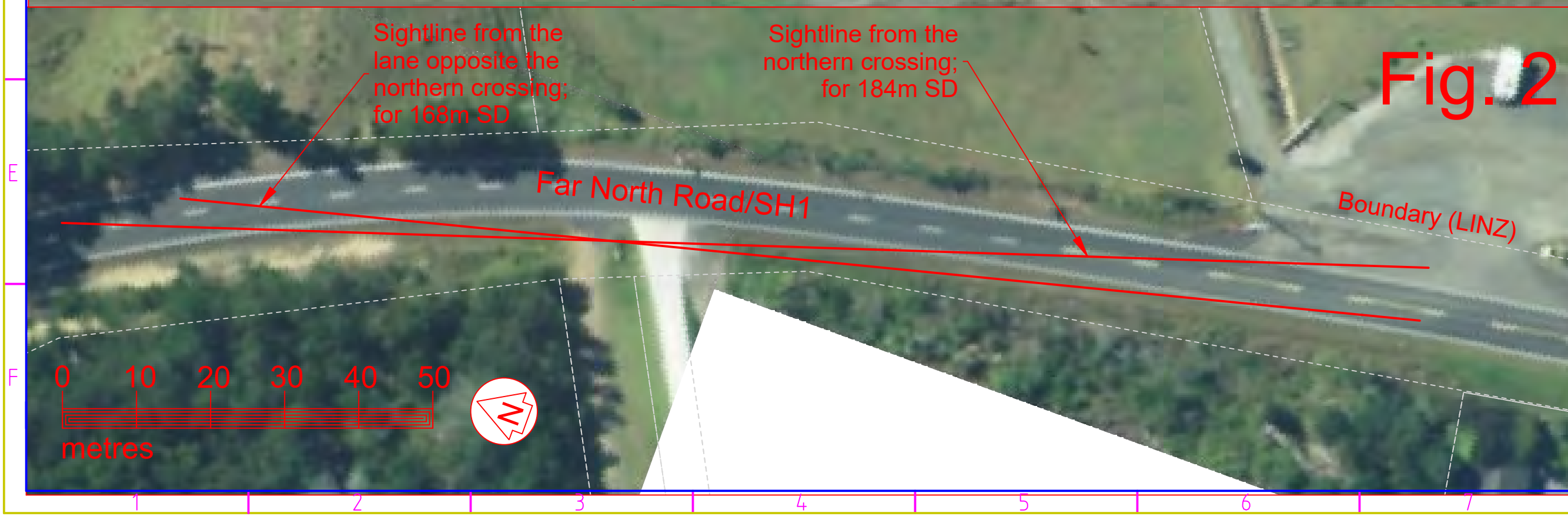


Fig. 2



Tel. 09 436 5534
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Project
Commercial
4238 Far North Rd
Pukenui

Client
**Houhora
Honey Bees**

Surveyed by
LINZ

Amendments

Council ref.

Scale 1:500 at A3

Date 11-May-2026 09:13:02

4. THE EXISTING ROAD NETWORK

Far North Road is sealed with two lanes, a carriageway width close to 6.5 metres through the site frontage and open side drains. It is near level and straight along the frontage.

The speed limit on this part of Far North Road is 80 kilometres per hour but there is a transition to 50 km/hr only 70 metres south of the southern crossing (which is at the northern extent of the Pukenui settlement).

There is no carriageway lighting on Far North Road in this vicinity.

Photo 1. A panorama of the site and existing parking from north (left) to south, centred on the location of the proposed industrial unit. The laundromat will be at centre-right (beyond the grey car), the existing container café is at centre-left and the takeaway food outlet is beyond that (with the white car parked in front).



Photo 2. A panorama of Far North Road from north (left) to south, centred on the southern access crossing and laundromat site. Sight distances in this locality are all greater than the safe-intersection standard - the highest standard applicable to safety.



Photo 3. A panorama of Far North Road from north (left) to south, centred on the northern access crossing.



Photo 4. Looking south along Far North Road from the southern access crossing. Note the speed limit transition (from 80 to 50 km/hr).



Photo 5. Looking north along Far North Road from the southern access crossing.



Photo 6. Looking north along Far North Road from the northern access crossing.



Photo 7. Looking south along Far North Road from the northern access crossing.



Photo 8. Looking east along the private access that leads to Far North Road a short distance north of the site.



Photo 9. The existing no-stopping signs opposite the northern crossing, looking north.



5. COUNCIL RULES AND STANDARDS

The *Far North district plan* rule 15.1.6C.1.1c specifies that private access is permitted for access that leads to eight household equivalents and that access leading to nine or more household equivalents is to be a public road. Discretionary land-use consent is required for private access that leads to more than eight household equivalents. A household equivalent generates up to 10 vehicle movements per day.

Section 3.3.7.4 of the council's engineering standard 2009, which is part of the district plan, specifies that:

Accesses that carry 60 vehicle [movements] per day or more and have access onto rural roads that are expected to carry fewer than 1,000 vehicles per day in 10 years shall be in accordance with drawing FNDC/S/6D.

That is, it is specified that such accesses are to have local widening on the priority route to separate vehicles that are turning off that route from others that are not turning. [It is suggested that this clause should read "... **more** than 1,000 vehicles per day..." because FNDC/S/6D specifies a higher standard of crossing than any others. Far North Road does carry more than 1,000 vehicle movements per day at this locality.]

6. TRAFFIC

All vehicle movements are one-way movements whether an entry or exit or a movement in one direction along public roads.

6.1 Traffic generation

The traffic generation of the proposal has been estimated by monitoring the site and crossings, with digital video, in the third week of March 2026 including a Friday and weekend.

The total daily traffic on the Friday was 420 movements of which 63% travelled to/from the south and 12% occurred during the busiest hour (2 to 3pm). The two other busiest hours were between 7 and 8am and noon to 1pm during which 9% of the daily traffic movement occurred. A total of fourteen movements of large vehicles were observed of which four were of (school) buses, the remainder being trucks that were all visiting as customers, ie not making deliveries.

On the Saturday, the overall traffic was lower, but that around the middle of the day was slightly higher – specifically 76 movements between 11am and 1pm compared with 67 during the same period on the Friday. This indicates that a significant number of traffic movements on weekdays are generated by both workers and school pupils.

Of entries to the site and private access, 61% of right turns are into the southern access and 88% of left turns are into the northern access. The proportion of laundromat trips to/from the south is expected to mirror that from the overall site – 63% and a large proportion of entries are expected through the southern crossing.

A total of 70 movements were counted on the private access on the Friday. Based on the nearest 24-hour counts on SH1, this is equivalent to 74 movements over 24 hours.

It is expected that each of the laundromat machines will be used an average of four times on average days and up to eight times each during busy/holiday periods. The second tenancy will initially be used as a workspace for the container café. Even if it is let to an external tenant, it is expected to generate no more than 8 to 10 movements per day.

Some crossover, or “internal capture”, is expected such that laundromat customers would also patronise the café or takeaway food outlet and would have done so without the laundromat. This effect is expected to be only on traffic movement and be relatively small, but also far from insignificant – likely in the range 15 to 25% of laundromat customers.

As such, the laundromat and industrial unit is estimated to generate traffic in the range 60 to 66 additional movements on average days and 120 to 130 during holiday periods (over and above the traffic generated by the existing activities). This will increase the traffic on average weekdays to close to 500 movements. Similar levels are expected during holiday periods, when there is more recreational traffic but less of workers and none of school pupils.

6.2 Traffic on public roads

The current traffic on this part of Far North Road is estimated at 1,250 to 1,300 movements on an average day with future growth in the range 25 to 28 movements per day per annum¹. Significant increases are expected during holiday periods – potentially as much as a doubling.

In 2024 and 2025, weekend traffic at the nearest count station - 600 metres south of Turk Valley Road (south of Pukenui), was 87% of weekday traffic. This is expected to be mirrored at this site including with traffic generated by the laundromat.

6.3 Parking Demand

The peak existing parking demand occurred on the Friday of the monitoring, shortly before 8am, and was ten cars². The laundromat is expected to generate demand for nine cars when all machines are in use.

As shown in Figures 1 and 2, there is space for more than forty cars to park without the need to form or pave additional areas. Those are all clear of turning areas for buses and visiting trucks.

¹ Linear growth based on the nearest count, 600 metres south of Turk Valley Road which is south of both Pukenui and the Houhora Heads and Wagener holiday park. The linear trend in 15 years of counts from that location, determined using least-squares linear regression, was 34 movements per day per annum. The resulting daily traffic is below that estimated in Mobile Road for this locality, which is 1,500 movements on an average day, but that estimate is not supported by the count data.

² Determined by tracking each individual vehicle movement.

6.4 Crashes

The CAS crash database has been searched this part of Far North Road, including both crossings, over the period since the start of 2016. Two crashes are reported along the frontage in that time period including one, in October 2020, that resulted in serious injuries. However, the applicants owned the site in October 2020 and are not aware of any such crash and neither are other local residents. Furthermore, there is no crossing in the location reported in CAS. There is a crossing on the western side of Far North Road close to 44 metres north of the southern connection of Harbour View Road and another similarly situated in relation to Waterfront Road south of Pukenui (which is reported to be commonly confused with Harbour View Road and at which the speed limit is also the 80 km/hr as stated in the traffic crash report). In any event, the reported serious crash was not related to the activities on the subject site.

The other crash on the site frontage involved a left turn into #4231 Far North Road, opposite the site, but no injuries resulted.

No crashes have been reported that involve vulnerable road users, or of any type at the existing access crossings, in at least that time period.

7. ASSESSMENT OF TRAFFIC EFFECTS AND PROPOSED MITIGATION MEASURES

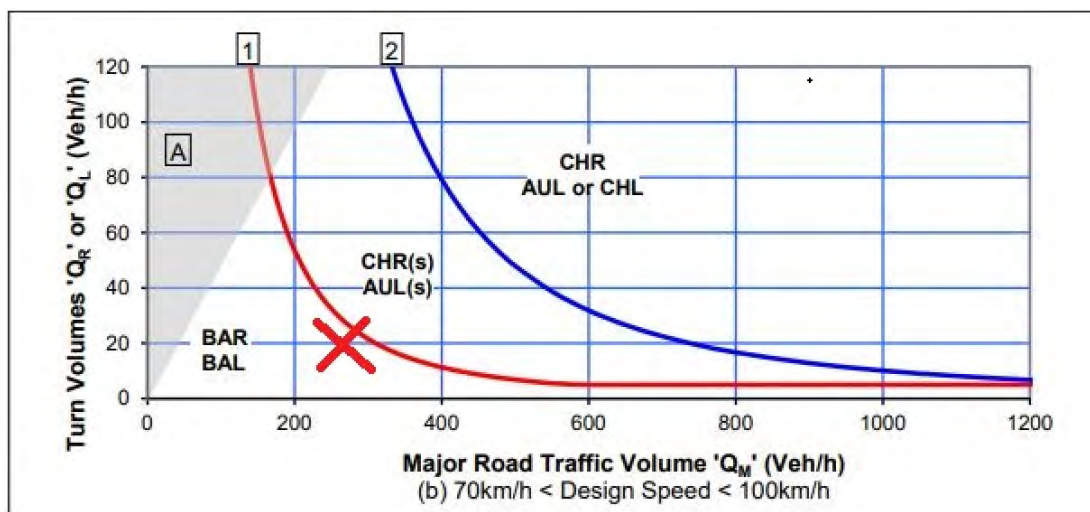
With the ample space on the site for all parking, loading and turning as shown, the key potential traffic effects of the proposal are considered to be the width of Far North Road at the access crossings and potential hazards to people on foot.

Sight distances and effects on the wider existing road network also warrant comment. It is not necessary to evaluate the capacity of the crossings because the traffic on this part of Far North Road will not reach levels at which exits can be challenging, for many decades at least and likely never. The existence of two crossings also splits the traffic and increases the overall capacity again.

7.1 Width of Far North Road

AUSTROADS' *Guide to Traffic Engineering* series of guidelines has warrants charts for local widening at crossings, which are generally known as "turn treatments". Figure 3 shows where the busier crossing for the busier entries falls on the relevant chart during holiday periods.

Figure 3. AUSTROADS' "turn treatment" warrants for the busiest entries during holidays.



This shows that neither “CHR” (a right turn bay) nor “AUL” (left turn lane) treatments are warranted at this location.

However the chart does specify “BAR” and “BAL” treatment of which NZTA’s Diagram D and E widening are examples. In fact, the chart specifies this for all combinations of traffic below the borderline for CHR and AUL treatment. Appendix B is a first-principles assessment of whether such treatments are, in fact, warranted here and concludes that the benefits would be less than one twentieth of the level that might warrant the equivalent of BAR and/or BAL widening³.

This assessment is also conservative because the southern crossing, where most right-turn entries occur, is only 70 metres beyond the transition from 50 km/hr, so it is unlikely that the operating speed at that location will be at levels typical for rural areas more remote from urban settlements. This part of SH1N is also nowhere near as busy as the average of the priority routes in which the relevant historic crashes occurred.

Overall, it is concluded that the risks associated with existing access crossings, including the width of Far North Road through them, are well within acceptable limits and, as such, the overall effects, including with the additional traffic, will be less than minor.

7.2 Pedestrian and cyclist safety

A small number of people were observed walking and cycling on Far North Road over the two days of monitoring – between 5 and 8 of each per day, most of whom were travelling to/from the site.

The proposal will slightly increase the risks to vulnerable road users because of the expected (~15%) increase in vehicle traffic. However, that risk is extremely low – not a single incident involving vulnerable road users has been reported in this vicinity since at least the start of 2016. A 15% increase in a virtually undetectable risk is concluded to be an effect that is less than minor.

7.3 Other matters

The sight distances associated with the crossings are all well above the safe-stopping standard (SSSD)⁴ and most are above the safe-intersection standard (the highest standard applicable to safety).

A Far North district-wide search of crashes involving vehicles exiting from an intersection or side road, on sealed rural roads in locations in which visibility is restricted, and being hit from the right⁵, did not find a single such crash in the most recent 5 calendar years. This is despite numerous locations in the district in which there are visibility restrictions to the right of exiting crossings and intersections.

Reinforcing this conclusion is a complete absence of crashes at the crossings for at least the last 10 years despite them having been in use for at least that period.

Overall, it is concluded that the risks associated with the sight distances from the crossing point are well within acceptable limits and, as such, the effects will be less than minor.

³ Which on State highways in this country is either Diagram D or E widening.

⁴ The most restricted sightline vector is ahead of the northern crossing, which is necessary for vehicles turning right into the crossing, from which the sight distance is SSSD plus 1.4 seconds of travel at the full operating speed. The proposal is not likely to increase the frequency of such turns. The available sight distance north of the northern crossing itself is SSSD plus another 2.0 seconds.

⁵ Type “JA” crashes in CAS.

The accessible parking space for the laundromat (#4) is located at the entrance door to the facility.

The road network beyond that site has ample surplus capacity for the traffic generated by existing activities additional traffic expected from the proposal.

8. FAR NORTH DISTRICT PLAN – ASSESSMENT CRITERIA

There are three sets of criteria in the plan relevant to traffic management and access. No assessment is given against the parking criteria in Section 15.1.6B.5, because all parking demand can be easily accommodated on the lots in accordance with section 15.1.6B and the Far North district plan no longer has minimum parking requirements. Each of the other criteria is quoted here and the assessment is given with each one.

8.1 Rule 15.1.6A.4.1: Traffic Intensity Matters for Consideration

This is an assessment of the proposal against matters that the Council will restrict the exercise of its discretion to with respect to restricted-discretionary activities.

Criterion (a): The time of day when the extra vehicle movements will occur.

The activities are expected to generate traffic at all times during opening hours, but with peaks around mid-afternoon on weekdays and around noon during holiday periods, with smaller peak around noon on weekends and between 7 and 8 am weekdays.

Criterion (b): The distance between the location where the vehicle movements take place and any adjacent properties.

The nearest existing dwellings are on the opposite side of Far North Road. That on the same side is more than 100 metres from the access.

Criterion (c): The width and capability of any street to be able to cope safely with the extra vehicle movements.

Far North Road will be suitable at its current width even with the additional traffic.

Criterion (d): The location of any footpaths and the volume of pedestrian traffic on them.

There is a footpath on Far North Road along the site frontage and which connects to all of Pukenui. For the reasons given in section 7.2, the effects of the proposal on pedestrians will be less than minor.

Criterion (e): The sight distances associated with the vehicle access onto the street.

Assessment of Criterion (e): This is addressed in section 7.3 and finds that all sight distances are at least adequate.

Criterion (f): The existing volume of traffic on the streets affected.

See section 6.2.

Criterion (g): Any existing congestion or safety problems on the streets affected.

There is no congestion in this locality and no evidence of unusual safety issues on Far North Road. See section 6.4

Criterion (h): With respect to effects in local neighbourhoods, the ability to mitigate any adverse effects through the design of the access, or the screening of vehicle movements, or limiting the times when vehicle movements occur.

Most vehicle movements are already screened from the closest properties by vegetation.

Criterion (i): With respect to the effects on through traffic on roads with more than 1000 vehicle movements per day, the extent to which Council's "Engineering Standards and Guidelines" (2004) are met.

There are no council transport assets in this locality that the *Engineering Standards* refer to.

Criterion (j): Effects of the activity where it is located within 500m of reserve land administered by the Department of Conservation upon the ability of the Department to manage and administer that land.

The site is not located within 500 metres of land administered by the Department of Conservation.

Criterion (k): The provision of safe access for pedestrians moving within or exiting the site

Some people walk to/from and through the site. For the reasons given in section 7.2, the risk to those people is well within acceptable limits and the effects are less than minor.

8.2 Section 15.1.6A.7: General Assessment Criteria, Traffic

This section includes eleven criteria. Criteria (a), (j), (k) and (l) are unique to this section of the plan. Criteria (b) to (i) are identical to criteria (a) to (h) of the assessment criteria in 15.1.6A.4.1, respectively, and have already been assessed in the previous section. This section is restricted to the criteria unique to 15.1.6A.7.

Criterion (a): The extent to which the expected traffic intensity exceeds the threshold set by the Traffic Intensity Factor contained in Appendix 3A in Part 4 of the district plan.

The permitted Traffic Intensity Factor (TIF) threshold for this site is 60 and while both the existing (consented) and proposed activities will significantly exceed that TIF, in reality as shown, the proposed traffic management and existing and proposed roadways will be able to cope with it at least adequately.

Criterion (j): With respect to the effects on through traffic on arterial roads, strategic roads and State Highways, any measures such as right-turn bays, flush medians, left-turn deceleration tapers, etc. proposed to be installed on the road as part of the development to accommodate traffic turning into and out of the site.

Far North Road has more than adequate capacity for traffic from both the existing and proposed activities on the site.

Criterion (k): The extent to which the activity may cause or exacerbate natural hazards or may be adversely affected by natural hazards, and therefore increase the risk to life, property and the environment.

The site access upgrading will require minimal earthworks and/or retaining and will not cause or exacerbate natural hazards. This is addressed in more detail in the reports of others.

Criterion (l): Whether providing or having access to bicycle parking, shower/changing facilities or alternative transportation would reduce the number of vehicle movements associated with the proposed activity.

Such facilities might encourage a small number of staff to travel by bicycle but even this is not certain and there is little, probably nothing, to be gained by the provision of special facilities.

15.1.6C.4.1 Property Access

Criteria (a) and (b) of this repeat those in other sections and have already been addressed. Specific comment is given for all others.

Criterion (c): Any foreseeable future changes in traffic patterns in the area.

No significant projects or road links are planned that might significantly change the patterns of traffic in this vicinity.

Criterion (d): Possible measures or restrictions on vehicle movements in and out of the access.

For the reasons given, the traffic will be well managed and there is no need for restrictions on vehicle movements.

Criterion (e): The adequacy of the engineering standards proposed and the ease of access to and from, and within, the site.

This is addressed in detailed section 7 and finds that the site access is, and will remain, adequate and fit-for-purpose.

Criterion (f): The provision of access for all persons and vehicles likely to need access to the site, including pedestrian, cycle, disabled, vehicular.

The access connections to Far North Road ensure adequate access for all transport modes. Pedestrians access by way of the footpath along the frontage and cyclists will be able to enter the site safely by way of the access and vehicle crossing connection.

Criterion (g): The provision made to mitigate the effects of stormwater runoff, and any impact of roading and access on waterways, ecosystems, drainage patterns or the amenities of adjoining properties.

The new parking and associated access and manoeuvring will require minimal earthworks and/or retaining and will not cause or exacerbate natural hazards. This is addressed in more detail in the reports of others.

Criterion (h) relates to sites with a road frontage on Kerikeri Road so is not relevant.

Criterion (i) The provisions of the roading hierarchy, and any development plans of the roading network.

No significant projects or road links are planned that might significantly change the patterns of traffic in this vicinity.

Criterion (j) relates to alternative access for car parking and vehicle loading in business zones and is not relevant.

Criterion (k) Any need to require provision to be made in a subdivision for the vesting of reserves for the purpose of facilitating connections to future roading extensions to serve surrounding land; future connection of pedestrian accessways from street to street; future provision of service lanes; or planned road links that may need to pass through the subdivision; and the practicality of creating such easements at the time of subdivision application in order to facilitate later development, so is not relevant.

Also Criterion (l) Enter into agreements that will enable the Council to require the future owners to form and vest roads when other land becomes available (consent notices shall be registered on such Certificates of Title pursuant to Rule 13.6.7).

There is nothing to be gained by facilitating access to areas outside the site using the mechanisms described. No internal access has potential outlets to other locations and is private in any event.

Criterion (m) With respect to access to a State Highway that is a Limited Access Road, the effects on the safety and/or efficiency on any State Highway and its connection to the local road network and the provision of written approval from the New Zealand Transport Agency.

The site leads directly to a State highway that is limited access road. This report will form the basis for consultation with the NZ Transport Agency.

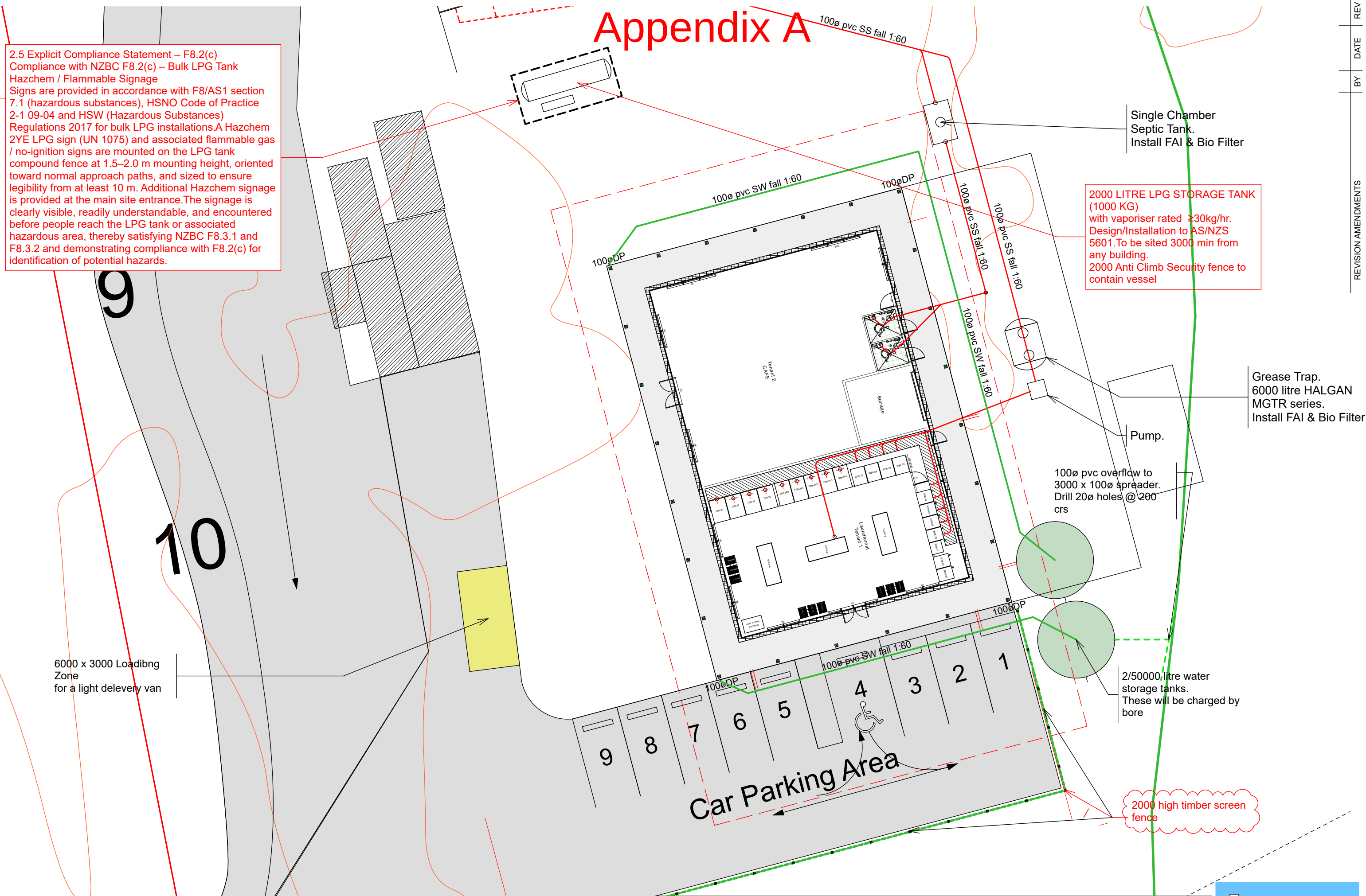
DRAWINGS ARE NOT TO BE SCALED. USE ONLY FIGURED DIMENSIONS. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.

REVISION AMENDMENTS

BY	DATE	REV
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2.5 Explicit Compliance Statement – F8.2(c)
Compliance with NZBC F8.2(c) – Bulk LPG Tank
Hazchem / Flammable Signage
Signs are provided in accordance with F8/AS1 section 7.1 (hazardous substances), HSNO Code of Practice 2-1 09-04 and HSW (Hazardous Substances) Regulations 2017 for bulk LPG installations. A Hazchem 2YE LPG sign (UN 1075) and associated flammable gas / no-ignition signs are mounted on the LPG tank compound fence at 1.5–2.0 m mounting height, oriented toward normal approach paths, and sized to ensure legibility from at least 10 m. Additional Hazchem signage is provided at the main site entrance. The signage is clearly visible, readily understandable, and encountered before people reach the LPG tank or associated hazardous area, thereby satisfying NZBC F8.3.1 and F8.3.2 and demonstrating compliance with F8.2(c) for identification of potential hazards.

Appendix A



CLIENT:	FIONA & SHAUN KEHELY	PROJECT #	FSK-0725
PROJECT:	SH10 PUKENUI	DATE #	22/09/2025
DWG	ENLARGED SITE/PARKING PLAN	SCALE @ A3	1:200
		DRAWN	KB/TB/DB
		CHKD	KB/TB/DB
		DWG #	A02



APPENDIX B: ANALYSIS OF WARRANTS FOR “TURN TREATMENTS” AND THEIR BASIS

The term “turn treatments” includes facilities such as right-turn bays, left-turn lanes and/or Diagram “D” or “E” widening. All are intended to provide space for vehicles that are not turning to safely overtake other vehicles that are turning into a side road or private access. As shown in Figure 2 of this report, according to AUSTROADS neither a right-turn bay nor a left-turn lane are warranted, but the warrants are not clear about lesser treatments that are also not currently in place at this site. This is a first-principles assessment of those.

Research that underpins AUSTROADS’ warrants is summarised in a paper entitled *New warrants for unsignalised intersection turn treatments* in the Proceedings of the Australian Road Research Board's 22nd annual conference (held in Canberra in 2006). That paper, which was prepared by the two researchers who developed the warrants - Dr Owen Arndt and Professor Rod Troutbeck, includes warrant charts identical to those in AUSTROADS’ *Guide to Traffic Management Part 6* and includes the following statement:

It is proposed that the new warrants be produced by identifying the location[s] at which the benefits of providing a higher-level treatment ([being] the reduction in estimated accident costs) are made [at least] equal to a proportion of the additional construction costs.’ [our additions to add clarification.]

The paper does not say what proportion of the costs it is appropriate to apply in respect of these warrants. In general, such upgrades are not even considered when the benefit-to-cost ratio (BCR) of doing so is below 1.0. In fact, a BCR much higher than 1.0 is generally required before such work is triggered. For the purposes of this investigation, a BCR of 1.0 has been taken as the trigger point for any upgrades. A lower trigger point is arguably appropriate for reviews to ensure there is time for review recommendations to be implemented.

This evaluation is for right turn treatment for the southern crossing and left turn treatment for the northern crossing. Those experience, and will continue to experience, the higher frequency of each of those types of entries.

Methods used

The BCR of the construction of local widening on Far North Road through the southern crossing location, has been estimated by comparing the expected frequency of right turns into that crossing with those turns over a much larger sample area than this single intersection - large enough to provide adequate statistical confidence⁶. From this, the “social cost” of relevant historic crashes has been calculated over the larger sample. Then, the benefits of upgrading the subject intersection have been estimated as a pro rata based on the frequency of turns through it. This has then been compared with the estimated cost of upgrading.

Relevant crash history

In the most recent 5 calendar years, eighteen historic injury-causing Types “GA” and “GD” crashes (rear-end crashes involving a vehicle turning left or right into a side road or private crossing) are reported on sealed rural roads in the Far North district. Of those, four resulted in serious injuries and fourteen resulted in minor injuries.

⁶ The entire Far North district including all State highways and non State highways.

A large proportion of the those crash locations have no specific widening. A large proportion of the crashes occurred on roads much busier than Far North in this location. More details of the crashes are given in Table 1.

Table 1. Details of Type GA and GD crashes on sealed rural roads in the Far North district in the most recent 5 calendar years

NOTES FROM DETAILED REPORTS	MVMT	CRASH SEVERITY	CRASH ROAD	CRASH DIST. (m)	SIDE ROAD DIRN	SIDE ROAD OR FEATURE	AADT, priority route	LATITUDE	LONGITUDE	CRASH ID	CRASH DATE
Long straight road, excellent visibility.	GD	S	SH 1N		I	SMITH ROAD	6750	-35.370068	173.97423	2021196006	24/07/2021
Long straight road, excellent visibility	GD	M	SH 1N	333	N	WIRELESS ROAD	7465	-35.085903	173.257099	2021203081	15/10/2021
Driveway. Driver distracted by tailgating vehicle	GD	M	AHIPARA ROAD	873	W	KAITAIA-AWAROA ROAD	2400	-35.173531	173.170976	2022221133	5/05/2022
Driveway Driver distracted "looking at the oranges".	GD	M	SH 10	452	N	COTTLE HILL DRIVE	9800	-35.261243	173.937335	2022224936	5/06/2022
10.7m wide, following driver distracted cleaning the windscreen.	GD	M	SH 1	877	N	WIRELESS ROAD	7860	-35.080818	173.257324	2023248259	16/02/2023
10.7m wide, following driver distracted cleaning the windscreen.	GD	M	SH 1	342	N	WIRELESS ROAD	7860	-35.085819	173.257095	2023257276	24/05/2023
7.5m wide	GD	M	SH 10	701	E	TAKOU BAY ROAD	4754	-35.14235	173.882278	2023259198	10/06/2023
9.6m wide. Following driver states the turning driver "pulled back onto the road after I tried to go around them".	GD	M	SH 12		I	WAITAHEKE ROAD	3600	-35.368267	173.866848	2023254894	16/02/2023
7.0m wide, inattention, motorbike.	GD	S	HOREKE ROAD	808	N	SH 12	260	-35.451725	173.650752	2025331139	3/05/2025
Inattention	GA	M	ORURU ROAD	271	N	DANGEN ROAD	950	-35.07735	173.508758	2022236456	16/09/2022
>/= Diagram E, inattention.	GD	M	SH 1		I	HUPARA ROAD	7520	-35.366161	173.969482	2024286101	30/04/2024
Previous crash site	GD	M	SH 1		I	WEHIRUA ROAD	1900	-35.319202	173.799638	2025352408	22/10/2025
Miscoded. Actually two-turning.	GD	M	SH 10	456	N	PUKEWHA ROAD		-35.269578	173.941739	2024279473	4/02/2024
10m wide. Driver distracted or fell asleep.	GD	S	SH 10		I	TAUPO BAY ROAD	3400	-35.001225	173.618312	2024281206	18/02/2024
9.1m wide, possible visibility restriction.	GD	M	SH 12	576	S	WAIWHARIKI ROAD	4550	-35.386326	173.847731	2024296871	14/09/2024
9.2m wide, "failed to notice slow/stopped vehicle ahead".	GD	M	WAIPAPA ROAD		I	PATHWAYS DRIVE	8950	-35.207681	173.936486	2025333674	17/05/2025
Inattention	GA	M	ORURU ROAD	271	N	DANGEN ROAD	950	-35.07735	173.508758	2022236456	16/09/2022
Motorbike following, rider not paying attention.	GA	S	TE AHU AHU ROAD	833	W	OLD BAY ROAD	1910	-35.313038	173.931193	2022243218	16/12/2022

This analysis is carried out as if right-turn treatment at the subject crossing would address all of these crashes. This is highly conservative because inattention was a factor in most of the crashes and "BAR" treatment does not generally address crashes resulting from inattention.

Analysis and results

It is not known how many right turns are made into rural side roads and private access across the Far North district each day, but it is possible to develop indicative estimates. There were close to than 20,000 rural households in the district in 2023⁷ – near the midpoint of the crash history under consideration. If an average of 6 vehicle trips are made to and from each household each day and each trip involved an average of two turns into a rural side road or access (in either direction), then a daily average of 240,000 such turns would be made each day.

The "social cost" of reported⁸ rural rear-end crashes that cause serious injury is in the order of \$830,000 and that for such crashes that cause minor injuries is in the order of \$90,000⁹. The average annual cost of the eighteen such crashes, in the historic record considered, is therefore \$915,000 for which the present value is \$21 million¹⁰.

⁷ 2023 Census, data obtained from the Stat.NZ web-based tool.

⁸ Those in the *Crash Analysis System* database.

⁹ Waka Kotahi *Monetised Benefits and Costs Manual*. Tables A33 and A34.

¹⁰ *ibid* Table A125 for 4% annual discount rate and 60 year planning horizon.

It is estimated that, with the laundromat and associated development, a daily average close to 100 turns will be made into each crossing in the relevant directions.

Even in the unlikely event that the risks associated with the crossing are close to the average for the region and that Diagram D treatment would eliminate 50% of all Type GA and GD crashes at the crossing, the present-value benefit of such widening is only:

$0.5 \times \$21 \text{ million} \times 200 \text{ entries per day} \div 240,000 \text{ such turns district-wide} = \text{\$8,800}.$

The cost of the widening and other work to necessary to create the equivalent of BAR and BAL widening at this location is likely to be close to average. Such widening typically costs at least \$200,000 and potentially significantly more. On this basis, the BCR of such work will, therefore be no more than 0.04, or less than one twentieth of the level that might warrant the equivalent of BAR and BAL widening.

It is acknowledged that there are a number of uncertainties in this analysis. In particular, the district-wide frequency of turns from rural roads. However, the analysis is still highly conservative for the reasons given.

There are also numerous intersections in the Far North district in which no serious crashes are recorded despite no turn treatment being in place, the intersections being subject to even more traffic than the subject intersection including right turns into the side roads and/or having other challenges such as two lanes of traffic opposing right turns and/or restricted sight distance. Examples are:

- SH1N/Whangae Road; Kawakawa
 - SH1N/Mangamuka Road, Mangamuka;
 - SH1N/Callaghans Road Maromaku
 - SH1N/Ruapekapeka Road, Towai;
 - SH1N/ Te Ahu Ahu Road, Waimate North;
 - SH10/Oromahoe Road, Oromahoe;
 - SH10/Cottle Hill Drive, Kerikeri;
 - Sh12/Wharekawa Rd, Oue, south Hokianga
 - Kohukohu Road/Broadwood Road/Mangamuka, Mangamuka;
 - Wiroa Road/Waimate North Road, Kerikeri;
 - Te Ahu Ahu Road/Waimate North Road, Kerikeri;
 - Waiare Road/Wiroa Road, Okaihau;
 - Te Pua Road/SH15 and Lake Road, Okaihau;
 - Several side roads off Landing Road, Kerikeri including Waipapa Landing Place and the entrance to Waipapa Landing;
 - Several side roads off Kapiro Road including Purerua Road and McCaughan Road,
- Plus numerous private accesses.

Appendix E – NZTA Correspondence

On Tue, Jun 23, 2026 at 10:35 AM Nicole Wallace <Nicole.Wallace@nzta.govt.nz> wrote:

Good morning Dean, I hope you're well.

I forwarded your email below to our regional Asset and Safety personnel for their comments and NZTA is still of the position that both vehicle crossings will need to be upgraded to Access Type E standard, and a construction design plan for these upgrades will need to be submitted to NZTA for review / approval. This upgrade is due to the substandard sight distances from the vehicle crossings, neither of which meet the desirable SISD for 80 km/h of 226m. There is also no control over which accessway a driver will use if both accessways are to be retained.

I hope this helps. If not, please feel free to get in touch with me.

Ngā mihi | Kind regards

Nicole Wallace BEP

Intermediate Planner - Poutiaki Taiao (Environmental Planning)

Environmental Planning | System Design | Transport Services | Te Toki Tārai

Email: nicole.wallace@nzta.govt.nz

Phone: 07 987 1101

NZ Transport Agency Waka Kotahi

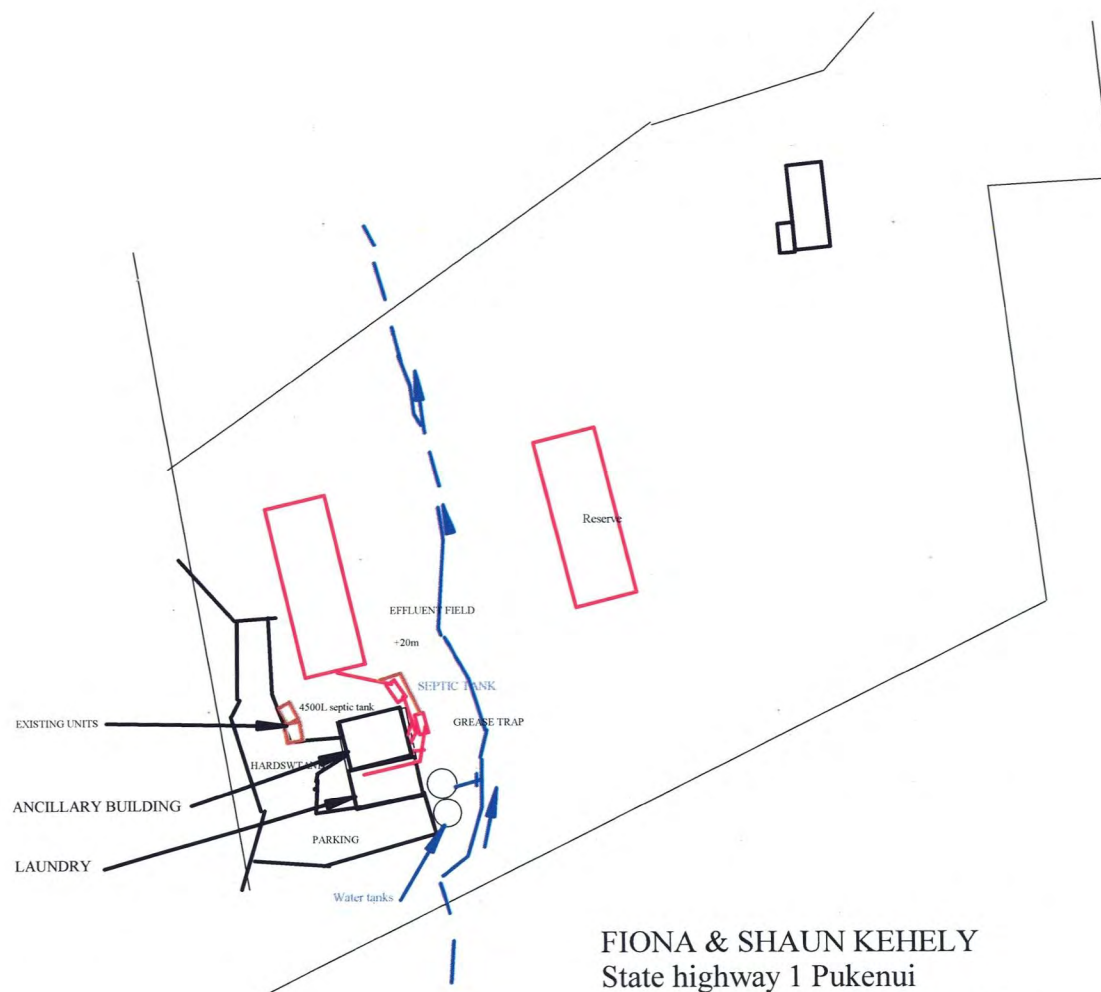
Hamilton Office, Level 1, Deloitte Building, 24 Anzac Parade

PO Box 973, Waikato Mail Centre, Hamilton 3240, New Zealand



www.nzta.govt.nz

Appendix F – TP58 Report



FIONA & SHAUN KEHELY
State highway 1 Pukenui
Septic & Waste water Schematic

Notes: All works to comply with ASNZS 3500
All materials to comply with ASNZS 1260
All septic and waste tanks to be a minimum of 3m off buildings
All septic works to be 1.5m off any boundary
Effluent field to be no closer than 15m from marked flood plain drainage
Falls to grease trap and septic tank to be no less than 1:60
Effluent field to be laid level
Septic tank to be 4500L fitted with FAI & Bio filter
Grease trap/laundry waste treatment tank to be fitted with fai & bio filter

Effluential DrainLayers Ltd

3778 Main North Road

R.D.4

Kaitia 0484

Phone 09 409 8854 Fax 09 409 7720 Mobile 0274 8855 84

Report Date: 15/10/2025

Owner Shaun & Fiona Keherly (KFCS Farms Ltd)

Storm Water Attenuation

Purpose

To control/assist the management of the effects of stormwater runoff from building developments and mitigate the impact this has on infrastructural assets.

Considerations

It needs to be accepted that the impact is greater in densely populated areas and less in urban/rural, this property is a farming enterprise.

The definition of soakage is the process where a permeable substance receives a liquid, in this case where storm water is disposed of into ground, or effective runoff slowed so as to minimize effects on the environment or infrastructure.

The infiltration factor k_{sat} assessment, assists in mitigating runoff impact.

Characteristics that determine permeability are soil structure, soil particle size, and geomorphology.

The flow rate of the soakage discharge is also dependent upon the soakage area and the hydraulic pressure forcing water into the absorbent media.

Site Description

The development is proposed to take place well back from Mangatoetoe road. This area of proposed development is in a soil type classed as TMH & WF The disposal area is more WF Whakapara Silt loam and Clay loam (moderately to well drained) soil class 4. This is a 1.9ha area of a large property.

Design Criteria

Soakage devices must be 3m from dwellings.

The Far North District Council aligns storm water attenuation requirements with other authorities.

The Whangarei District Council requires site attenuation when the percentage of impermeable surfaces exceeds 2%.

The Auckland Regional Council prepared TP10 as a reference on a similar basis and ASNZS 1547 is also structured in the same manner.

The spread sheet used in calculating Attenuation requirements has been developed in conjunction with the FNDC stormwater Engineer.

Effluent DrainLayers Ltd
3778 Main North Road
R.D.4
Kaitaia 0484

Phone 09 409 8854 Fax 09 409 7720 Mobile 0274 8855 84

The Far North District Council information was designed specifically to enable storm water design to be expedited quickly. The ARC prepared TP10 on the same basis. ASNZS1547 is also structured in the same manner.

Therefore, attenuation is only required when the ratio of impermeable surfaces to total property area exceeds 2%. However attenuation cannot be required by the FNDC retrospectively and so should not be a requirement with this development.

Design Calculations

All calculations submitted are via Stormwater calculation spread sheet. It is a given that new calculations may be required should future development take place.

Design Proposal

Any development has some adverse effects however in relation to the major area the new effects are small, with stormwater having no new immediate effect on any regional infrastructure. Stormwater overflow from tanks is designed to be slowed by a spreader to the existing drainage system, the metal hard stand is lower than the road and will discharge to the same over land area.

Devices which discharge water via infiltration through soil provide a storm water quality benefit to the receiving environment and the in-situ soil acts as a filter media for removing contaminants. This is a known beneficial factor and provides for infiltration devices to be used as storm water quality treatment.

On site observation indicates that there is not, and is unlikely to be, any erosion from this source.

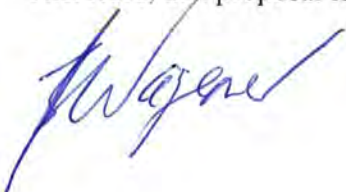
It is most unlikely given the percentage of change to impervious surfaces that there will be any new environmental effect which cannot be contained within the boundaries with this proposed development.

This combination of circumstance lessens the impact on the downstream environment while providing for the maximum soil absorption as proposed by TP10, again lessening the potential impact on infrastructure. Stormwater discharge is designed to be via a spreader to the natural vegetation and overland flow path. TP10 can not be applied retrospectively therefore this assessment is on the newly created areas.

Regional Plan:

The Northland Regional Council proposed rule C6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network, provided that (amongst other conditions) the discharge or diversion does not cause or increase nuisance or damage to other property. In this case there will be no affected neighboring properties.

Therefore, this proposal is in accordance with NRC Rule C6.4.2.



10yr

S & F Kehny 25

Pre – Development water flow

Rational method

48hr

Pre-development
Slope
%

(Original water flow)

Total area.

Area (m²)

Roof
& decks
1 (m²)

Concrete &
smooth seal
2 (m²)

Metalled area
Or rough seal
3 (m²)

Other
Impervious
4 (m²)

Vegetation
5 (m²)

Bush
6 (m²)

10

CI correction

0.00

Runoff coefficient

Use "C" values from FNDC TR55 chart

Generally do not use slope adjustment Ci factor if using TR55

CI (coefficient)

FALSE

FALSE

FALSE

0.59

FALSE

0.59

Rainfall intensity

Rainfall Data from NIWA, Hirds 4, RCP6, 2081-2100

Use an appropriate event for the situation

Flow rate of surface water

Qc (m³/sec)

0.000

0.000

0.000

0.000

0.000

Post-development
Slope
%

10

CI correction

0.00

Pre – development flow
of developed area

Qp (m³/sec)

0.0005

0.48

Post – Development water flow

Any area where there is a change
in the impermeability values

Pre-development area where there is
a change in impermeable surfaces but
not collected in attenuation system

Any area where there is no change
to the impermeability values

Total area.

Area (m²)

Roof
& decks
1 (m²)

Concrete &
smooth seal
2 (m²)

Metalled area
Or rough seal
3 (m²)

Vegetation
4 (m²)

Concrete &
smooth seal
5 (m²)

Metalled area
or vegetation
6 (m²)

Metalled area
or seal
7 (m²)

Vegetation
8 (m²)

OK

Use "C" values from FNDC TR55 chart

Generally do not use slope adjustment Ci factor if using TR55

CI (coefficient)

0.96

FALSE

0.90

FALSE

0.96

FALSE

0.59

Rainfall Data from NIWA, Hirds 4, RCP6, 2081-2100

Use an appropriate event for the situation

Flow rate of surface water

Qc (m³/sec)

0.000

0.000

0.001

0.000

0.000

0.000

0.000

Rainfall intensity rate

Generally do not use slope adjustment Ci factor if using TR55

Qc (m³/sec)

0.000

0.000

0.001

0.000

0.000

0.000

0.000

Total included in attenuation system calc's

Qa (m³/sec)

0.000

0.35

Total impermeable excluded from
attenuation system collection

Qby (m³/sec)

0.000

0.00

Total no change, excluded from
attenuation system calc's

Qby (m³/sec)

0.00

Post – Pre development flow

Qdpp (m³/sec)

0.0004

0.35

Total post development flow

Qatt (m³/sec)

0.0008

0.84

Developed flow + undeveloped flow

Qatt (m³/sec)

0.0008

0.84

0 to 10min

1b

Rational method

48hr

[illegible]

Calculate maximum storage volume										For period 2081-2100													
Chart intensity				Storm duration-		Attenuation calc.		total Catchment pre-del.		Hourly CC		Hourly		Chart step factor				Check		Catchment pre-del.		Catchment pre-del.	
Hr values		THH		Event data, TMM5 Direct to Atten.		plus orifice flow out				Post-del RCP6		Pre-del (0 deg)		Adjust step factor if required		Chart step factor		Adjust step factor if required		Chart step factor		Adjust step factor if required	
steps used	minute steps	(hr)	min	Or (L/sec)	Or (L/sec)	Or (L/sec)	Or (L/sec)	Or (L/sec)	Or (L/sec)	10 yr	2.99	10 yr	1.4	OK	1	OK	1	OK	1	OK	1	OK	
48	720	12.00	720	0.35	0.71	1.4	3.33	5.05	0.55	OK	0.55	0.56	Lower Factor	OK	0.56	OK	0.56	OK	0.56	OK	0.56	OK	
24	1080	6.00	360	0.6	1.1	2.2	9.6	8.31	0.55	OK	0.55	0.55	Lower Factor	OK	0.55	OK	0.55	OK	0.55	OK	0.55	OK	
12	1380	3.00	180	1.8	1.8	3.4	15.6	13.3	0.55	OK	0.55	0.55	Lower Factor	OK	0.55	OK	0.55	OK	0.55	OK	0.55	OK	
6	1410	2.00	120	3.7	3.7	6.2	31.9	26.5	0.9	OK	0.9	0.9	OK	OK	0.9	OK	0.9	OK	0.9	OK	0.9	OK	
2	1410	0.50	30	5.7	9.0	9.0	47.8	39.4	0.8	OK	0.8	0.8	OK	OK	0.8	OK	0.8	OK	0.8	OK	0.8	OK	
1	1425	0.25	15	8.2	12.4	12.4	69.3	57.1	1.0	OK	1.0	1.0	OK	OK	1.0	OK	1.0	OK	1.0	OK	1.0	OK	
30	1430	0.08	5	10.0	14.8	14.8	84.9	70	1.0	OK	1.0	1.0	OK	OK	1.0	OK	1.0	OK	1.0	OK	1.0	OK	
20	1435	0.08	5	14.0	19.5	19.5	118	97	1.5	OK	1.5	1.5	OK	OK	1.5	OK	1.5	OK	1.5	OK	1.5	OK	
10	1440	0.08	5	14.0	19.5	19.5	118	97	1.5	OK	1.5	1.5	OK	OK	1.5	OK	1.5	OK	1.5	OK	1.5	OK	
10	1445	0.08	5	10.0	16.2	16.2	84.9	70	1.0	OK	1.0	1.0	OK	OK	1.0	OK	1.0	OK	1.0	OK	1.0	OK	
20	1450	0.08	5	10.0	14.3	14.3	69.3	57.1	0.9	OK	0.9	0.9	OK	OK	0.9	OK	0.9	OK	0.9	OK	0.9	OK	
30	1455	0.08	5	5.7	11.5	11.5	47.8	39.4	0.8	OK	0.8	0.8	OK	OK	0.8	OK	0.8	OK	0.8	OK	0.8	OK	
1470	1470	0.25	15	3.7	9.1	9.1	31.9	26.5	1.1	OK	1.1	1.1	OK	OK	1.1	OK	1.1	OK	1.1	OK	1.1	OK	
2	1500	0.50	30	1.8	4.6	4.6	15.6	13.3	1	OK	1	1	OK	OK	1	OK	1	OK	1	OK	1	OK	
6	1620	2.00	120	1.1	2.3	2.3	9.6	8.31	0.8	OK	0.8	0.8	OK	OK	0.8	OK	0.8	OK	0.8	OK	0.8	OK	
12	1800	3.00	180	0.6	1.3	1.3	5.72	5.05	0.8	OK	0.8	0.8	OK	OK	0.8	OK	0.8	OK	0.8	OK	0.8	OK	
24	2160	6.00	360	0.4	0.8	0.8	3.33	2.99	0.73	OK	0.73	0.73	OK	OK	0.73	OK	0.73	OK	0.73	OK	0.73	OK	
48	2880	12.00	720	0.4	0.8	0.8	3.33	2.99	0.73	OK	0.73	0.73	OK	OK	0.73	OK	0.73	OK	0.73	OK	0.73	OK	
Catchment flow Q _{cat} (cell MAX(P109,P130))										Vol. stored, (m³)													
Catchment flow = orifice flow out + catchment pre-development flow										20.185													
For calculation purposes this section changes the dia only and thereby the area										OK													
The information is not used for anything else										OK													
Use this orifice size for final design										OK													

PRODUCER STATEMENT

DESIGN: ON-SITE EFFLUENT DISPOSAL SYSTEMS (T.P.58)

ISSUED BY:.....*Eric Wagener*..... (approved qualified design professional)

TO:.....*Shaun Keherly*..... (owner)

TO BE SUPPLIED TO:*Far North District Council*.....

PROPERTY LOCATION:....*Henderson Bay Road*.....

LEGAL DESCRIPTION

TO PROVIDE : Design an on-site effluent disposal system in accordance with Technical paper 58 and provide a schedule to the owner for the systems maintenance.

THE DESIGN: Has been in accordance with G13 (Foul Water) G14 (Industrial Liquid Waste) B2 (durability 15 years) of the Building Regulations 1992.

As an independent approved design professional covered by a current policy of Professional Indemnity

Insurance (Design) to a minimum value of \$200,000.00, I BELIEVE ON REASONABLE GROUNDS that subject to:

- (1) The site verification of the soil types.
- (2) All proprietary products met the performance requirements.

The proposed design will met the relevant provisions of the Building Code and 5.3.11 of The Far North District Council Engineering Standards.

.....*[Signature]*..... (Signature of approved design professional)

.....*Certifying Registered Drainlayer*..... (Professional qualifications)

.....*05877*..... (Licence Number or professional Registration number)

Address*3778 Far North Rd, RD4 Kaitaia*.....

Phone Number.....*09 4098 854*.....

Fax Number

Cell Phone*0274 885 584*.....

Date*23/03/2025*.....

Note: This form is to accompany every application for a Building Consent incorporating a T.P.58. Approval as a design professional is at Councils discretion.

On-site Wastewater Disposal Site Evaluation Investigation Checklist

FAR NORTH DISTRICT COUNCIL

Appendix E

TP58

On-site Wastewater Disposal Site Evaluation Investigation Checklist

Part A –Owners Details

1. Applicant Details:

Applicant Name	Shaun & Fiona Kehely		
Company Name	KFCS Farms Limited		
Property Owner Name(s)	First Name(s)	Surname	
	Shaun Fiona	Kehely	
Nature of Applicant*	Owner		

(*i.e. Owner, Leasee, Prospective Purchaser, Developer)

2. Consultant / Site Evaluator Details:

Consultant/Agent Name	Eric Wagener & Robert Wagener			
Site Evaluator Name				
Postal Address	3778 Far North Rd			
	RD4			
	Kaitaia			
Phone Number	Business	094098854	Private	
	Mobile	0274885584	Fax	
Name of Contact Person	Eric Wagener			
E-mail Address	ewagener@xtra.co.nz			

3. Are there any previous existing discharge consents relating to this proposal or other waste discharge on this site?

Yes		No	☒	(Please tick)
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If yes give Reference Numbers and Description	

4. List any other consent in relation to this proposal site and indicate whether or not they have been applied for or granted

If so, specify Application Details and Consent No.

(eg. LandUse, Water Take, Subdivision, Earthworks Stormwater Consent)

See CT

Part B- Property Details

1. Property for which this application relates:

Physical Address of Property	4238 Far North Road Pukenui		
Territorial Local Authority	FAR NORTH DISTRICT COUNCIL		
Regional Council	NORTHLAND REGIONAL COUNCIL		
Legal Status of Activity	Permitted:	Controlled:	Discretionary:
Relevant Regional Rule(s) (Note 1)			
Total Property Area (m ²)	40194m2		
Map Grid Reference of Property If Known			

2. Legal description of land (as shown on Certificate of Title)

Lot No.		DP No.		CT No.	
5		107403		Blk X1 Houhora East	
Other (specify)					

Please ensure copy of Certificate of Title is attached

PART C: Site Assessment - Surface Evaluation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation and Sn 5.2.2(a) Site Surface Evaluation)

Note: Underlined terms defined in Table 1, attached

Has a relevant property history study been conducted?

Yes		No	☒	(Please tick one)
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If yes, please specify the findings of the history study, and if not please specify why this was not considered necessary.

There are no HAIL issues as it is remote from hazardous activity. The property has been urban lifestyle for many years. There are no known recorded hazards apart from potential flood as per maps

1. Has a Slope Stability Assessment been carried out on the property?

Yes ☐ No ☒ Please tick

If No, why not?

There are no signs of stability problems.

If Yes, please give details of report (and if possible, please attach report):

Author	
Company/Agency	
Date of Report	
Brief Description of Report Findings:-	

2. Site Characteristics (See Table 1 attached):

Provide descriptive details below:
Performance of Adjacent Systems:
<i>Systems are working well</i>
Estimated Rainfall and Seasonal Variation:
Information available from N.I.W.A MET RESEARCH
<i>1100-1300mm/yr</i>
Vegetation / Tree Cover:
<i>Grass</i>
Slope Shape: (Please provide diagrams)
<i>Basically flat. at proposed development</i>
Slope Angle:
<i>Minor parabolic dune structure It will not create any difficulties for installation of disposal system. Slope 1>2 degrees</i>
Surface Water Drainage Characteristics:
<i>Surface water will be alleviated by the natural contour of the land.</i>
Flooding Potential: YES/NO
<i>Unlikely to flood at proposed building, or disposal field location. Refer to enclosed flood map</i>
If yes, specify relevant flood levels on appended site plan, i.e. one in 5 years and/or 20 year and/or 100 year return period flood level, relative to disposal area.
Surface Water Separation:
<i>+20m</i>
Site Characteristics: or any other limitation influencing factors

3. Site Geology Check Rock Maps

Houhora sand over sandstone, followed by silica sands is listed in the soil maps. This was confirmed by onsite test

Geological Map Reference Number *NZMS 290*

4. What Aspect(s) does the proposed disposal system face? (please tick)

North	☒	West	☐
North-West	☐	South-West	☐
North-East	☐	South-East	☐
East	☐	South	☐

5. Site clearances,(Indicate on site plan where relevant)

Separation Distance from	Treatment Separation Distance (m)	Disposal Field Separation Distance (m)
Boundaries	<i>+20m</i>	Check Council requirements <i>+1.5m</i>
Surface water, rivers creeks, drains etc	<i>+20m</i>	<i>+20m</i>
Groundwater	<i>+ 1.8m</i>	<i>+ .800m</i>
Stands of Trees/Shrubs	<i>+5m</i>	<i>+5m</i>
Wells, water bores	<i>N/A</i>	<i>N/A</i>
Embankments/retaining walls	<i>N/A</i>	<i>N/A</i>
Buildings	<i>+3m</i>	<i>+3m</i>
Other (specify):	<i>N/A</i>	<i>N/A</i>

PART D: Site Assessment - Subsoil Investigation

(Refer TP58 - Sn 5.1 General Purpose of Site Evaluation, and Sn 5.2.2(a) Site Surface Evaluation and Sn 5.3 Subsurface Investigations)

Note: Underlined terms defined in Table 2, attached

1. Please identify the soil profile determination method:

Test Pit	Depth_____m	No of Test Pits	
Bore Hole	Depth___ <i>0.75</i> ___m	No of Bore Holes	<i>2</i>
Other (specify):			

Soil Report attached?

Yes ☒ No ☐ Please tick

2. Was fill material intercepted during the subsoil investigation?

Yes ☐ No ☒ Please tick

If yes, please specify the effect of the fill on wastewater disposal

3. Percolation testing (mandatory and site specific for trenches in soil type 4 to 7)

Please specify the method

Constant Head ksat

Test Report Attached?	Yes	☒	No	☐	Please tick
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4. Are surface water interception/diversion drains required?

Yes	☐	No	☒	Please tick
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If yes, please show on site plan

4a Are subsurface drains required

Yes	☐	No	☒
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If yes enter details

5. Please state the depth of the seasonal water table:

Winter	<i>Not found</i>	Measured	☐	Estimated	☒
Summer	<i>Not found</i>	Measured	☐	Estimated	☒

6. Are there any potential storm water short circuit paths?

Yes	☐	No	☒	Please tick
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If the answer is yes, please explain how these have been addressed

7. Based on results of subsoil investigation above, please indicate the disposal field soil category (Refer TP58 Table 5.1)

Is Topsoil Present?	<i>Yes</i>	If so, Topsoil Depth? (m)	<i>70> 150mm</i>
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Soil Category	Description	Drainage	Tick One
1	Gravel, coarse sand	Rapid draining	
2	Coarse to medium sand	Free draining	
3	Medium-fine & loamy sand	Good drainage	<i>X</i>
4	Sandy loam, loam & silt loam	Moderate drainage	
5	Sandy clay-loam, clay-loam & silty clay-loam	Moderate to slow drainage	
6	Sandy clay, non-swelling clay & silty clay	Slow draining	
7	Swelling clay, grey clay, hardpan	Poorly or non-draining	

Reasons for placing in stated category

<i>Onsite soil tests put this soil into category 3</i>
<i>Category was corroborated by soil maps.</i>

PART E: Discharge Details

1. Water supply source for the property (please tick):

Rainwater (roof collection)	☒
Bore/well	☐
Public supply	☐

2. Calculate the maximum daily volume of wastewater to be discharged, unless accurate water meter readings are available
(Refer TP58 Table 6.1 and 6.2)

Number of Bedrooms	<i>Commercial Laundry</i>	
Design Occupancy	<i>Plus twin toilets</i>	(Number of People)
Per capita Wastewater Production	<i>Est 36 person @ 20L=720L</i>	(Litres per person per day)
Other – specify		<i>Used supplier machine water use for calcs</i>
Total Daily Wastewater Production	<i>9620L</i>	(Litres per day)

3. Do any special conditions apply regarding water saving devices

a) Full Water Conservation Devices?	Yes		No	☒	(Please tick)
b) Water Recycling - what %?		%			(Please tick)

If you have answered yes, please state what conditions apply and include the estimated reduction in water usage

4. Is Daily Wastewater Discharge Volume more than 2000 litres:

Yes	☒	(Please tick)
No		(Please tick)

Note if answer to the above is yes, an N.R.C wastewater discharge permit may be required

Note This is greywater only

5. Gross Lot Area to Discharge Ratio:

Gross Lot Area	<i>40194</i>	m ²
Total Daily Wastewater Production	<i>9620</i>	(Litres per day)(from above)
Lot Area to Discharge Ratio	<i>2.39</i>	

7. Does this proposal comply with the Northland Regional Council Gross Lot Area to Discharge Ratio of greater than 3?

Yes	☒	No		(Please tick)
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8. Is a Northland Regional Council Discharge Consent Required?

Yes	☒	No		(Please tick)
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PART F: Primary Treatment (Refer TP58 Section 7.2)

1. Please indicate below the no. and capacity (litres) of all septic tanks including type (single/dual chamber grease traps) to be installed or currently existing: If not 4500 litre, dual chamber explain why not

Number of Tanks	Type of Tank	Capacity of Tank (Litres)
1	Standard concrete septic	4500L
1	PVC Grease Trap	6000
	Total Capacity	10500L

2. Type of Septic Tank Outlet Filter to be installed?

Biofilter in both

PART G: Secondary and Tertiary Treatment

(Refer TP58 Section 7.3, 7.4, 7.5 and 7.6)

1. Please indicate the type of additional treatment, if any, proposed to be installed in the system: (please tick)

Secondary Treatment	
Home aeration plant	
Commercial aeration plant	
Intermediate sand filter	
Recirculating sand filter	
Recirculating textile filter	
Clarification tank grease trap	X
Tertiary Treatment	
Ultraviolet disinfection	
Chlorination	
Other	Specify

PART H: Land Disposal Method

(Refer TP58 Section 8)

1. Please indicate the proposed loading method: (please tick)

Gravity	✓
Dosing Siphon	
Pump	

2. High water level alarm to be installed in pump chambers

Yes		No	X
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If not to be installed, explain why

3. If a pump is being used, please provide the following information:

Total Design Head		(m)
Pump Chamber Volume		(Litres)
Emergency Storage Volume		(Litres)

4. Please identify the type(s) of land disposal method proposed for this site: (please tick)

(Refer TP58 Sections 9 and 10)

Surface Dripper Irrigation		
Sub-surface Dripper irrigation		
Standard Trench		
Deep Trench		
Mound		
Conventional bed		
Other	X	Specify <i>Wide trench as per plans</i>

5. Please identify the loading rate you propose for the option selected in Part H, Section 4 above, stating the reasons for selecting this loading rate:

Loading Rate	25	(Litres/m ² /day)
Disposal Area	Design	384 (m ²)
	Reserve	384 (m ²)

Explanation (Refer TP58 Sections 9 and 10)*This is in line with TP58 for cat 2>3 soils.***6. What is the available reserve wastewater disposal area** (Refer TP58 Table 5.3)

Reserve Disposal Area (m ²)	384
Percentage of Primary Disposal Area (%)	100%

7. Please provide a detailed description of the design and dimensions of the disposal field and attach a detailed plan of the field relative to the property site:**Description and Dimensions of Disposal Field:***See Design Site Plan**Total basal area required is 384m²*Plan Attached? Yes ☒ No ☐**If not, explain why not**

PART I: Maintenance & Management

(Refer TP58 Section 12.2)

1. Has a maintenance agreement been made with the treatment and disposal system suppliers?

Yes		No	☒
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 (Please tick)

Name of Suppliers

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PART J: Assessment of Environmental Effects**1. Is an assessment of environmental effects (AEE) included with application?**

(Refer TP58 section 5. Ensure all issues concerning potential effects addressed)

Yes	☒	No	
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 (Please tick)

If Yes, list and explain possible effects

Nil

PART K: Is Your Application Complete?**1. In order to provide a complete application you have remembered to:**

Fully Complete this Assessment Form	☒
Include a <i>Location Plan</i> and <i>Site Plan</i> (with Scale Bars)	☒
Attach an Assessment of Environmental Effects (AEE)	☒

1. Declaration

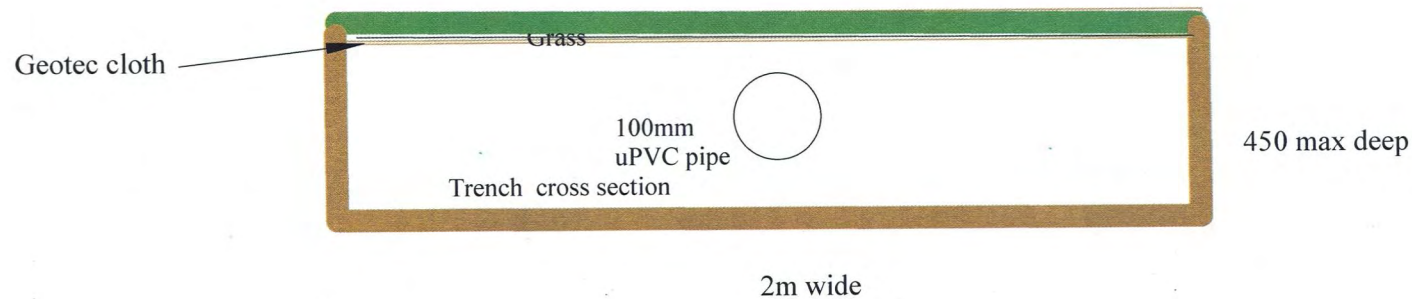
I hereby certify that, to the best of knowledge and belief, the information given in this application is true and complete.

Name	Eric Wagener	Signature	
Position	Certifying Reg Drainlayer	Date	23/03/2025

Note

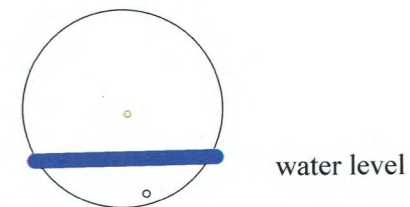
Any alteration to the site plan or design after approval will result in non compliance.





S & F Kehely
Black & Grey water disposal

E.J.Wagener 05877



Pipe sawcut or drilled with 20mm holes so as to form a cup holes at 600c/c

Calcs: total waste water produced = 9620L/D
 $9620 / k_{sat} 25 = 384.8 \text{ m}^2$
 $384.8 / 2 = 192.4$
 $192.4 / 35 = 5.5 \text{ trenches}$

Appendix G – Approved Form 4 Letter (EBC/2026-300-00)

25 November 2025

KFCS Farms Limited
S C R Kehely & F Kehely
4238 Far North Road
RD 4
Kaitaia 0484

Dear Sir / Madam,

Building consent number: EBC-2026-300/0
Property ID: 3336811
Address: 4238K Far North Road, Pukenui 0484
Description: Commercial Building Install Commercial Laundry in Tenancy
1 Install On-Site Wastewater Disposal System and LPG
Storage Tank

Requirement for Resource Consent

PIM Assessment of your application has highlighted the need for Resource Consent that must be granted prior to any building works or earthworks commencing.

NB: As of 27th July 2022, some rules and standards in the Far North District Council Proposed District Plan took legal effect and compliance with these rules applies to your building consent. Please visit our website to see these rules
[Far North Proposed District Plan \(isoplan.co.nz\)](http://isoplan.co.nz)

The site is zoned **Coastal Residential** under the Operative District Plan and Resource Consent is required for breach of the following:

Rule:	10.8.5.1.3 SCALE OF ACTIVITIES
Reason:	The number of people permitted on this site is 26.79 or 27 people, excluding people who normally reside on the site or are members of the household. The Fire Safety Compliance Report for KFCS Farms Ltd at 4238 Far North Road, Pukenui, prepared by Formable Fire Safety Design has calculated total occupancy for this proposed building as 46-person occupancy, and this exceeds the permitted 2 persons per 3,000m ² threshold for this site.
Rule:	10.8.5.1.6 STORMWATER MANAGEMENT
Reason:	This application demonstrates impermeable surfaces total area of 3,469.2m ² , this exceeds the permitted 1,000m ² threshold for this site.
Rule:	10.8.5.1.12 HOURS OF OPERATION - NON-RESIDENTIAL ACTIVITIES
Reason:	The Agent advises the proposed hours of operation will be 7 days per week and will breach this rule.
Rule:	15.1.6A.2.1 TRAFFIC INTENSITY
Reason:	The proposed Land Use Activity retail generates 149.8 average daily one-way vehicle movements required for this proposed building work, and this exceeds the permitted 20 daily one-way vehicle movements for this site.

Rule:	12.8.6.1.1 HAZARDOUS SUBSTANCES - CONSENT STATUS INDICES FOR PERMITTED ACTIVITIES
Reason:	The proposed LPG storage tank quantity 2,000L (1 tonne) exceeds the relevant adjusted threshold for above-ground storage of hazardous substances in this zone.

Rule:	2019 Proposed Regional Plan for Northland – C.6.1.3 Other on-site treated domestic wastewater discharge – permitted activity: <i>Note: Far North District Council issue Discharge Consents under delegated authority from the Northland Regional Council for wastewater from domestic systems up to 3m³/day.</i>
Reason:	The volume of wastewater/greywater discharge proposed exceeds two cubic meters per day. Northland Regional Council Discharge Consent approval is required.

Please note there may be other rule breaches found during the Resource Consent process. It is your responsibility to ensure the Resource Consent approved plans match the Consented approved plans.

The application form can be downloaded from www.fndc.govt.nz and submitted to Council's (Planning Department) with the appropriate documentation and instalment fee.

If you have any queries, please contact the Duty Planner on Duty.Planner@fndc.govt.nz or 0800 920 029.

Yours faithfully



Lysigna Mare
PIM Officer

Delivery and Operations

Emailed to: beardarc48@gmail.com ; tylerkharissa@gmail.com

FORM 4
Certificate attached to
PROJECT INFORMATION MEMORANDUM

Section 37, Building Act 2004

Building Consent Number: EBC-2026-300/0

**RESTRICTIONS ON COMMENCING BUILDING WORK UNDER
RESOURCE MANAGEMENT ACT 1991**

The building work referred to in the attached Project Information Memorandum is also required to have the following **Resource Consent(s)** under the Resource Management Act 1991:

- **Resource Consent – REQUIRED**
- **Northland Regional Council Discharge Consent - REQUIRED**

As the above Resource Consent(s) will affect the building work to which the Project Information Memorandum relates, until this has been granted no building work may proceed.

As the above Discharge Consent will affect the building work to which the Project Information Memorandum relates, until this has been granted no building work may proceed.

Failure to comply with the requirements of this notice may result in legal action being taken against you under the Resource Management Act 1991.

Signature:



Trent Blakeman
Manager - Building Services –
Delivery and Operations
Far North District Council (Building Consent Authority)
25 November 2025

Position:

On behalf of:

Date: