



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 <u>Form 9</u>). Prior to, and during, completion of this application form, please refer to <u>Resource Consent Guidance Notes</u> and <u>Schedule of Fees and Charges</u> — both available on the Council's web page.

1. Pre-Lodgement Meeting			
Have you met with a council Resource Cov	vnsent representative to discuss this application prior to lodgement?		
○ Yes ○ No			
2. Type of consent being applied	d for		
(more than one circle can be ticked):			
Cand Use	Oischarge		
Fast Track Land Use*	Change of Consent Notice (s.221(3))		
Subdivision	Extension of time (s.125)		
Consent under National Environme (e.g. Assessing and Managing Contami			
Other (please specify)			
*The fast track is for simple land use cor	nsents and is restricted to consents with a controlled activity status.		
3. Would you like to opt out of t	he fast track process?		
Yes No			
4. Compultation			
4. Consultation			
Have you consulted with lwi/Hapū? Ye	es ONo		
If yes, which groups have you consulted with?			
Who else have you consulted with?			
For any questions or information regard District Council, <u>tehonosupport@fndc.g</u> c	ling iwi/hapū consultation, please contact Te Hono at Far North		

5. Applicant details			
Name/s:	D and T McKenzie		
Email:			
Phone number:			
Postal address: (or alternative method of service under section 352 of the act)			
	of abatement notices, enforcement orders, infringement notices and/or convictions gement Act 1991? Yes Vo		
If yes, please provide detail	S.		
6. Address for corres			
Name and address for service a	nd correspondence (if using an Agent write their details here)		
Name/s:	Alister Hartstone		
Email:			
Phone number:			
Postal address: (or alternative method of service under section 352 of the act)			
All correspondence will be se of communication.	ent by email in the first instance. Please advise us if you would prefer an alternative means		
7. Details of property	y 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:	As per applicant		
Property address/ location:			
	Postcode		

8. Application site details			
Location and/or property street address of the	proposed activity:		
Name/s:			
Site address/ location:			
	Postcode 0202		
Legal description:	Val Number:		
Certificate of title:			
	our Certificate of Title to the application, along with relevant consent rances (search copy must be less than 6 months old)		
Site visit requirements:			
Is there a locked gate or security system	n restricting access by Council staff? Yes No		
Is there a dog on the property? Yes	; ⊘ No		
	y restrictions that Council staff should be aware of, e.g. health and safety, avoid a wasted trip and having to re-arrange a second visit.		
Please contact the applicant before under	taking a site visit		
9. Description of the proposal			
Please enter a brief description of the p <i>Notes</i> , for further details of information	roposal here. Please refer to Chapter 4 of the <i>District Plan, and Guidance</i> requirements.		
Construct additions and alterations to an	existing dwelling in the Russell Township Zone		
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.			
10. Would you like to request	public notification?		
○ Yes No			
· ·	eing applied for under different legislation		
(more than one circle can be ticked):			
Building Consent Enter BC ref # here (if known)			
Regional Council Consent (ref # if known) Ref # here (if known)			
National Environmental Standard Consent Consent here (if known)			
Other (please specify) Specify 'other' here			

12. National Environ in Soil to Protect		Assessing and Managing Contaminants	
The site and proposal may the NES please answer the		In order to determine whether regard needs to be had	:О
	ly being used or has it historion Activities List (HAIL)? Yes	cally ever been used for an activity or industry on the No Don't know	
	activity covered by the NES? F y apply as a result? Yes	Please tick if any of the following apply to your No Don't know	
Subdividing land		Oisturbing, removing or sampling soil	
Ohanging the use of a	piece of land	Removing or replacing a fuel storage system	
13. Assessment of er	nvironmental effects:		
a requirement of Schedule 4 AEE is not provided. The info	of the Resource Management A rmation in an AEE must be spec ude additional information suc	ed by an Assessment of Environmental Effects (AEE). This is Act 1991 and an application can be rejected if an adequate cified in sufficient detail to satisfy the purpose for which it is h as written approvals from adjoining property owners, or	
44 Duest conditions			
14. Draft conditions:			_
Do you wish to see the draf	t conditions prior to the relea	se of the resource consent decision? 🗹 Yes 🔷 No	
If yes, please be advised the enable consideration for the	•	ended for 5 working days as per s107G of the RMA to	
15. Billing Details:			
		ele for paying any invoices or receiving any refunds e also refer to Council's Fees and Charges Schedule.	
Name/s: (please write in full)	DR & TA McKenzie Family Tru	ıst]
Email:]
Phone number:]
Postal address: (or alternative method of service under section 352 of the act)			
application in order for it to be reasonable costs of work und	be lodged. Please note that if th dertaken to process the applica 20th of the month following inv	at the time of lodgement and must accompany your ne instalment fee is insufficient to cover the actual and tion you will be required to pay any additional costs. Invoice oice date. You may also be required to make additional	:d

15. Billing details continued...

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)	Tracey McKenzie			
Signature:	/		Date	11 Dec 2025
(signature of bill payer)		MANDATORY		

16. 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.

17. Declaration			
The information I have supplied with this application is true and complete to the best of my knowledge.			
Name (please write in full)	Alister Hartstone		
Signature		Date 11-Dec-2025	
	A signature is not required if the application is made by electronic means		

Checklist
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)
O Details of your consultation with lwi and hapū
Ocopies of any listed encumbrances, easements and/or consent notices relevant to the application
Applicant / Agent / Property Owner / Bill Payer details provided
O 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
O Location and Site plans (land use) AND/OR
O Location and Scheme Plan (subdivision)
C Elevations / Floor plans
O 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.

Resource Consent Application for D and T McKenzie 5 Beresford Street, Russell



Resource Consent application for D and T McKenzie

Application Details

Applicant: Darren and Tracey McKenzie

Location: 5 Beresford Street, Russell

Legal Description: Lot 4 Deposited Plan 41395

Application Summary: To undertake additions and alterations to an existing dwelling consisting

of a new deck, guest house, and pool.

District Plan zoning: Operative DP - Russell Township Zone and Russell Township Basin and

Gateway Area

Proposed DP – Kororareka Russell Township Zone, Kororāreka Russell

Heritage Area Overlay (Part D) and Coastal Environment

Attachments

Attachment A Building plans

Attachment B Certificate of Title

Attachment C Archaeological Assessment prepared by Geometria Limited

Attachment D Stormwater Mitigation Report prepared by Wilton Joubert Limited

Attachment E District Plan maps

Address for Service

Alister Hartstone Set Consulting Limited Ph 0277555607 E-mail alister@setconsulting.co.nz

Form 9 - Application for Resource Consent under Section 88 of the Resource Management Act 1991

To: Far North District Council

- 1. **Darren and Tracey McKenzie, 3 Beresford Street, Russell**, apply for the necessary resource consent to undertake alterations and additions to an existing dwelling on a site in the Russell Township Zone.
- 2. The location of the proposed activities is as follows:
 - 3 Beresford Street, Russell Lot 4 Deposited Plan 41395 (NA77D/90)
- 3. The other activities that are part of the proposal to which this application relates are as follows: N/A
- 4. There are no other activities that are part of the proposal to which this application relates.
- 5. No additional resource consents are needed for the proposal to which this application relates.
- 6. I attach an assessment of effects on the environment that:
 - (a) includes the information required by clause 6 of Schedule 4 of the Resource Management Act 1991; and
 - (b) addresses the matters specified in clause 7 of Schedule 4 of the Resource Management Act 1991; and
 - (c) includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.
- 7. I attach an assessment of the proposed activity against the matters set out in Part 2 of the Resource Management Act 1991.
- 8. I attach an assessment of the proposed activity against any relevant provisions of a document referred to in Section 104(1)(b) of the Resource Management Act 1991, including information required by clause 2(2) of Schedule 4 of that Act.

A Hartstone BREP(Hons) MNZPI

1.0 Introduction

1.1 Pursuant to Section 88 of the Resource Management Act 1991 ('the Act'), Set Consulting Limited submits to the Far North District Council an application for resource consent prepared on behalf of Dareen and Tracey McKenzie ('the applicant'). This application has been prepared in accordance with Form 9 and Schedule 4 of the Act, and incorporates all information required by statute.

2.0 The Proposal

- 2.1 The proposal involves the construction of alterations and additions to an existing dwelling located at 3 Beresford Street, Russell. An extension to the rear and southern side of the existing dwelling, consisting of a pantry / laundry / bathroom extension (currently a covered carport area), timber deck with a detached guest house and inground swimming pool is proposed, as shown on the plans contained in Attachment A. It should be noted that an area of existing concrete located on the street frontage of the site is intended to be removed and will become pervious.
- 2.2 Minor earthworks will be required to undertake the works. The guest house is effectively a sleepout providing for an additional bedroom and ensuite and is connected to the dwelling via the proposed deck. The proposed inground swimming pool will be 3.8m x 2.13m (16,200 litres).
- 2.3 No changes are proposed to the existing dwelling and associated services and access.

3.0 Site and Surrounding Environment

- 3.1 The subject site contains 1080m² of developed residential land containing an existing dwelling and detached garage fronting Beresford Street. The property has an open lawn and landscaped area at the rear and is fenced on all boundaries, with a gentle slope to the west. The site is bounded by a metalled shared access on the northern boundary with other residential properties along Beresford Street adjoining to the north and east. The southern boundary adjoins the Shrine of St Peter Chanel property, which consists of a large area of open space and a church building with access from Beresford Street. Properties on the opposite side of Beresford Street all obtain access via Chapel Street and are known as the 'Russell Cottages' hotel.
- 3.2 A copy of the record of title for the property is provided in Attachment B. There are no relevant interests registered on the title that require consideraiotn as part of this application.



Aerial view of the subject site (highlighthed) and surrounding properties.

4.0 Reasons for Consent

Operative Far North District Plan

- 4.1 The subject site is zoned Russell Village and is located within the Russell Township Basin and Gateway Area as depicted in the Operative Far North District Plan. No resource areas (eg. historic sites, natural hazards, etc) are identified as affecting the site. As the activity does not involve any matters identified in Chapter 12 of the Plan, no assessment other than the relevant Zone rules is provided below.
- 4.2 An assessment of the relevant zone rules is provided in the Table below.

10.9 Russell Township Zone		
Rule	Compliance	Comments
10.9.5.1.1 Relocated Buildings	N/A	
10.9.5.1.2 Residential Intensity	Permitted	The proposal provides for one residential unit on the site
10.9.5.1.3 Scale of Activities	N/A	
10.9.5.1.4 Building Height	Permitted	Plans show compliance
10.9.5.1.5 Building Scale	Permitted	Plans show compliance, noting the existing garage is excluded on the basis that it is an area allocated to meet car parking requirements.
10.9.5.1.6 Sunlight	Permitted	Plans show compliance
10.9.5.1.7 Stormwater Management	Discretionary	The total impermeable surfaces on the site inclusive of the proposed buildings and

		swimming pool will cover 534.61m ² or 49.5% of the site area where the permitted standard is 378m ² being 35%. The proposal will not comply with the 40% coverage requirement as a restricted discretionary activity under Rule 10.9.5.2.9 Stormwater Management
10.9.5.1.8 Setback from	Permitted	Plans show compliance
Boundaries		
10.9.5.1.9 Outdoor Activities	N/A	
10.9.5.1.10 Transportation	N/A	
10.9.5.1.11 Hours of Operation –	N/A	
Non-residential Activities		
10.9.5.1.12 Keeping of Animals	N/A	
10.9.5.1.13 Noise	N/A	
10.9.5.1.14 Helicopter Landing	N/A	
Area		

- 4.3 It is noted that the amount of earthworks required to site the proposed buildings and pool will amount to approximately 40m³, of which approximately 17m³ is required for the inground pool. While the pool will require excavation up to 2 metres deep, it does not qualify as a cut/fill face in terms of the earthworks rule, where the definition states that cut/fill face '....excludes any face of a height greater than 1.5 metres but no greater than 3 metres which is to be retained by a properly engineered retaining wall and for which a building consent has been issued.' The swimming pool is engineer-designed and will be subject to a building consent. On this basis, the proposed earthworks will not exceed the permitted standards specified under Rule 12.3.6.1.3 (a) and (b).
- Overall, the application requires assessment as a discretionary activity under the Operative Far North District Plan due to the impermeable surfaces proposed on the site exceeding the 35% permitted standard specified under Rule 10.9.5.1.7 Stormwater Management, where 49.5% (534.61m²) of impermeable area is proposed.

Proposed Far North District Plan

- 4.5 The subject site is located within the Kororareka Russell Township Zone, Kororāreka Russell Heritage Area Overlay (Part D) and Coastal Environment Overlay. A review of proposed Plan provisions indicates that none of the Zone or Coastal Environment Overlay rules currently have legal effect.
- 4.6 There are provisions in the Heritage Area Overlays Chapter of the proposed Plan that are relevant to the proposal and have legal effect. In assessing those provisions, the following is relevant:
 - The subject site does not contain any scheduled Heritage Resource and the nearest scheduled Heritage Resources appear to be 'King House' (#53) at 17 Beresford Street and Russell Primary School (#51) at 2 Baker Street.
 - The proposed guest house will be partially visible from both Beresford and Chapel Street.
- 4.7 The relevant Heritage Area Overlay Rules have been reviewed in detail and assessed as follows:

Heritage Area Overlays		
Rule	Compliance	Comments
HA-R1 Maintenance and repair of	N/A	
buildings or structures	,	
HA-R2 Additions or alterations to existing buildings or structures	Permitted	The proposal complies with PER-1, PER-2 and PER-3, noting that HA-S2 does not apply as the guest house will be painted the same colour as the existing dwelling.
		Clauses PER-4, PER-5, PER-6, and PER-7 are not relevant to the proposal.
HA-R3 Strengthening or fire protection of scheduled Heritage Resource	N/A	
HA-R4 New Building or Structures	N/A	
HA-R5 Earthworks	Permitted	The extent of earthworks required will comply with PER-1 Clauses 1. and 2. PER-2 and PER-3 are not relevant to the proposal.
HA-R6 Infrastructure and renewable electricity generation infrastructure	N/A	
HA-R7 Buildings or structures (including additions and alterations) located within the Alderton Park development	N/A	
HA-R8 New Buildings or Structures	Restricted Discretionary	The proposal does not comply with RDIS-1, where the proposed guest house and enclosed car port will be partially visible from Beresford and Chapel Streets. The proposal complies with RDIS-2 and RDIS-3.
HA-R9 New Building or Structures	N/A	
HA-R10 Infrastructure and renewable electricity generation infrastructure	N/A	
HA-R11 Activities not otherwise listed in this chapter	N/A	
HA-R12 Relocation of a Scheduled Heritage Resource	N/A	
HA-R13 Demolition of a scheduled Heritage Resource not otherwise listed in rule HA-R13	N/A	
HA-R14 Demolition or relocation of a scheduled Heritage Resource	N/A	

4.8 Overall, the application requires assessment as a restricted discretionary activity under the proposed Far North District Plan due to infringement of Rule HA-R8 New Buildings or Structures -

Clause RDIS-1 – where the proposed guest house and proposed carport will be partially visible from a public place¹, being both Beresford and Chapel Streets.

NES Requirements

- 4.9 The National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health 2012 (the 'NES') is considered relevant to the application. There is no evidence to indicate that the site has been used for any activity other than a residential activity. Aerial photos dating back to 1951 illustrate a dwelling being located on the site.
- 4.10 There is no evidence to indicate that any activity listed on the Hazardous Activities and Industries List is, has been or is more likely than not to have been undertaken on the site. On that basis, the Regulation is not relevant to the proposal.
- 4.11 The proposal does not involve any activities that require consideration against the National Environmental Standard for Freshwater 2020.

Heritage New Zealand Pouhere Taonga Act 2014

4.12 The site has been subject to an archaeological assessment as provided in Attachment C. That report records the history of use of the site and assesses the extent of potential heritage effects arising from the proposal. The report concludes that 'No archaeological sites are present on the property and no archaeological remains were identified in the area of proposed works through historic research and minor on site investigation. Therefore, an authority is not required from Heritage New Zealand Pouhere Taonga. However, owing to the significant historical activity in Russell/Kororāreka an accidental discovery protocol has been recommended.'

5.0 Section 95 Assessment

- 5.1 The following assessment addresses those matters considered relevant under Sections 95A 95G as they relate to this application.
- 5.2 In addressing Section 95A, the following applies:
 - The proposal does not require public notification pursuant to s95A(3). For completeness, the applicant is not requesting public notification of the application.
 - The proposal is not precluded from public notification under the criteria specified in Section 95A(5)(a) or (b).
 - The application is not subject to any rule requiring public notification under Section 95A(8)(a).
 - An assessment of effects is provided below to address Section 95A(8)(b). That assessment concludes that any adverse effects on the environment will be less than minor.
 - No special circumstances are considered to exist that warrant public notification as per Section 95A(9). There are no unique or exceptional circumstances associated with either the site or the proposal that constitute special circumstances.
- 5.3 For the purposes of Section 95B, the following applies:
 - There are no protected customary rights groups or affected customary marine title groups

¹ 'Public place' is not defined and is therefore assumed to include public roads.

- The proposal does not fall under the criteria specified in Section 95B(6)
- For the purpose of Section 95B(8), an assessment of affected persons in accordance with Section 95E is provided below. No persons have been identified as being potentially adversely affected to a minor or more than minor extent by the proposal.
- No other persons are required to be notified of the application as per Section 95B(10).
- 5.4 On the basis of the above assessment, it is respectfully considered that the application can be processed without public or limited notification.

6.0 Assessment of Effects

- 6.1 The following assessment addresses those matters considered relevant under Section 95, Section 104, and the Fourth Schedule of the Act. An assessment of any relevant permitted baseline is provided, along with an assessment of the matters specified in Chapter 11 of the Operative District Plan, and relevant matters of discretion listed in the proposed District Plan.
- 6.2 The following assessment of effects is undertaken in accordance with Section 95D. For the purpose of Section 95D(a), the effects on the following persons who occupy or own adjacent land must be disregarded:
 - 11 Beresford Street, Russell
 - 7 Beresford Street, Russell
 - 1 Beresford Street, Russell
- 6.3 Section 95D(b) and Section 104(2) provide for consideration of the permitted baseline, being activities that '...a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.' The permitted baseline includes any activities that are lawfully established on the site at the time any application is made. The site is currently occupied by an existing dwelling and ancillary detached garage with servicing and access onto Beresford Street. That existing dwelling and associated concreted areas cover approximately 507.8m² (46.9%) of the site in impermeable surfaces. The extent of existing development on the site is considered to form part of the existing environment.
- 6.4 It would be possible to construct a new single residential dwelling on the site in compliance with all relevant Operative District Plan rules. Such a building could be two-storied and located in the same or similar position to the current and proposed dwelling. A complying building could have a similar building footprint, potentially as a two-level building with basement garaging. Minor earthworks and provision of services could be undertaken on the site as a permitted activity in conjunction with any building. Such a dwelling would be of a similar scale and size as that proposed where it complies with both sunlight and building scale rules. The extent of impermeable surfaces proposed on the site would need to be reduced to 378m² to comply. However, the existing environment inclusive of the approximately 507.8m² of impermeable surfaces forms part of the existing environment and informs the permitted baseline in that respect. It is noted that some of the impermeable surfaces associated with the building, particularly the patio area around the pool, would not be assessed as impermeable surfaces where they were designed and constructed as open slatted timber decks. While it is credible to

- consider some open slatted decks occupying these areas, it does not account for the entire area proposed as impermeable surfaces which consists mainly of a new building, swimming pool and surrounds.
- Based on the current Heritage Area Overlay rules with legal effect under the proposed District Plan, the construction of any new building visible from any public place would require consent as a restricted discretionary activity. On this basis, there is no applicable permitted baseline under the proposed Far North District Plan.
- There are no known activities which could be carried out under a granted, but as yet unexercised, resource consent.
- 6.7 Section 95D(c) is not relevant as the application is a full discretionary activity.
- 6.8 There are no trade competition matters requiring consideration under Section 95D(d).
- 6.9 The application is not supported by any written approvals requiring consideration under Section 95D(e).

Operative Far North District Plan Assessment Criteria

6.10 The Operative District Plan requires an assessment of the proposal against the assessment criteria contained in Chapter 11. In addition, the matters that discretion is restricted to under Rule HA-R8 New Buildings or Structures contained in the proposed District Plan are addressed.

11.3 Stormwater Management

- (a) The extent to which building site coverage and impermeable surfaces result in increased stormwater runoff and contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment.
- (b) The extent to which Low Impact Design principles have been used to reduce site impermeability.
- (c) Any cumulative effects on total catchment impermeability.
- (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.
- (e) The physical qualities of the soil type.
- (f) Any adverse effects on the life supporting capacity of soils.
- (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.
- (h) The extent to which paved, impermeable surfaces are necessary for the proposed activity.

- (i) The extent to which landscaping may reduce adverse effects of run-off.
- (j) Any recognised standards promulgated by industry groups.
- (k) The means and effectiveness of mitigating stormwater run-off to that expected by the permitted activity threshold.
- (I) The extent to which the proposal has considered and provided for climate change.
- (m) The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects
- 6.11 The plans provided in Attachment A detail the extent of additional proposed impermeable surfaces. While there are already existing impermeable surfaces located on the site, the inclusion of additional guest house, swimming pool, and surrounds will increase the amount of impermeable area to 534.61m² or 49.5%. The site currently contains approximately 507.80m² of impermeable surfaces (consisting of existing dwelling and detached garage, water tanks, patios, paths, and vehicle access). The increase in impermeable surfaces by approximately 26.81m² will be generated mainly by the proposed guest house and swimming pool, noting that the removal of some impermeable surfaces at the house frontage will minimise the increase across the site.
- 6.12 The Stormwater Mitigation Report provided in Attachment D addresses the existing environment as it relates to stormwater management on the site and proposes additional mitigation measures to accommodate the additional stormwater generated by the proposal. Those mitigation measures involve modifications to the existing water tank to achieve suitable attenuation as set out in Section 6 of the report.
- 6.13 Section 8 of the Stormwater Mitigation Report provides an assessment of the matters of discretion listed under the Rule. That assessment is adopted for the purpose of this application.

11.21 Russell Township Basin and Gateway Area

- (a) Where existing buildings are being added to or altered, pitches of new roofs should be the same as the existing roof, unless the alterations are generally re-establishing the proven original style or character of the building.
- (b) Where existing buildings are altered or added to, this should be in a manner which preserves their essential character or which recovers original character lost through subsequent unsympathetic modification.
- (c) Window size and shape should be appropriate to the style of building.
- (d) Generally, traditional construction methods (e.g. timber frame), together with traditional cladding such as weatherboard or corrugated sheet steel and traditional roof coverings such as shingles or corrugated sheet steel, reinforce historic forms and are generally appropriate. Concrete block walls, concrete or pressed metal roof tiles, and aluminium joinery are generally considered inappropriate.
- (e) Dormer windows are only considered appropriate where they are generally consistent with the historic style of the building.

- (f) A low level of ornamentation is generally desirable in Russell.
- (g) The protection and enhancement of existing vegetation will be encouraged and soft landscaping (including hedging) will be preferred at site boundaries except on the Strand where hard edges such as fences are more appropriate.
- (h) Buildings should not be visually obtrusive as viewed from the Strand or Kororareka Bay and Matauwhi Bay. In particular, buildings on the skyline should not exceed the maximum height.
- As the application is a full discretionary activity, those matters that relate to the Russell Township Basin and Gateway Area require consideration. Clauses (a) (f) relate to specific building design components. The proposed guest house and existing dwelling extension will be of the same character and design as the existing dwelling on the site, which does retain some historic character albeit having been relocated onto the site in 1996 with subsequent renovations undertaken at various times. All existing landscape planting on the site will be retained and the building works cannot be considered as visually intrusive to any extent, noting that it involves enclosure of an existing carport and new buildings at the rear of the site.
- 6.15 Matters (g) and (h) are not directly relevant to the proposal given the extent of existing development and location of the property.
- 6.16 Taking into account the above assessment, it is considered that any adverse effects arising from the proposal will be less than minor.

Proposed Far North District Plan - Rule HA-R8 New Buildings or Structures

- 6.17 The proposal requires consideration as a restricted discretionary activity under Rule HA-R8, with the matters that discretion is limited to listed as follows:
 - a. whether the proposed building or structure will adversely affect the heritage values of the Heritage Area overlay;
 - b. whether the proposed building or structure will adversely affect the heritage values of any nearby Scheduled Heritage Resource;
 - c. any assessments or advice from a suitably qualified and experienced heritage or cultural expert;
 - d. the colour of all exterior surfaces and their appropriateness within the Heritage Area overlay;
 - e. any landscaping or fencing;
 - f. the location and relationship of the building or structure in relation to adjoining sites, coastal marine area, roads; and
 - g. any consultation with Heritage New Zealand Pouhere Taonga, Department of Conservation and tangata whenua.
- 6.18 The infringement under the rule relates solely to Clause RDIS-1, where the proposed guest house and the enclosed carport area will be visible from Beresford and Chapel Streets. The extent of visibility from the streets is limited to glimpses of the carport and the rear of the proposed guest house from narrow view corridors on both streets looking either side of the existing Church

- building located on 1 Beresford Street. There is no suggestion that being able to view part of the rear façade of the proposed guest house from these discrete public locations will generate any adverse effects on heritage values.
- 6.19 An archaeological assessment has been undertaken to ensure no effects associated with earthworks or built heritage values will arise.
- 6.20 No adverse effects on any heritage values are anticipated to arise as a result of the proposal.

7.0 Affected persons

- 7.1 Section 95B requires consideration of adverse effects on only those persons who own or occupy land adjacent to the subject site. Secondly, for a person to be adversely affected, those adverse effects must be minor or more than minor as prescribed in Section 95E.
- 7.2 The application is not supported by any written approvals in accordance with Section 95E(3)(a), on the basis that the extent of off-site adverse effects associated with the proposal will be less than minor. Notably, the impermeable surfaces infringement will not result in any off-site adverse effects. A suitable mitigation measure is offered as a condition of consent to ensure attenuation is provided to address any potential off-site effects associated with additional stormwater generated by the proposal.
- 7.3 There are no identified effects on any heritage resource that might otherwise require consideration under both the Operative and proposed District Plan provisions.
- 7.4 On this basis, the application is therefore considered to be precluded from limited notification.

8.0 Section 104 Assessment

Section 104(1)(a) - Assessment of Effects

- 8.1 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 is that the adverse effects of granting consent to the proposal are less than minor, and therefore acceptable in the receiving environment.
- 8.2 A condition is offered as part of the application to address the mitigation of stormwater generated by the additional impermeable areas. This is based on the recommendation made in the engineering report provided in Attachment D requiring modifications to the existing water tank to provide for some attenuation. A condition can be imposed which requires those modifications to be completed prior to the issuing of a Code of Compliance Certificate for the building works proposed.
- 8.3 If considered necessary, a condition is offered to ensure that the proposed guest house is not to be used as a single residential unit, although this is not considered necessary given the plans show no cooking facilities that may constitute a kitchen.

Section 104(1)(ab) – Offsetting and Compensation

8.4 Section 104(1)(ab) allows a consent authority to have regard to any measure that provides for positive effects to offset or compensate for adverse effects resulting from the activity. There is no offsetting or compensation involved in the application.

Section 104(1)(c) – Relevant Planning Provisions

8.5 Section 104(1)(b) requires the consent authority to have regard to the contents of any relevant documents as listed under Section 104(1)(b)(i)-(vi). For the purpose of considering this application the provisions of both the Operative Far North District Plan and proposed Far North District Plan require consideration. No higher-order national or regional planning documents require consideration given the minor extent of infringements. The relevant provisions of the Operative and proposed District Plans are assessed below.

Operative Far North District Plan

- 8.6 Sections 10.9.3 and 10.9.4 of the District Plan contain the relevant planning provisions that the application needs to be considered against, noting that the infringements do not involve any District-Wide Provisions under Chapter 12 of the Plan.
- 8.7 The Russell Township Zone only specifies one objective which states as follows:
 - 10.9.3.1 To achieve the continued growth and development of Russell in a way which maintains its special historic and amenity values and minimises adverse effects on the natural environment.
- 8.8 The policy that underpins this objective and that is relevant to the proposal states as follows:
 - 10.9.4.3 That the portion of a site or of a development that is covered in buildings and other impermeable surfaces be limited to allow for open space and landscaping around buildings and to reduce total impermeable area and its adverse hydrological, ecological and amenity effects.
- 8.9 It is considered that no adverse hydrological effects will arise through the appropriate on-site management of stormwater. Open space and landscaping on the site will be retained, noting that the extent of built form on the site complies with the Building Scale rule. Overall, the proposal will not have any adverse effects on the special historic and amenity values associated with Russell Township. The proposal is therefore considered to be consistent with the relevant planning provisions contained in the Operative District Plan.

Proposed Far North District Plan

8.10 The Historical and Cultural Values Chapter of the proposed District Plan contains the Heritage Area Overlays which are relevant to the proposal. The site is located within the Kororāreka Russell Heritage Area Overlay (Part D) which is described as covering '....the remainder of the Kororāreka Russell Heritage Area Overlay and reflects the original street layout and subdivision patterns and contains archaeological sites that indicate a relatively high sensitivity and risk of revealing archeological deposits relating to earlier Maori and European occupation. It includes the cultural and archaeological landscape provided by the two headlands north and south of the beach. It also

includes Matauwhi Bay which represents earlier Maori activity and some European settlement contemporary with Kororāreka Russell.'

- 8.11 The relevant Objective and Policies are listed as follows:
 - Objective HA-01
 - Policy HA-P1
 - Policy HA-P6
- 8.12 Policy HA-P6 is specific to the Kororāreka Russell Heritage area overlay and is set out in full below:

'To maintain the integrity of the Kororāreka Russell Heritage area overlay and protect the heritage values by:

- a. maintaining the architecture and integrity of the build form within Part A The Strand, recognising the use of veranda, roof forms and materials that reflect an earlier architectural style;
- b. maintaining Part A The Strand as predominately a pedestrian area;
- c. protecting the architecture and integrity of the build form within Part B Wellington Street, recognising the low key informal siting of buildings, bush backdrop and villa or bungalow style build form;
- d. recognising and protecting the foreground and informal area upon entry of the Village created by the open space of the Christ Church building and yard of Part C Christ Church;
- e. ensuring subdivision reflects the form of the early township and the surviving historical boundaries and street layout;
- f. protecting scheduled archaeological sites from damage or destruction, and retrieving archaeological information whenever unscheduled archaeological sites are discovered;
- g. acknowledging and protecting the landforms and setting of Russell Kororāreka which have an important relationship to the values of the heritage area; and
- h. protecting boundary treatments and landscape areas associated with Scheduled Heritage Resources.'
- 8.13 Clauses a. d. are only relevant to specific areas of the Heritage Overlay which do not affect the site. Clause e. relates to subdivision which is not relevant to the proposal. Clauses f. and g. are addressed by way of the archaeological assessment provided in Attachment D. Clause h. is not relevant as the site is not identified as containing any Scheduled Heritage Resource.
- 8.14 As the proposal is considered to be consistent with the Proposed Plan provisions, no consideration of the relative weighting to be given to the proposed Plan provisions in making any decision is required.

Section 104(1)(c) - Other Matters

8.15 Section 104(1)(c) provides for consideration of any other matters that may be relevant to the activity. There are no known other matters that may be relevant in considering this application.

9.0 Part 2 Assessment

9.1 As per current case law², an assessment of relevant matters under Section 104 is subject to Part 2. A council must have regard to the provisions of Part 2 when it is appropriate to do so. In this case, there is no suggestion that the effects that have been identified and assessed, and the relevant planning provisions that require assessment, do not reflect those relevant matters in Sections 6 and 7. On that basis, it is not considered appropriate or necessary to undertake a detailed assessment of Part 2 matters.

10.0 Conclusion

- 10.1 This resource consent application has been prepared and lodged on behalf of Darren and Tracey McKenzie to undertake alterations and additions to an existing dwelling on a site located at 3 Beresford Street, Russell. The identified Operative District Plan infringement relates to impermeable surfaces on the subject site. In addition, consent is required under the proposed Far North District Plan in terms of the Heritage overlay values. The application requires consideration as a discretionary activity.
- 10.2 A full assessment of the requirements under Section 95A 95G is provided. That assessment concludes that the adverse effects on both the wider environment and on identified adjacent owners are less than minor.
- 10.3 Consideration of matters under Section 104 is provided. That consideration concludes that the extent of effects on the environment will be acceptable, and that the proposal is consistent with the identified planning provisions. On that basis, consent can be granted as a discretionary activity pursuant to Section 104 and 104B. Conditions can be imposed pursuant to Section 108, noting that conditions of consent have been offered in the application.

² R J Davidson Family Trust v Marlborough DC [2018] NZCA 316

Attachment A Building Plans









Main 4 Architects Ltd

T. 09 430 0151 **M.** 021 057 0707

A. PO Box 300 47 Norfolk Street Whangarei 0140

E. office@main4.co.nz

CLIENT:

McKenzie

PROJECT:

House Alteration

SITE INFO:

5 Beresford street, Russell

JOB NO:

872

NOTES:

ARCHITECT: CHRIS HOWELL DRAWN BY:

CHRIS HOWELL

ENGINEER:

CHECKED BY:

ISSUE TYPE:

For consultation only. Destroy all drawings once tender drawings are issued, not for pricing or construction.

Wednesday, 10 December 2025

DRAWING TITLE: 3D

SCALE:

A3 ORIGINAL

DRAWING:

McKenzie.pln

Legal: Lot 4 DP 41395 Area: 1080m2 Climate Zone: 1 Earthquake Zone: Zone 1 Exposure Zone: Zone D (ALL FIXINGS TO BE STAINLESS STEEL) Lee Zone: No Rainfall Range: 90 - 100 Wind Region: A
Building height: 7.2m Max
Wind Zone: SPECIFIC DESIGN

WDC Environment : Operative Russell Township Zone

Sunlight:

No part of any building shall project beyond a 45 degree recession plane as measured inwards from the part of any building shall project beyond a 45 degree recession plane as measured inwards from the part of th any point 2m vertically above ground level on any site boundary (refer to definition of Recession Plane in Chapter 3 - Definitions), except that:

(a) a building may exceed this standard for a maximum distance of 10m along any one boundary other than a road boundary, provided that the maximum height of any building where it exceeds the standard is 2.7m (refer to Recession Plane Diagram B within the definition of Recession Plane in Chapter 3 - Definitions); and

(b) where a site boundary adjoins a legally established entrance strip, private way, access lot, or access way serving a rear site, the measurement shall be taken from the farthest boundary of the entrance strip, private way, access lot, or access way.

The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 35%.

Setbacks:

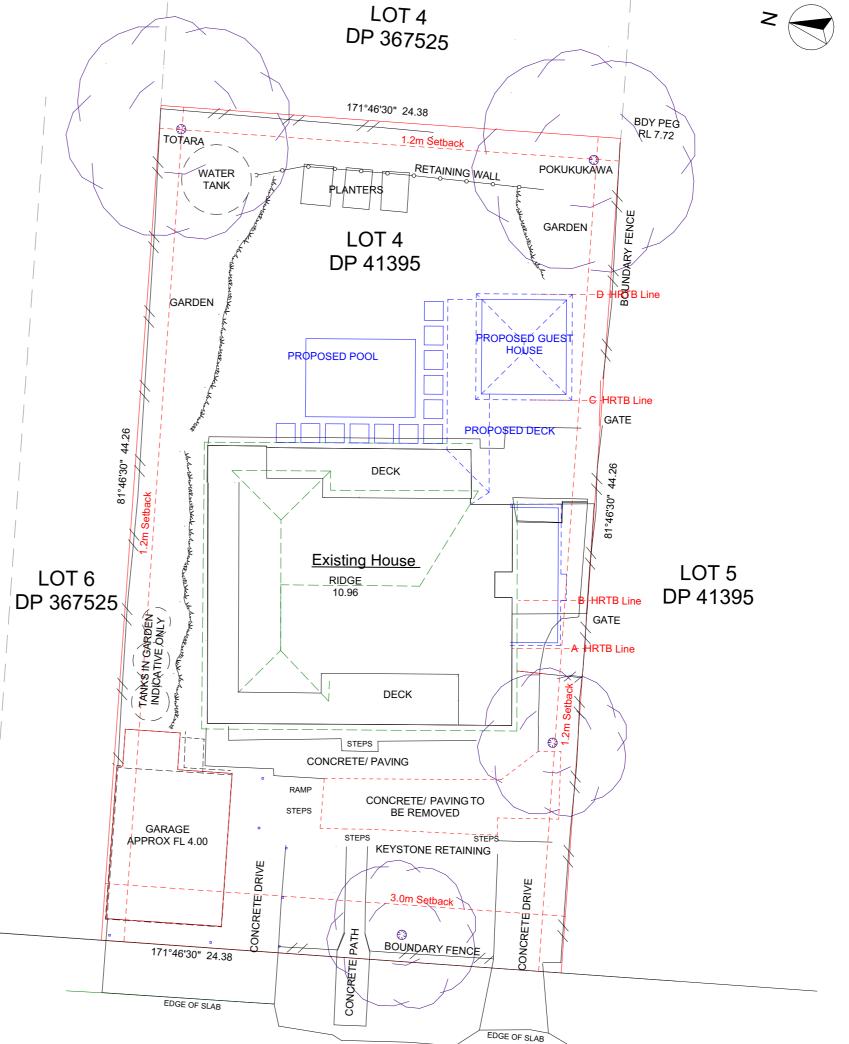
- (a) the minimum building setback from road boundaries shall be 3m; and (b) the minimum setback from any boundary other than a road boundary shall be 1.2m, except that
- no setback is required for a maximum total length of 10m along any one such boundary; and (c) not less than 50% of that part of the site between the road boundary and a parallel line 6m therefrom shall be landscaped.

Building scale:

Within a Heritage Precinct, all as defined on Maps 89 and HP4, the maximum net floor area of all buildings on the site shall not exceed 20% of the net site area, provided that this may be exceeded on sites with a net site area less than 400m² such that the maximum net floor area may be up to

SITE COVERAGE

Site Area/ Gross 1080 m2 Net floor area Proposed house 35.78 Existing house/garage 138.19 **Total Net floor area 173.97** m2 Max allowable net floor area 20.00% Existing net floor area 17.92% Propsed net floor area 16.11% Complies Impermeable surfaces Existing 507.8 Proposed addition 26.81 Impermeable surfaces Total **534.61** m2 Impermeable surfaces Total **534.61** m2 Max allowable Impermeable cover **35** % Existing Impermeable cover 46.9 % Proposed Impermeable cover 49.5 % FAIL





CLIENT McKenzie

PROJECT:

House Alteration

A. PO Box 300

47 Norfolk Street

Whangarei 0140

E. office@main4.co.nz

SITE INFO:

5 Beresford street, Russell

JOB NO: 872

NOTES

ARCHITECT CHRIS HOWELI DRAWN BY

ENGINEER

CHECKED BY:

CHRIS HOWELL ISSUE TYPE:

r consultation only. Destroy all drawings once tender drawing issued, not for pricing or construction.

Transmittal Set

Wednesday, 10 December 2025

Α

DRAWING TITLE:

SCALE:

A3 ORIGINAL REVISION:

L01

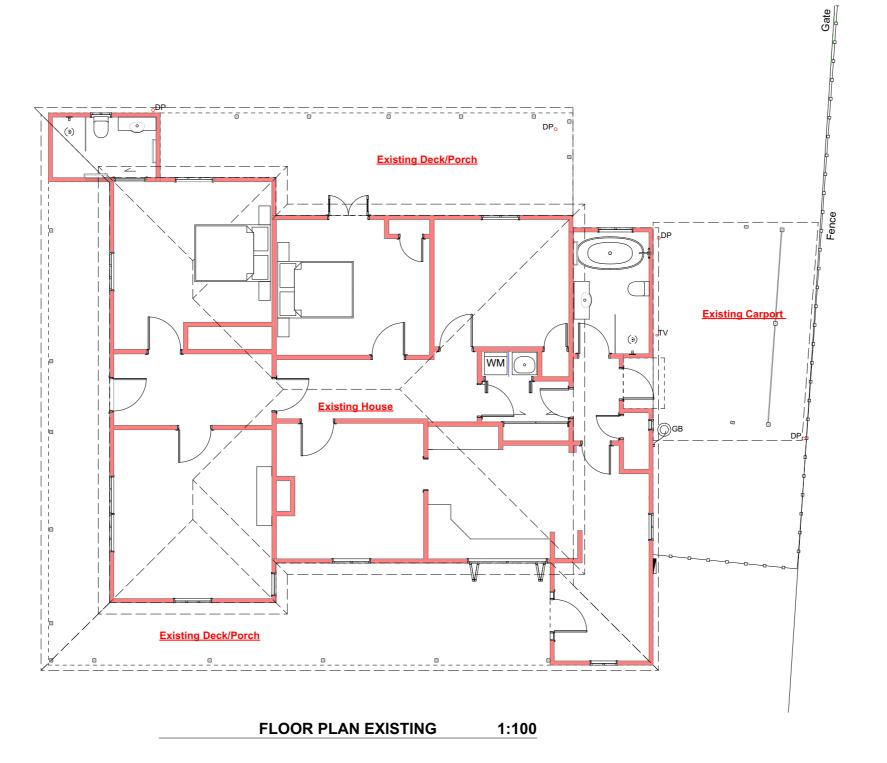
McKenzie.pln

PROPOSED SITE PLAN

1:200

Beresford St





m4)
ARCHITECTS

www.main4.co.nz

Main 4 Architects Ltd

T. 09 430 0151 **M.** 021 057 0707

A. PO Box 300 47 Norfolk Street

Whangarei 0140

E. office@main4.co.nz

CLIENT:

McKenzie

PROJECT:

House Alteration

SITE INFO:

5 Beresford street, Russell

JOB NO: **872**

NOTES:

DO NOT SCALE, CONTRACTOR SHALL VERIF ALL DIMENSIONS ON SITE, THIS DRAWING AN THE DESIGN IT COVERS SHALL REMAIN THE PROPERTY AND COPYRIGHT OF THE ARCHITE

CHRIS HOWELL

ARCHITECT: CHRIS HOWELL
DRAWN BY: EH

ENGINEER:

CHECKED BY:

100UE T/DE

ISSUE TYPE:

For consultation only. Destroy all drawings once tender drawings are issued, not for pricing or construction.

DATE:

Wednesday, 10 December 2025

DRAWING TITLE:
EXISTING FLOOR PLAN

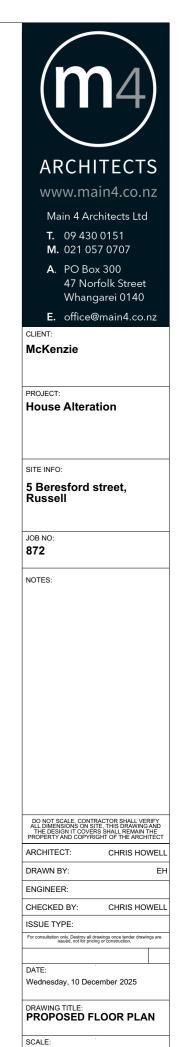
SCALE:

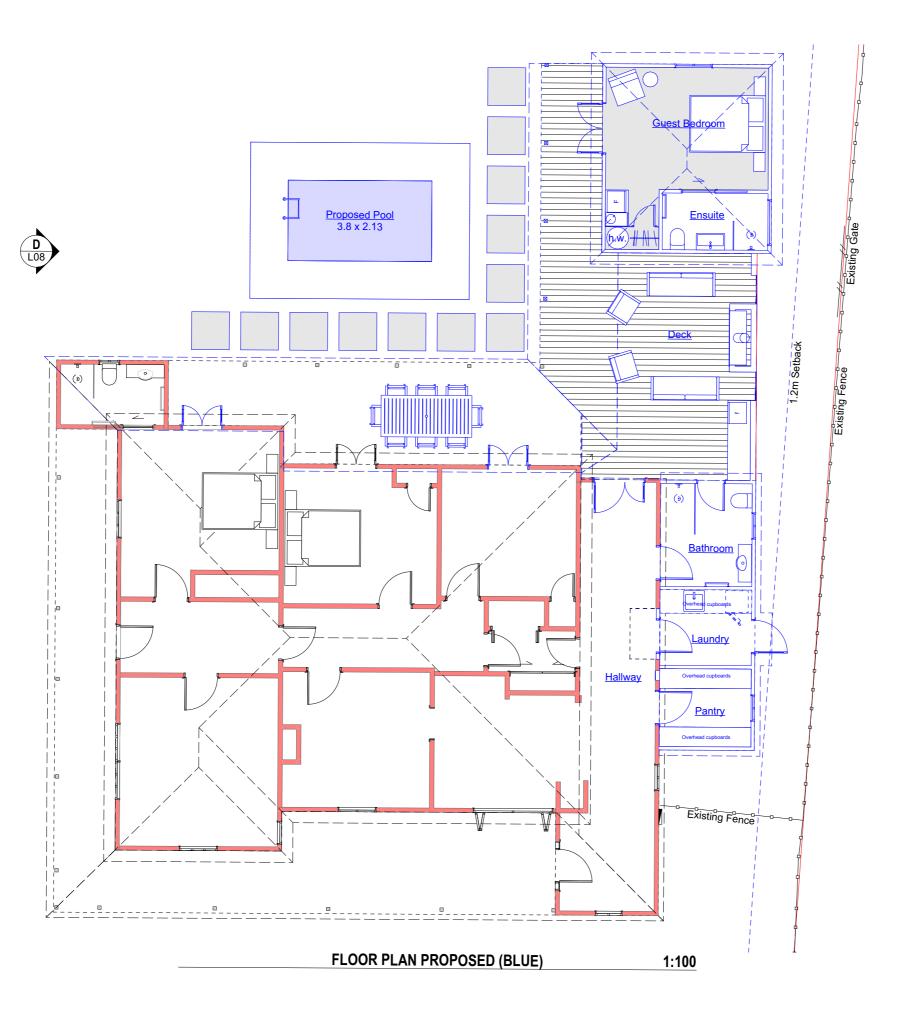
A3 ORIGINAL

DRAWING: REVI

McKenzie.pln





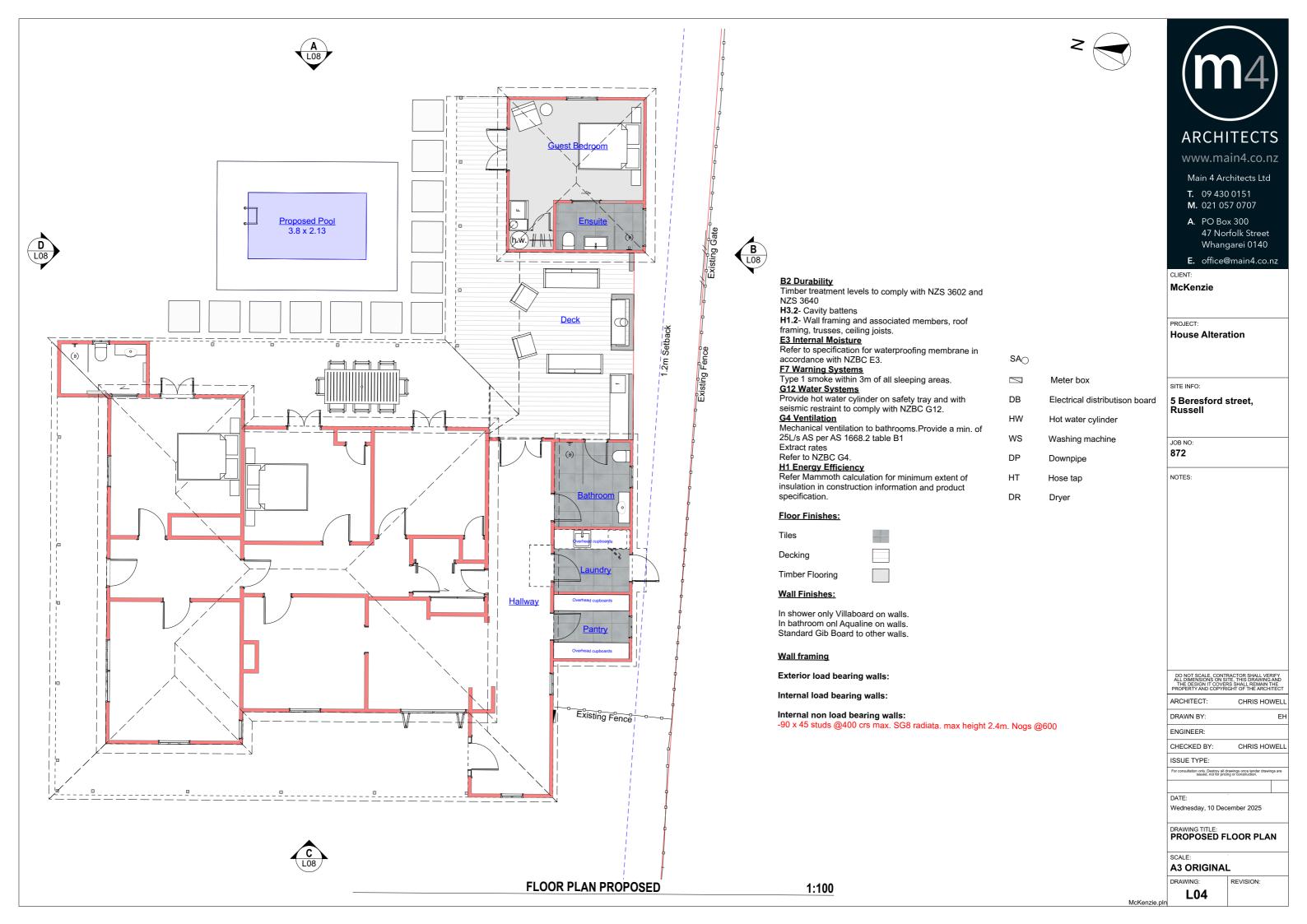


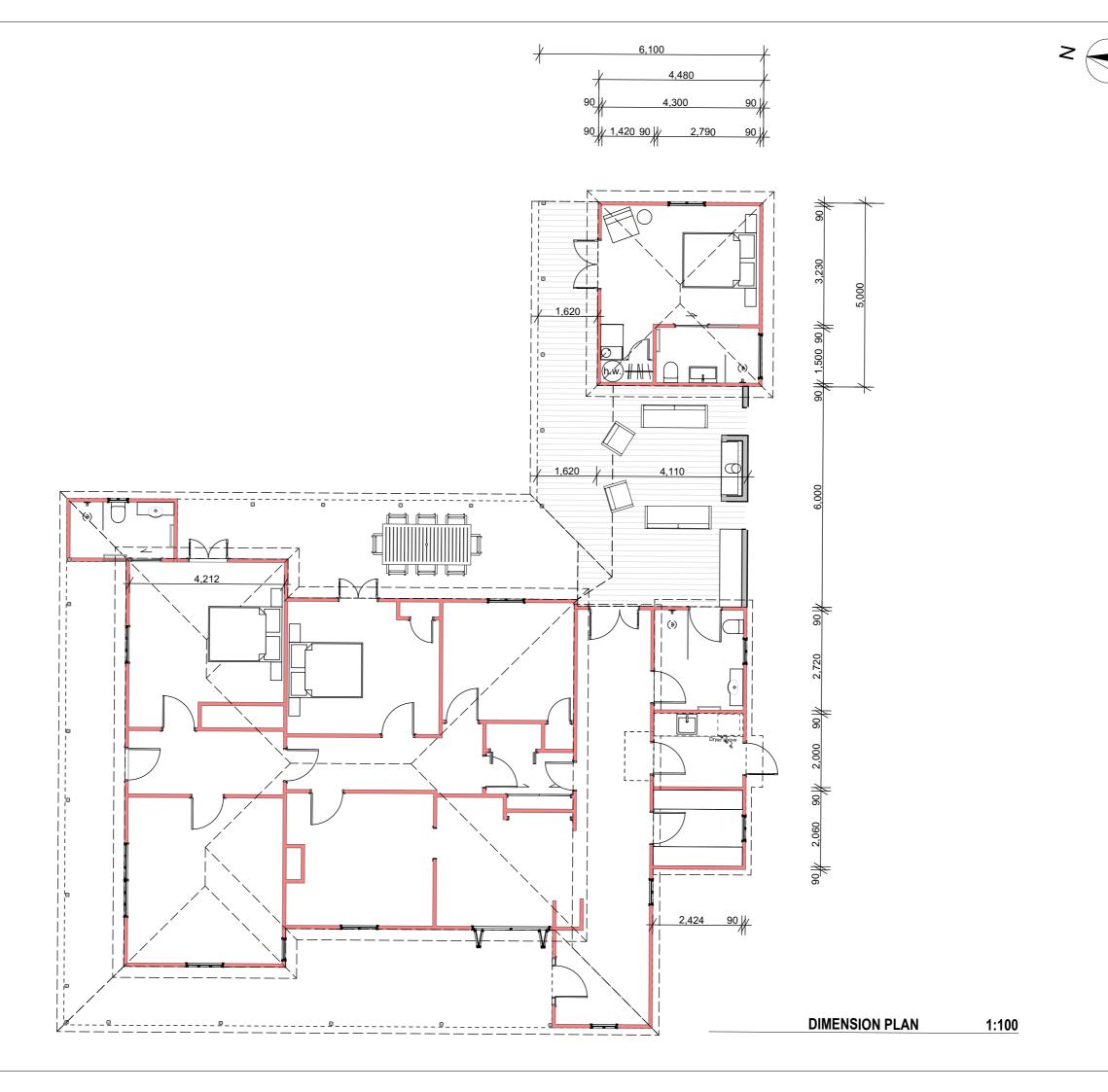
1.2m Setback

A3 ORIGINAL
DRAWING: F

L03

McKenzie.pln







ARCHITECTS

www.main4.co.nz

Main 4 Architects Ltd

T. 09 430 0151 **M.** 021 057 0707

A. PO Box 300 47 Norfolk Street

Whangarei 0140

E. office@main4.co.nz

CLIENT:

McKenzie

PROJECT:

House Alteration

SITE INFO:

5 Beresford street, Russell

JOB NO: **872**

· -

NOTES:

DO NOT SCALE, CONTRACTOR SHALL VERIF ALL DIMENSIONS ON SITE, THIS DRAWING AN THE DESIGN IT COVERS SHALL REMAIN THE PROPERTY AND COPYRIGHT OF THE ARCHITE

ARCHITECT: CHRIS HOW

DRAWN BY:

ENGINEER:

CHECKED BY: CHRIS HOWELL

ISSUE TYPE:

For consultation only. Destroy all drawings once tender drawings are issued, not for pricing or construction.

DATE:

Wednesday, 10 December 2025

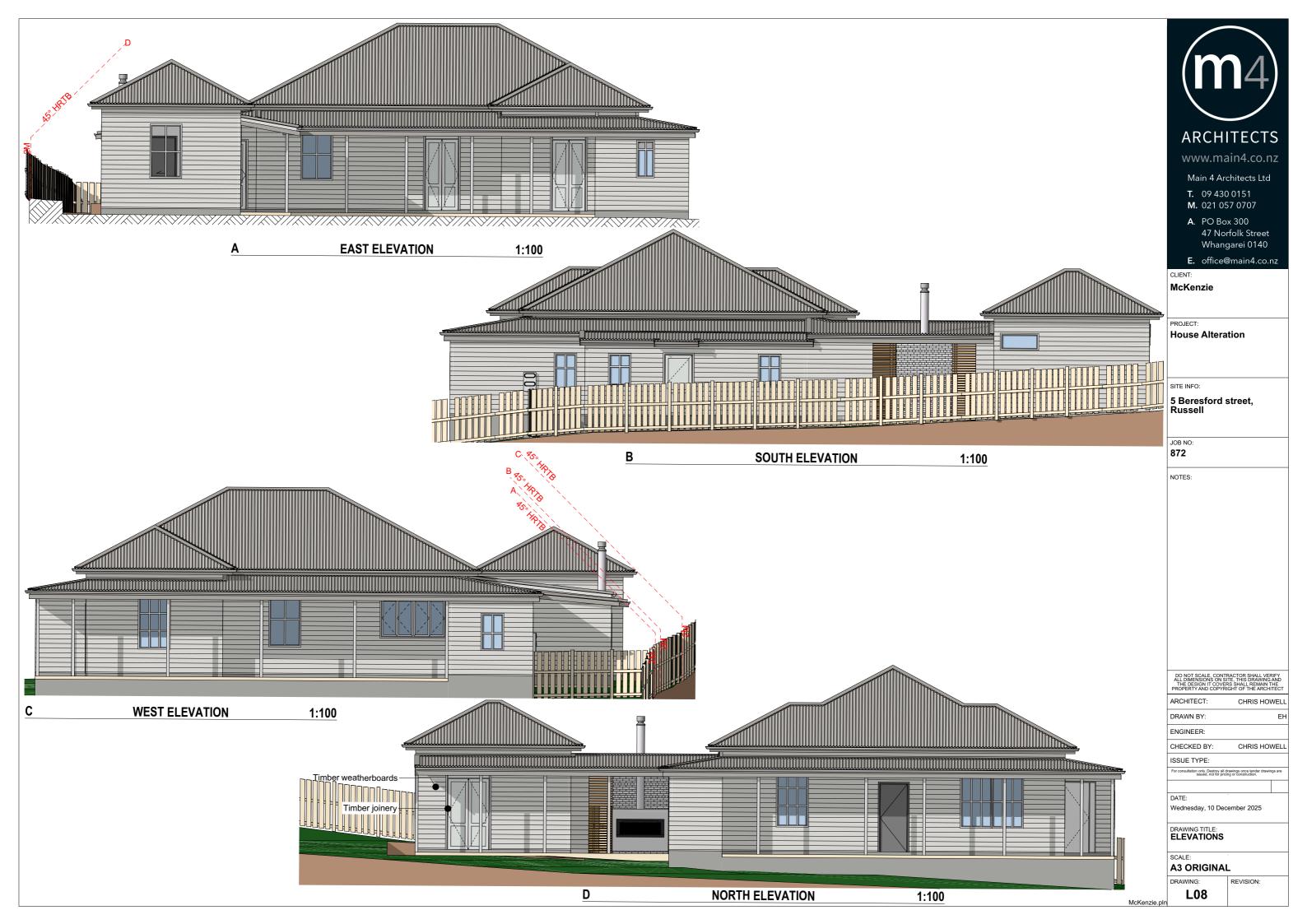
DRAWING TITLE:
DIMENSION PLAN

SCALE:

A3 ORIGINAL

L05

zie nIn







SOUTH- WEST SIDE OF PROPOSED ALTERATION FROM ROAD

Location= Beresford Street



SOUTH SIDE OF PROPOSED ALTERATION FROM ROAD

Location= Chapel Street



NORTH- WEST SIDE OF PROPOSED ALTERATION FROM ROAD

Location= Beresford Street



WEST SIDE OF PROPOSED ALTERATION FROM ROAD

Location= Beresford Street



www.main4.co.nz

Main 4 Architects Ltd

T. 09 430 0151 **M.** 021 057 0707

A. PO Box 300 47 Norfolk Street

Whangarei 0140 **E.** office@main4.co.nz

OLIENT

McKenzie

PROJECT:

House Alteration

SITE INFO:

5 Beresford street, Russell

JOB NO:

872

NOTES:

DO NOT SCALE, CONTRACTOR SHALL VERIF ALL DIMENSIONS ON SITE, THIS DRAWING AN THE DESIGN IT COVERS SHALL REMAIN THE PROPERTY AND COPYRIGHT OF THE ARCHITE

ARCHITECT: CHRIS HOWELI
DRAWN BY: EH

ENGINEER:

CHECKED BY: CHRIS HOWELL

ISSUE TYPE:

For consultation only. Destroy all drawings once tender drawings are issued, not for pricing or construction.

Wednesday, 10 December 2025

DRAWING TITLE: PHOTOS

SCALE:

A3 ORIGINAL

RAWING: REVISIO

McKenzie.pln

Attachment B Certificate of Title



RECORD OF TITLE UNDER LAND TRANSFER ACT 2017 FREEHOLD





Identifier NA77D/90

Land Registration District North Auckland

Date Issued 01 August 1989

Prior References PROC 14355

Estate Fee Simple

Area 1080 square metres more or less
Legal Description Lot 4 Deposited Plan 41395

Registered Owners

Darren Ross McKenzie, Tracey Ann McKenzie and TW Trustees Limited

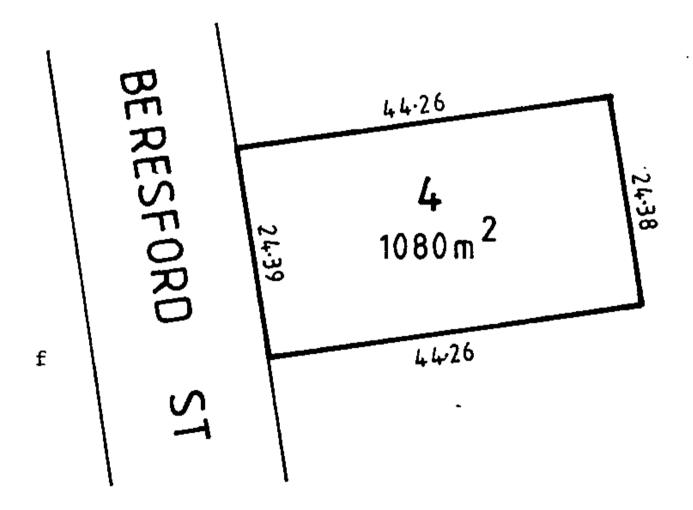
Interests

Subject to Part IV A Conservation Act 1987

13092993.3 Mortgage to ANZ Bank New Zealand Limited - 4.11.2024 at 1:19 pm



Bay of Islands County



DP 41395 KMJ Exd 44. Attachment C Archaeological Assessment prepared by Geometria Limited

Archaeological Assessment of Effects

Additions on Lot 4 DP 41395

5 Beresford Street, Russell

01 October 2025



Commissioned by:

DR & TA McKenzie Family Trust 187c Te Rongo Road, RD4 Whangarei 0174

Prepared by:

Georgia Kerby, Jono Carpenter Geometria Limited P.O. Box 68-653 Newton Auckland



Executive Summary

Geometria was engaged by D. & T. McKenzie to assess possible archaeological effects of a planned addition and pool at their property Lot 4 DP 413955, Beresford Street, Russell, that could potentially modify archaeological remains. No archaeological sites are present on the property and no archaeological remains were identified in the area of proposed works through historic research and minor on site investigation. Therefore, an authority is not required from Heritage New Zealand Pouhere Taonga. However, owing to the significant historical activity in Russell/Kororāreka an accidental discovery protocol has been recommended.

Quality Information

Document: Archaeological Assessment of Effects. Additions on Lot 4 DP 41395 at 5 Beresford Street,

Russell

Ref.: 2025-409

Date: 14 October 2025

Prepared by: Georgia Kerby and Jono Carpenter

Revision History

Revision	Revision Date	Details	Authorised Name
Draft	2 October 2025	Draft	Georgia Kerby
Final	14 October 2025	Final	Jono Carpenter

Glossary

Classic	The later period of New Zealand settlement	
Midden	The remains of food refuse usually consisting of shells, and bone, but can also contain artefacts	
Pā	A site fortified with earthworks and palisade defences	
Pit	Rectangular excavated pit used to store crops by Māori	
Terrace	A platform cut into the hill slope used for habitation	
Wahi tapu	Sites of spiritual significance to Māori	

© GEOMETRIA Limited 2025

The information contained in this document produced by GEOMETRIA Limited is solely for the use of the Client identified on the cover sheet for the purpose for which it has been prepared and GEOMETRIA Limited undertakes no duty to nor accepts any responsibility to any third party who may rely upon this document.

All rights reserved. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any from without the written permission of GEOMETRIA Limited.

File ref.: 2025\2025-409_ Lot 4 DP 41395_5 Beresford Street Russell

Contents

Ex	ecutive	Summary	i
Qι	iality Inf	ormation	ii
Re	vision H	istory	ii
Glo	ossary		ii
Со	ntents.		iii
Lis	t of Figu	ıres	iv
Lis	t of Tab	les	V
1	Intro	duction	1
2	Statu	tory Requirements	2
	2.1	The Heritage New Zealand Pouhere Taonga Act 2014	2
	2.2	The Resource Management Act 1991	2
3	Meth	odology	3
	3.1	Site Assessment	3
	3.2	Significance Assessment	3
	3.2.1	Condition and Integrity	3
	3.2.2	Diversity	4
	3.2.3	Rarity and Uniqueness	4
	3.2.4	Archaeological Context	4
	3.2.5	Landscape Context and Amenity Values	4
	3.2.6	Historic Context and Community Associations	5
4	Histo	rical Background	5
	4.1	Section 26 Block 1 Parish of Russell	6
5	Archa	eological Background	18
	5.1	Previous Archaeological Work	18
6	Othe	Heritage Sites and Features	21
7	Site I	nspection	21
8	Asses	sment of Archaeological and Other Values	25
9	Asses	sment of Effects and Recommendations	25
10	Co	onclusions	25
		S	
ΑP	PENDIX	A: Architectural Plans	27
ΛD	DEVIDIA	R. Site Record Forms	30

List of Figures

Figure 1. Location of 5 Beresford Street, Lot 4 DP 41395, Russell, Northland. Subject property of	outlined
in blue	1
Figure 2. Clayton, George Thomas fl 1845: Kororareka in the Bay of Islands, New Zealand. Sketch	ned Mar
10th 1845 on the morning before the assault and destruction by Honi Heke. Drawn by Captain	Clayton,
and on stone by W. A. Nicholas. London, E. D. Barlow [1845?] ATL C-010-022. Catholic chu	rch and
Claytons house circled. Subject property between.	8
Figure 3. [Jones, Theodore Morton] 1828-1895: Kororarika, Bay of Islands; formerly the	seat of
government of New Zealand (burnt by natives) / [T M Jones] [1851? Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851? Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones] [1851] Part 2 ATL [Jones, The content of New Zealand (burnt by natives) / [T M Jones]	neodore
Morton] 1828-1895: Kororarika, Bay of Islands; formerly the seat of government of New Zealan	d (burnt
by natives) / [T M Jones] [1851? Part 2 with Roman Catholic Church circled. Subject property	in front
and to the left of the church.	8
Figure 4. Section 26 Parish of Russell, Deeds Index 1E Country of Bedford: 90	9
Figure 5. OLC 300 (1863)	10
Figure 6. Detail from OLC 300 (1863)	11
Figure 7. SO 920C (1890)	12
Figure 8. Detail from SO 920C (1889)	13
Figure 9. SO 5602 (1890)	13
Figure 10. Detail from SO 5602 (1890) showing Mrs Poole's house and Catholic Church. Subject p	property
approximately where the word Bishop is annotated.	14
Figure 11. DP 41395 (1953) showing subdivision of Section 26.	15
Figure 12. Aerial image SN 209 Run 544/12 (1951) showing no development on subject property	y. House
formerly belonging to Mrs Poole and old Catholic Church site circled	16
Figure 13. Aerial image SN 3406 Run 4480 (1971) showing the existing house, garage and	a small
structure in the back garden on subject property	16
Figure 14. Archaeological sites, and historic features from maps, plans and aerials	17
Figure 15. Recorded archaeological sites near 5 Beresford Street, Russell, from Archsite (NZAA	4 2025).
	20
Figure 16. Current FNDC Plan for Russell. Dashed black line shows Heritage Precinct while pu	rple line
shows Township Area	22
Figure 17. Proposed FNDC Plan for Russell with Heritage Areas outlined in dark purple. Subject p	property
outlined in blue.	22
Figure 18. East (back) of house at 5 Beresford Street with two test pits.	23
Figure 19. Test pit 1	24
Figure 20. Test pit 2	24
Figure 21 Location of investigated areas from the site visit	2/

List of Tables

Table 1. Recorded archaeological sites within 200m of subject property	20
Table 2. Stratigraphy of test pits	23

1 Introduction

Geometria was engaged by D. & T. McKenzie to assess possible archaeological effects of a planned addition at their property 5 Beresford Street, Russell. Lot 4 DP 41395 is 1080m² in size, and is sited on the rolling greywacke hill backing the Russell township (Figure 1). This area is fairly densely residential and the property is situated next to the National Catholic Shrine of Saint Peter Chanel and diagonally across from Russell Primary School.

Plans by M4 Architects show the proposed deck and guest house addition plus a pool at the rear of the existing building that could potentially modify archaeological remains (Appendix A). The eastern elevation shows the requirement for a small cut to approximately 400mm depth, and presumably deeper excavation for the pool. The building has undergone various alterations since it was relocated onto the site, including a 32m² house extension on the south and west sides in 1996, a new garage between 2002 and 2006, and an ensuite added between 2007 and 2008. The west of the house has been modified with concrete, driveway and garden, while the west is bounded by garden, a retaining wall and two large native trees.

Under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) all archaeological sites are protected from any modification, damage or destruction except by the authority of Heritage New Zealand Pouhere Taonga (HNZPT).

This assessment uses archaeological techniques to assess archaeological values and does not seek to locate or identify wahi tapu or other places of cultural or spiritual significance to Māori. Such assessments may only be made by Tangata Whenua, who may be approached independently of this report for advice. Likewise, such an assessment by Tangata Whenua does not constitute an archaeological assessment. Permission to undertake ground disturbing activity on and around archaeological sites and features may only be provided by Heritage New Zealand Pouhere Taonga, and may only be monitored or investigated by a qualified archaeologist approved through the archaeological authority process.



Figure 1. Location of 5 Beresford Street, Lot 4 DP 41395, Russell, Northland. Subject property outlined in blue.

2 Statutory Requirements

There are two main pieces of legislation in New Zealand that control work affecting archaeological sites. These are the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA; previously the Historic Places Act 1993) and the Resource Management Act 1991 (RMA).

2.1 The Heritage New Zealand Pouhere Taonga Act 2014

Under the HNZPTA all archaeological sites are protected from any modification, damage or destruction except by the authority of the Historic Places Trust. Section 6 of the HNZPTA defines an archaeological site as:

- "(a) any place in New Zealand, including any building or structure (or part of a building or structure), that—
 - (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
 - (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- (b) includes a site for which a declaration is made under section 43(1)"

To be protected under the HNZPTA an archaeological site must have physical remains that pre-date 1900 and that can be investigated by scientific archaeological techniques. Sites from 1900 or post-1900 can be declared archaeological under section 43(1) of the Act.

If a development is likely to impact on an archaeological site, an authority to modify or destroy this site can be sought from the local Heritage New Zealand Pouhere Taonga office under section 44 of the Act. Where damage or destruction of archaeological sites is to occur Heritage New Zealand usually requires mitigation. Penalties for modifying a site without an authority include fines of up to \$300,000 for destruction of a site.

Most archaeological evidence consists of sub-surface remains and is often not visible on the ground. Indications of an archaeological site are often very subtle and hard to distinguish on the ground surface. Sub-surface excavations on a suspected archaeological site can only take place with an authority issued under Section 56 of the HNZPTA issued by the Heritage New Zealand.

The archaeological authority process applies to all archaeological sites, regardless of whether:

- The site is recorded in the NZ Archaeological Association Site Recording Scheme or included in the Heritage New Zealand List,
- The site only becomes known about as a result of ground disturbance, and/ or
- The activity is permitted under a district or regional plan, or a resource or building consent has been granted

Heritage New Zealand also maintains the New Zealand Heritage List/ Rarangi Korero of Historic Places, Historic Areas, Wahi Tupuna, Wahi Tapu and Wahi Tapu Areas. The List can include archaeological sites. Its purpose is to inform members of the public about such places.

2.2 The Resource Management Act 1991

Archaeological sites and other historic heritage may also be considered under the Resource Management Act 1991 (RMA). The RMA establishes (under Part 2) in the Act's purpose (Section 5) the matters of national importance (Section 6), and other matters (Section 7) and all decisions by a Council

are subject to these provisions. Sections 6e and 6f identify historic heritage (which includes archaeological sites) and Māori heritage as matters of national importance.

Councils have a responsibility to recognise and provide for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga (Section 6e). Councils also have the statutory responsibility to recognise and provide for the protection of historic heritage from inappropriate subdivision, use and development within the context of sustainable management (Section 6f). Responsibilities for managing adverse effects on heritage arise as part of policy and plan preparation and the resource consent processes.

Historic heritage includes:

- historic sites, structures, places, and areas
- archaeological sites;
- sites of significance to Māori, including wahi tapu;
- surroundings associated with the natural and physical resources (RMA section 2).

These categories are not mutually exclusive and some archaeological sites may include above ground structures or may also be places that are of significance to Māori.

Where resource consent is required for any activity the assessment of effects is required to address cultural and historic heritage matters (RMA 4th Schedule and the district plan assessment criteria [if appropriate]).

3 Methodology

3.1 Site Assessment

The methods used to assess the presence and state of archaeological remains on the property included both a desktop review and field survey. The desktop survey involved an investigation of written records relating to the history of the property. These included regional archaeological publications and unpublished reports, New Zealand Archaeological Association Site Record Files or NZAA SRF (ArchSite-www.archsite.org.nz - is the online repository of the NZAA SRF), and land plans held at Land Information New Zealand. The field survey included pedestrian surface survey, probing and spade testing.

3.2 Significance Assessment

HNZPT has provided guidelines setting out criteria that are specific to archaeological sites (HNZPT 2006:9-10). The archaeological values of sites relate mainly to their information potential, that is, the extent to which they can provide evidence relating to local, regional and national history through the use of archaeological investigation techniques, and the research questions to which the site could contribute. The surviving extent, complexity and condition of sites are the main factors in their ability to provide information through archaeological investigation. Other relevant values could include historical, technological, architectural and cultural.

Where archaeological sites, features and/or values are present within the proposed subdivision the following criteria are used to assess their significance:

The first set of criteria assess the potential of the site to provide a better understanding of New Zealand's past using scientific archaeological methods. These categories are focussed on the intra-site level.

3.2.1 Condition and Integrity.

How complete is the site? Are parts of it already damaged or destroyed? What information can be provided by the investigation of the site using archaeological methods.

A complete, undisturbed site with visible/accessible physical features would have high value, a partly destroyed or damaged site would have moderate value and a site suffering from extensive modification or damage would be of low value.

3.2.2 Diversity

How diverse are the visible/accessible physical features, and those features which might be expected below the surface and amenable to archaeological investigation of the site?

A complex site like a pā or kāinga withs pits, terraces, defensive works, midden and stratified occupation deposits or other visible/accessible physical features and which could be expected to have a variety of subsurface features and associated with a long-term occupation by a large group of people would be of high significance. A smaller site, such as a complex of a few terraces, pits and midden which might be associated with a family-level occupation and used for a short period of time would be of moderate significance. A site with only one or two known or expected feature types, such as a small midden which overlay several ovens and with no other associated features is of low value.

3.2.3 Rarity and Uniqueness

How rare or unique is the site as a type? Are there features within the site that are not commonly found or are unusual?

Rarity can be described in a local, regional and national context. If the site is not rare at all, it has low significance in this category. If the site is rare in a local context only it is of low significance, if the site is rare in a regional context, it has moderate significance and it is of high significance it the site is rare nationwide. Coastal shell midden with relatively homogenous contents and not specifically associated with a larger occupation or other features are ubiquitous in Taitokerau/Northland and are the most common site type nationally, and would generally be of low archaeological significance. Small pit and terrace complexes are moderately common and typically moderately significant. Pā sites, although still numbered in the thousands nationally, are rarer and are of high significance. Sites from the earliest period of human occupation in Aotearoa New Zealand, so-called "Archaic" sites associated with the cooked remains of moa and other extinct or locally extirpated species and Polynesian-style artefact forms are incredibly rare and unique and are of the highest significance, despite being a kind of midden.

The second set of criteria puts the archaeological site into its broader context including the wider archaeological landscape, amenity values, and historic context and associations with events and people, and the values the present-day communities of interest hold in the site.

3.2.4 Archaeological Context

What is the context of the site within the surrounding archaeological sites?

The question here is the part the site plays within the surrounding known archaeological sites. A site which sits amongst similar surrounding sites without any specific features of note, such as a coastal midden with other midden nearby is of low significance. A site which occupies a central or prominent position such as a large pā with surrounding satellite occupation, horticultural and other sites which might reasonably be associated with it is of high significance.

3.2.5 Landscape Context and Amenity Values

What is the context of the site within the landscape? Does it have visual, education, recreation or other amenity values

This question is linked to the one above, but focuses onto the position of the site in the landscape. If it is a dominant site with many features still visible from public places it has high significance, but if the sites' position in the landscape is ephemeral with little or no features visible it is of low significance. This assessment is also concerned with the amenity value of a site such as whether it is publicly

accessible and used for recreational or other activities, available and useful for interpretation and education activities. A prominent pā in a public reserve with walking tracks, an urupa visible from the road, or the site of a first waka or ship landing, church service or other important event regardless of whether anything physical is visible would be of high significance. Subsurface features on private land and not otherwise associated with any important person or even would be assessed as having low significance.

3.2.6 Historic Context and Community Associations

What is the historic context of the site and is it associated with important historic events or people? How do communities of interest, be they the mana whenua, other descendant communities or local inhabitants feel about the site?

This is the question of known cultural association either by tangata whenua or other descendant groups. Sites linked with important historic events or people have higher the significance while sites with no known history are of lesser significance. Likewise sites ascribed value by communities of interest are of higher significance than those sites the community is unaware of or does not care about. An overall significance assessment derives from weighing up the different significance values across of the six categories.

4 Historical Background

The historic significance of Russell/Kororāreka has been recognised for more than sixty years, with major popular syntheses Ross (1946), Jack Lee (1983) and King (1992) and many other works also available.

According to traditional histories, the Bay of Islands was controlled by the Ngātiawa people until the 16th century when the people of the Hokianga and Kaikohe were coalescing as Ngāpuhi. Ngare Raumati, part of Ngātiwai, held Kororāreka through the 17th and early 18th century. After killing Waipahihi, a chief of Ngāti Manu of Paihia, Ngare Raumati ceded Kororāreka as compensation and Ngāti Manu controlled the area when the first European, Captain Stewart, stepped foot on the beach in 1805.

The local Māori refused to sell land initially, but had relented by 1814 when Thomas Hansen, Captain of the Active, arrived in the Bay of Islands with Rev. Samuel Marsden. A substantial Māori population lived around a pā overseen by the Ngāti Manu chief Whareumu, with the settlement extending along the beach. The first European to take up residence was John Johnston, a sawyer and trader who had huts and saw pits in the area by 1827 but the European population remained small until the 1820s. Increasing stops by whalers looking for supplies and entertainment saw the population grow from this point on, and following the "Girls War" the Ngāti Manu influence declined in favour of Ngāpuhi. At this time large scale land purchases by Europeans began. Between 1830 and 1840 Russell became an important port for merchants and whalers and in the absence of a strong government became a rough and tumble frontier town. Elements of a civil society evolved locally in the lead up to the Treaty of Waitangi, with a Kororāreka Association of Vigilantes formed in 1838 to deal with local lawbreakers, the establishment of a local newspaper and banking company, and the call for subscriptions for road building from the local community. Following the Treaty and the subsequent removal of the seat of colonial government to Auckland, Russell declined somewhat.

At the time of the chopping down of the flagstaff and subsequent sack of the town by Hone Heke and his allies in 1845, Kororāreka had a population of about 400. Although the town was soon re-established after Heke burned it to the ground apart from the churches and mission buildings, it entered a period of slow decline, exacerbated by the shift of the South Pacific whaling fleet to more northern latitudes, and the American Civil War which removed even more foreign ships from local waters. In 1876 Russell had two hotels, a dozen stores, a custom house and courthouse, post office, telegraph office, schoolhouse and 12 prefabricated cottages for miners; the establishment of a manganese mine in 1872

(closed in 1895) and a large mullet cannery in 1889 having provided the major economic stimulus to the town in the late 19^{th} century.

4.1 Section 26 Block 1 Parish of Russell

The subject property was originally part of the Catholic Church's holdings in Kororāreka, the three acres Section 26 Block 1 Parish of Russell (Figure 4).

Section 26 was granted to Bishop Pompallier and the Catholic Church through the Land Claims Commission investigations of the 1840s and 1850s, and was separate to the Church's purchase of its holdings on the beachfront where the Mission was established (Berghan 2006: 585, Old Land Claim 585).

This claim was made up from the following transactions in the Bay of Islands:

Part of this land was purchased for £5 cash and 1 pair trousers in December 1836 by George Hull who sold to Edward Callender who sold and transferred to Bishop Pompallier on 13 April 1838.

Another part was purchased in a larger tract on the 10 November 1838 from Rewa for goods amounting to £54 by L.A. Wood who sold part of this tract to Bishop Pompallier on the 4 July 1838.

Another part was bought from Rewa by John Roberton in April 1839 and sold and transferred to Bishop Pompallier in 1839.

On 28 September 1842, Bishop Pompallier appeared before the Old Land Claims Commission providing the usual details associated with claims. He also provided evidence of the original purchases and subsequent transfers. On 14 October 1842, Rewa gave evidence acknowledging the original transaction and the payments made.

On 26 November 1842, Commissioner Godfrey recommended an award of 60 acres to be issued to Bishop Pompallier for the Catholic Mission. On 7 February 1843, the award was confirmed by Shortland. A grant for 59 acres was not issued until 11 February 1856.3654 Under the Bell Commission, the claim was surveyed and found to contain 85 acres. This was granted to Bishop Pompallier on 10 September 1861.

However, part of this grant to Pompallier and the Catholic Church had already been granted to settler and landowner Thomas Clayton (Berghan 2006: 73-75, Old Land Claim 102). On 6 November 1838, John Evans and George Thomas entered into a land transaction with "E Rukka" and "E Tucko" for approximately 1 acre "at the back of the swamp" at Kororāreka in the Bay of Islands. They paid £5 in cash and also in goods that were later calculated to have a value of 12s 6d making a total payment of £5. On 9 November 1838, Evans and Thomas transferred the land to George Thomas Clayton for £15.

Clayton then on-sold the land to Joseph Aberline for the sum of £200. On 10 December 1840, Clayton forwarded in his claim to the Colonial Secretary. On 11 November 1841, Clayton testified before the Old Land Claims Commission providing the usual details associated with claims. John Evans testified to the original transaction made by he and Thomas and the transfer to Clayton three days later. On 27 December 1841, William Wells testified to being a witness to the original deed. On 2 November 1842, E.Rukka testified to the original transaction and receipt of the payment.

On 26 November 1842, Commissioner Godfrey found in favour of Clayton's claim and recommended that an award for the 1 acre be issued to Aberline. On 13 December 1842, Shortland confirmed this award. The next day the award was gazetted. However, notification in August 1843 of the disallowance of the 1842 New Zealand Land Claims Ordinance meant that this award had to be recalculated under a formula for valuing pre-1840 payments that had been originally contained in the 1841 New Zealand Land Claims Ordinance. It appears, that the award was amended and a new award was gazetted on 6 September 1843 although this possibly was for the same amount of land. At some later time, however, the Governor ordered an award to Clayton for 1 acre 10 perches although this was found to cause

difficulties in respect of surrounding sections. Nevertheless, a Grant was issued to Clayton on 30 December 1844 for 1 acre 10 perches.

There is nothing recorded on the file for OLC No.102 relating to the actions of the Bell Commission. A later summary, however, records Aberline's Grant as being valid "but it interferes with a Grant to R[oman].C[atholic]. Bishop".

Clayton also made another claim that overlapped with the Catholic Church (Berghan 2006: 77-79, Old Land Claim 109). On 7 September 1837, Thomas Spicer entered into a land transaction with "Awaddy and Akeda" for approximately 9 acres at Kororāreka in the Bay of Islands for which he paid goods that were later calculated to have a value of £18. On 3 October 1838, Spicer sold the land to George Thomas Clayton for £30. Part of the land Clayton then on-sold to John Kelly and the rest to Stephenson. On 10 December 1840, Clayton forwarded his claim to the Colonial Secretary. On 19 November 1841, Clayton testified before the Old Land Claims Commission providing the usual details associated with claims. On 17 December 1841, Spicer also appeared and provided testimony on the original transaction from local Māori and also as to his onselling the land to Clayton. On 18 December 1841, the chief "Aneka" then appeared confirming the transaction to Spicer.

On 26 November 1842, Commissioners Richmond and Godfrey found in favour of the claim and recommended that an award for the 9 acres be issued to Clayton and those who had subsequently purchased the land and claimed through him. Although Clayton's claims had been opposed by Thomas Hanson, this claim was rejected as having not been substantiated. It also appeared that the part sold to Kelly had been further on-sold to A.B.V. de Sentis who had then sold it to Bishop Pompallier for the Roman Catholic Mission.

On 13 December 1842, Shortland confirmed the award which was gazetted on 14 December 1842. However, notification in August 1843 of the disallowance of the 1842 New Zealand Land Claims Ordinance meant that this award had to be recalculated under a formula for valuing pre-1840 payments that had been originally contained in the 1841 New Zealand Land Claims Ordinance. As a result, the claimant's award was amended and a new award was gazetted on 6 September 1843 which in Clayton's case appears to have been for the same amount of land – 9 acres.

Although the award had been confirmed, no Grant was issued to Clayton and the Bell Commission later recorded that no claim was brought forward in Clayton's name. However, under the de Sentis claim OLC 972, a Grant for 3 acres and 10 perches was eventually awarded to the Roman Catholic Bishop on 19 October 1855. This grant was not disturbed by the Bell Commission and was held as being valid. By 1870, it was recorded on file that a claim had still not been brought forward in the name of Clayton so possibly this claim lapsed without an award being finalised. There is no other evidence of Stephenson's derivative claim being recognised.

OLC 300 shows the grants to Bishop Pompallier and Clayton, noting that Pompallier's grant had formerly been granted to Clayton (Figures 5-6). Ultimately, the water course between the Oneroa Road and Chapel St, running east to west through the area, became the boundary line between the parties. The Catholic Church itself was originally built on the high ground to the east of the current church, as shown on Morton's 1851 painting and as indicated on the 1889 and 1890 town survey plans (Figures 2-3;7-10; 14).

Unfortunately none of the many historic photographs of Russell from the 1890s-1920s show much in the way of clear detail for the rear part of the town. However it appears that there was little activity in the vicinity of the subject property. Aerial images and plan DP 41395 show Mrs Poole's house directly next door to the subject property and the current church in the early 1950s, followed by the arrival of the present house at 5 Beresford Street after 1953 and 1971 (Figures 11-13). While a small structure is visible at the back of the house in the 1971 aerial (Figure 13), a 1977 aerial (SN 5124 Run A P3) clearly shows a large water or wastewater tank present on that location, the southwest corner of the house.

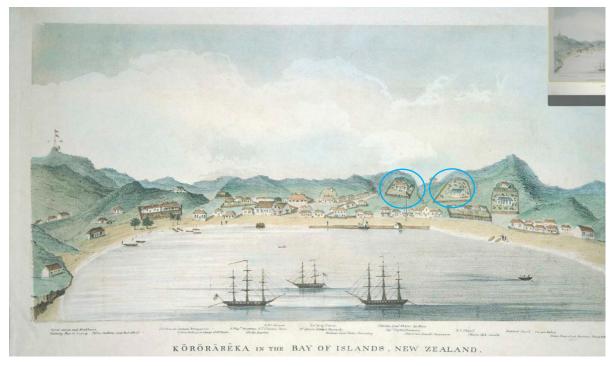


Figure 2. Clayton, George Thomas fl 1845: Kororareka in the Bay of Islands, New Zealand. Sketched Mar 10th 1845 on the morning before the assault and destruction by Honi Heke. Drawn by Captain Clayton, and on stone by W. A. Nicholas. London, E. D. Barlow [1845?] ATL C-010-022. Catholic church and Claytons house circled. Subject property between.

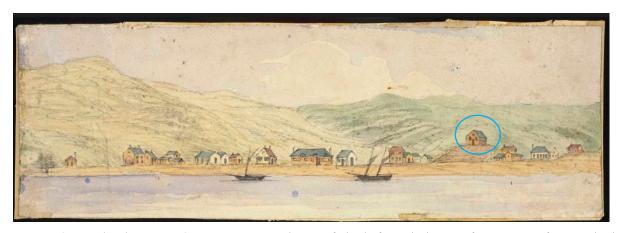


Figure 3. [Jones, Theodore Morton] 1828-1895: Kororarika, Bay of Islands; formerly the seat of government of New Zealand (burnt by natives) / [T M Jones] [1851? Part 2 ATL [Jones, Theodore Morton] 1828-1895: Kororarika, Bay of Islands; formerly the seat of government of New Zealand (burnt by natives) / [T M Jones] [1851? Part 2 with Roman Catholic Church circled. Subject property in front and to the left of the church.

AL PA	Ac 3	0.8	Para Ruso	ell			90
-	The same of the sa	Trest reads					
No.	Rece	cipt of Instrument,	Nature of Instrument.	Date of Instrument.	Where Recorded.	Reference.	SIGNATURE
179 E	7-53	Om 17 Octor 1867	(C. 1775)	19 Oslow 1855	F1 14.3		Q. E. Lepine
36291	1 55	Vm 17 011-1001	Mortgage	17 Octor 1867	To the same of the		munt Balale
89709	11	am 3 Sept 1869		1 Sept 1869			
412.45	10 31	am 4 May 1870	Mortgage	28 Sept 1869			Edm & Planker 7
3213W	10 35	am 1 Mar 1872	1	16 Feby 1842			Afthughes
45014	10 13	am 1 March 1842		30 Dec 1871			Explicagles
45018	10 15	× 40 × 4	Transfer	13 Sept 1869	14 m 834		Alfthighes
	108185	10 15 Oct 1888	A STATE OF THE PARTY OF THE PAR	8 cept 1889	K 30 531		al bol 40
	183	" 2 Jan 1889		17 Die 1888			Shure KShank J.
	180366	3 31 Jan 1899 1 13 Sept 1906	De charation	2 3 est 1000	P126-370	7	Millaria
	2	- 4- /-	1 - 1000	1 1 6	the sail want		
Wille.	CTun	der The Lai	el Transf	act is	sued		
	fora	der The Lai part lying pplication	to the over	of serge	on wit	cluston	SCR 24/11/31
		part liging	4720 VW	V Lussee -	Le see	K21678	
	Balance "	now fenous as					
3	or i se	Self.	Certificate of	title, Vol. 451			
for how	67/1	40	Transfer				
de gother			Application	No. 300940			
				The state of the s			
		The state of					
				1 7 to 10			SET IN SE
			Total a				
	A Property						
				F I Maria			
		N. W. Lett. Will	75		*		
					E TOWNER !		
			13	* 15- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	Charles Like	Francis Co.	F			4	1
1726	Pompallier 16 Vi Pompallier 16 Vi Harker or Pon	Veston					
41245 3218W	Pompattier Harley lo	to Harter	5+1 E+ M	1			
45017	Harter to	Harler	ATTACA	1	- 1		
103155	lanoth to 3	sever !			1		The state of the
145665	toroke to		1 3		1		
385284	Eleany Lo	hundy in (part)	A STATE			1	
2			1-1/3-1-2		3 //		1
			7	698			
		THE REAL PROPERTY.		1			1

Figure 4. Section 26 Parish of Russell, Deeds Index 1E Country of Bedford: 90.

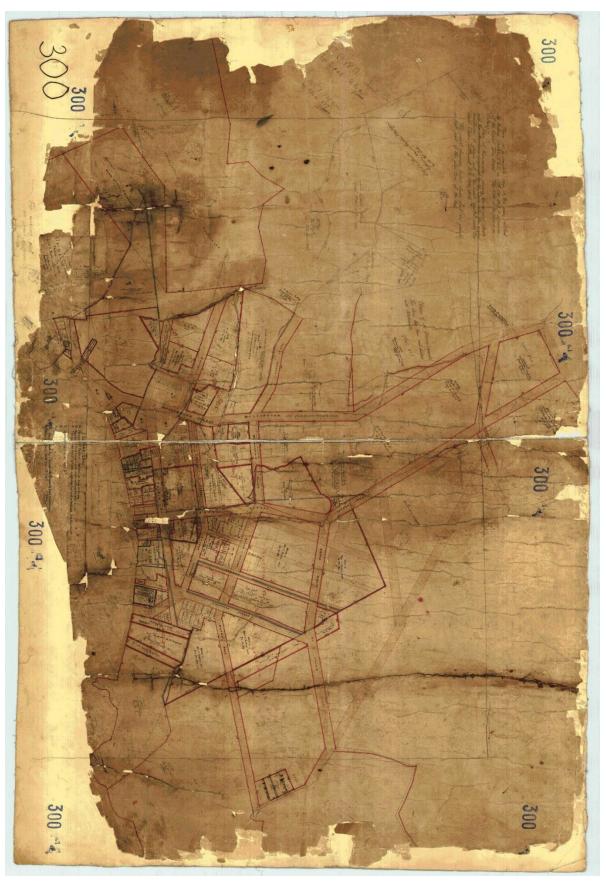


Figure 5. OLC 300 (1863).

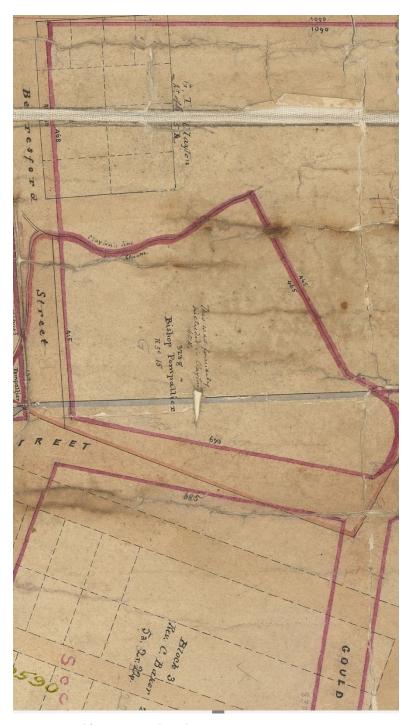


Figure 6. Detail from OLC 300 (1863).

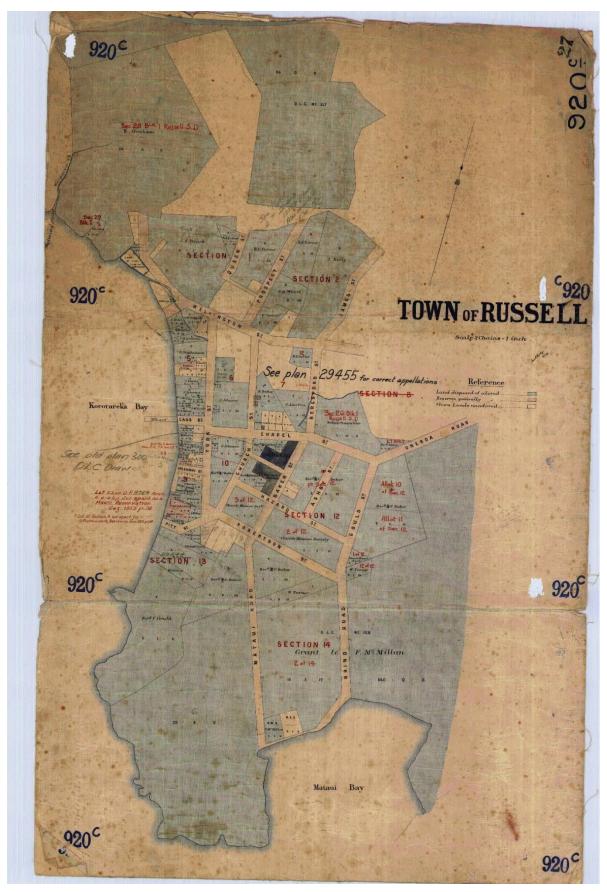


Figure 7. SO 920C (1890).

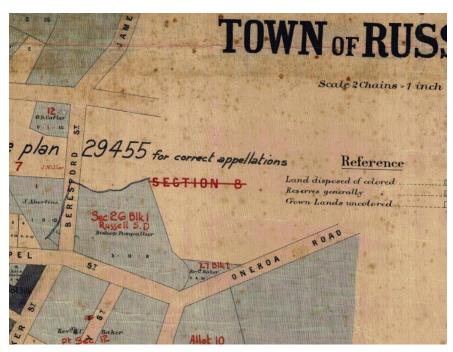


Figure 8. Detail from SO 920C (1889).



Figure 9. SO 5602 (1890).

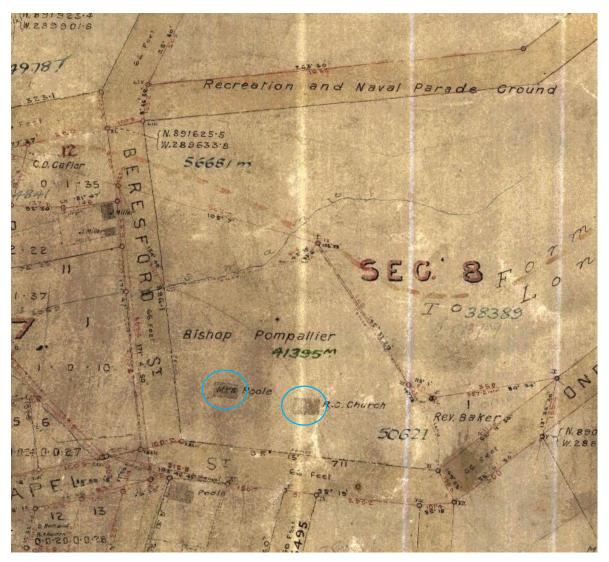


Figure 10. Detail from SO 5602 (1890) showing Mrs Poole's house and Catholic Church. Subject property approximately where the word Bishop is annotated.

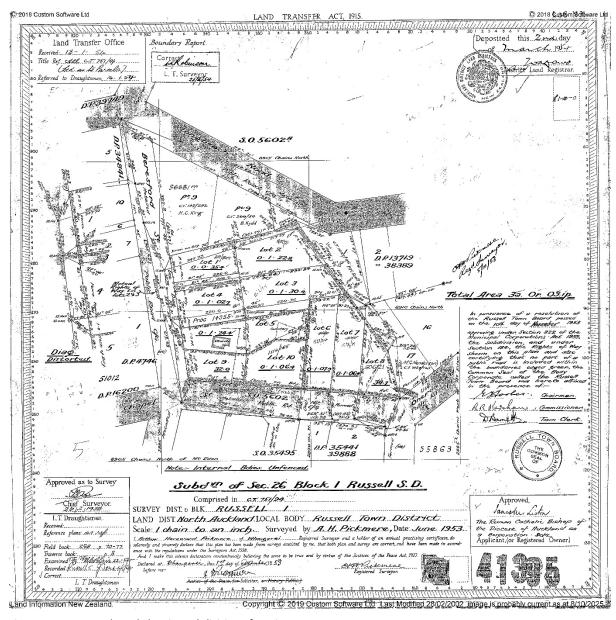


Figure 11. DP 41395 (1953) showing subdivision of Section 26.



Figure 12. Aerial image SN 209 Run 544/12 (1951) showing no development on subject property. House formerly belonging to Mrs Poole and old Catholic Church site circled.



Figure 13. Aerial image SN 3406 Run 4480 (1971) showing the existing house, garage and a small structure in the back garden on subject property.

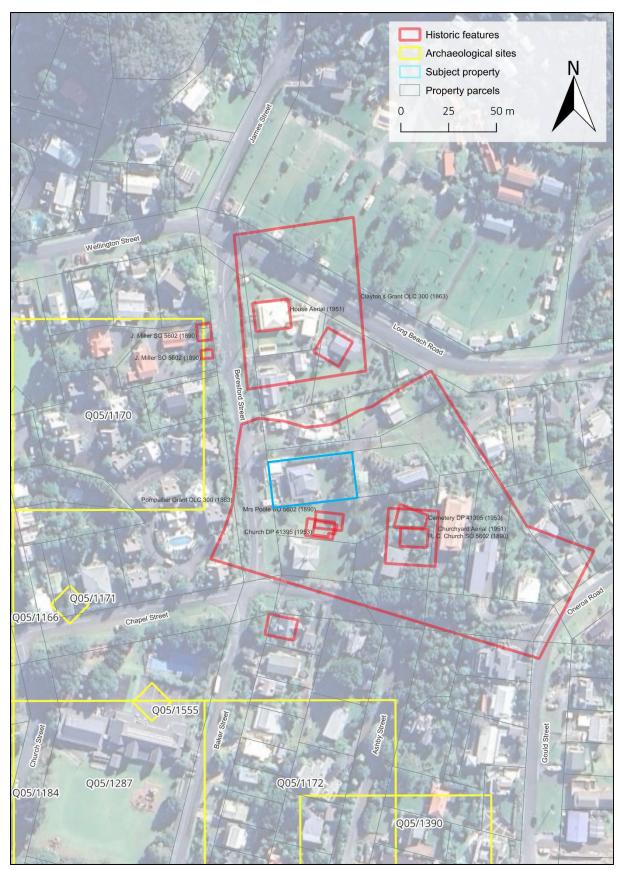


Figure 14. Archaeological sites, and historic features from maps, plans and aerials.

5 Archaeological Background

The occupational history of Kororāreka/Russell has produced a dense archaeological landscape. The archaeology of the area spans the physical remains of the pre-contact Māori occupation, the pre-Treaty heyday of sailors, whalers and grogshops, the razing of the town at the start of the Northern war, and the rebuild and slow decline at the end of the 19th century, prior to the reinvigoration of the town as a sport fishing mecca and tourist attraction.

The archaeological potential of Russell was noted in the Russell Planning Review in the late 1980s and numerous submissions drew attention to the importance of the archaeology and history of the area. This was recognised when the Planning Review recommended the identification of archaeological features and their investigation or preservation depending on circumstances so as to enhance the historic significance of the area (Nugent and Salmond 1988: 8). The subsequent technical report by Mclean and Maingay (1988) identified 87 sites associated with the early settlement of Russell, all but 25 being located between York Street and the foreshore. There have been more than a dozen archaeological investigations in Russell, associated with the development of the area since the late 1980s. Larger excavations have occurred at the south end of town in the vicinity of Pompallier House and the Department of Conservation Visitors Centre (the Hall House site, the Blomfield House site, James Callaghan's tannery, The Arlidge-Hung House, The Gables). Extensive monitoring and testing occurred during the development of the Russell sewerage and wastewater schemes, and smaller testing and monitoring excavations have occurred at sites along The Strand, Cass Street and Wellington Street over the last 25 years. Artefacts and features have been found during archaeological investigation or monitoring of relatively small scale developments on properties which are already modified, including the installation of a fuel tank at the wharf, foundations for a new house on The Strand, re-piling and associated drainage works at the police station (e.g. Best 1995a and b; Best 2003). In 1993, W. England undertook trench-line monitoring and test excavations next to inspection covers as part of the Russell Sewerage Scheme reticulation (England 1993, 1994) across The Strand, York Street, and areas in between. Small-scale subdivision and residential development on Wellington Street has revealed historic and prehistoric midden and cooking features (Hensley 2003). Monitoring of cable trenches along The Strand and Cass Street has also revealed artefacts and charcoal-rich historic midden twenty centimetres below the asphalt (Maingay 2002; Maingay 2003). Having been involved in more investigations at Russell than any other archaeologist, S. Best has a comprehensive understanding of the archaeological potential of the area. In his concluding comments to the Hall House site excavation he states that "As with all archaeological investigations so far carried out at Russell on the back beach, despite the extremely limited extent...of the test holes, features and artefacts from the towns early past were discovered" (Best & Turner 1997:56). He has noted that because of the good bearing quality of the Russell beach ridge/foredune shingle, extant buildings in Russell tend to lack substantial excavation for piles or concrete slab floors meaning considerable undisturbed archaeological remains are likely to be present in many areas (Best 2000: 25). Rather less has been found behind the beach ridge in the vicinity of the old swamp east of York Street, or around its margins or on the higher ground.

5.1 Previous Archaeological Work

A review of ArchSite, the national database of recorded archaeological sites, managed by the New Zealand Archaeological Association (NZAA) has identified 10 sites within 200m of the subject property, although none are present on or within 30m of the property (Table 1; Appendix B). Primarily these sites are historic buildings which were originally recorded by S. Maingay and M. McLean in 1988 using old land plans such as W. J. Wheelers 1890 plan SO 5602, but without following up with a site visit (McLean and Maingay 1988). Joan Maingay recorded these locations as archaeological sites in 1993 during the FNDC Russell sewerage scheme upgrade. Two projects in the vicinity of Church Street (Johnson & Callaghan 2006; Callaghan 2007) found the subsurface in both the area of a carpark on Church Street

and a test pit near the junction between Church and Chapel Streets to have been modified in the past and now been composed of fill to around 1-1.5m depth.

The nearest such site to the subject property is Q05/1170 "W. Bakers House", recorded from historic survey plan SO5602 (1890) only, about 30m north of the central part of Chapel St. It has not been field checked. The next nearest site is Q05/1172 on the eastern side of Baker St, 30m north of Hazard St. It is also recorded from the historic survey plan and refers to a house "used by natives".

Q05/1171 is at 11 Chapel St. It comprised features associated with the relocated historic cottage (c1890) include a refuse pit on the north east corner of the property with sparse historic artefacts consisting mainly of fragments of china; a range of soakage pits to the rear and front of the cottage (mostly 20th century), a basalt rock and brick chimney base and a range of wooden foundation piles of which the original appeared split puriri and in one occasion a split top of an old wharf pile (Johnson & Callaghan 2014). A range of historic artefacts occurred in fill at the rear north side of the cottage consisting mainly of fragmentary china and glass with more recent mid-20th century items. A further range of late 19th century artefacts was found on the surface in the vicinity of the chimney base including a range of leather shoes and boots, whole and fragmentary glass bottles, ceramics and a tin. These occurred with later material relating to the early to mid-20th century.

Q05/1555 is the original Russell School (Johnson and Callaghan 2021). The 1892 Russell School appears to have been constructed in the area identified as Reynolds Lot on OLC 300 (1863); also identified as Lot 15 on SO 5602 (1890). The playground appears to be the former Lot 14 on the same plan. The original school building appears in historic photographs to be a single room structure, typical of the 1890s school rooms of the time, weatherboard clad with a corrugated iron roof, with a brick chimney situated at the interface of the teachers office/storeroom/entrance porch and the main school room. Between 1911 and 1932, the main school building was extended on the north side and the porch/teacher office/store room was also extended to the north. Additional windows were added at the time. By 1960, the building had uplifted, re-orientated along a west-east axis and partitioned to form three class rooms. By 1981 the gable ends had been added to the building and it is assumed that the verandah and ancillary offices had been added to the original 1892 section of the building at that time as well (Lindauer pers comm). A series of photographs taken between 1911 and 1954 show a school house located in the school grounds, to the south of the school. The school and school-house buildings are both fenced and separated by a grassed area, which is consistent with the 1865 and 1890 land boundaries. The area appears to be a legal road or passage, which has been amalgamated into the school property. Note: this site record is for the site of the school. The building itself has been relocated, as noted, and has been extensively renovated. There are potential subsurface remains associated with the site of the original 1892 building (such as the remains of the chimney base, building foundations) that may still be in-situ.

Table 1. Recorded archaeological sites within 200m of subject property.

Site Number	NZTM Coordinates	Туре	Description
Q05/1289	E 2612850 N 6659220	Historic Midden	1850s rubbish pit, 1870/80s rubbish pit, early retaining wall.
Q05/1164	E 2612900 N 6659300	Historic House	Masefield's residence, as shown on W. J. Wheelers plan: SO 5602 (1890). West side of York Street; 20 m north of Cass Street, Russell.
Q05/1166	E 2612900 N 6659200	Historic Workshop	Prior's workshop, recorded by Wheeler, 1890, SO 5602. On west side of York Street, about 30m south of Cass Street.
Q05/1170	E 2613000 N 6659300	Historic House	W. Baker's house recorded by Wheeler on SO 5602. On east side of Church Street, about 30m north of Chapel Street.
Q05/1171	E 2613000 N 6659200	Historic Houses	Historic house and historic house foundations and historic midden. 12 Chapel Street.
Q05/1172	E 2613100 N 6659100	Historic House	Historic Māori house on SO 5602.
Q05/1184	E 2612900 N 66591300	Historic Building	Site of Bank of New Zealand on SO 5602.
Q05/1287	E 2613040 N 6659100	Artefacts	Historic artefacts related to the Christ Church.
Q05/1390	E 2613152 N 6659057	Artefacts	Possible historic artefacts on Robertson and Bakers Streets.
Q05/1555	E 1702235 N 6097325	Historic Building	Original 1892 Russell School.

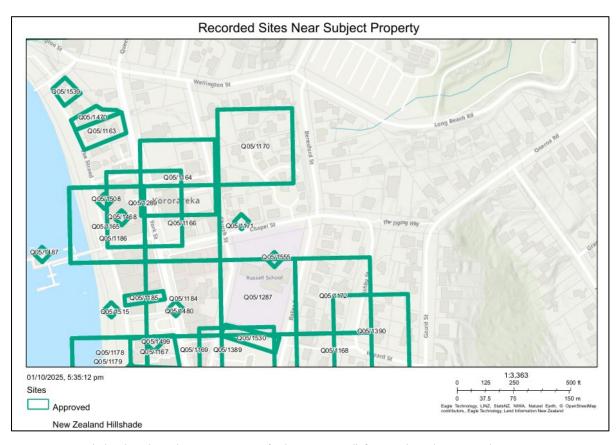


Figure 15. Recorded archaeological sites near 5 Beresford Street, Russell, from Archsite (NZAA 2025).

6 Other Heritage Sites and Features

The property is located on the edge of the current Far North District Council's (FNDC) Heritage Precinct for Kororāreka Russell (Figure 16) but is included in Heritage Area D of the proposed District Plan which "reflects the original street layout and subdivision patterns and contains archaeological sites that indicate a relatively high sensitivity and risk of revealing archaeological deposits relating to earlier Māori and European occupation" (Figure 17). Several historic buildings in Russell are listed on the NZ Heritage List Rārangi Kōrero with the closest to the subject property being King House, which is positioned nearby on the corners of Beresford and Longbeach Road and is a Historic Place Category II listed building (No. 410). Slightly to the south, the Christ Church and Church Yard (No. 50) and Russell Primary School (No. 51) are also listed on Rārangi Kōrero as Category I and II historic buildings respectively.

7 Site Inspection

Georgia Kerby of Geometria visited the subject property on 8 October 2025 and carried out a site survey (Figures 18-21). The grassed central area of garden was generally flat suggesting previous modification, while a slightly depressed circular area at the south east portion of the garden suggested a circular garden or structure had been located there in the past. The grass was edged with barked planted soil garden beds and these were inspected for shell or other archaeological material. No archaeological material was visible on the surface on the lawn, its edges, or the surrounding gardens. The majority of the grassed area was investigated with a soil probe, with particular focus on the areas to be altered by the proposed development (Figure 21). Gritty or gravelly substrate with occasional lumps of what were inferred to be broken up concrete was felt by soil probe in the southern third to half of the grassed area (Figure 21). Two small test pits were dug and revealed the profile of loamy topsoil above a c. 150mm layer of disperse water-worn gravel including concrete fragments above a distinct horizontal boundary with buff coloured weathered greywacke clay (Table 2; Figures 19-20).

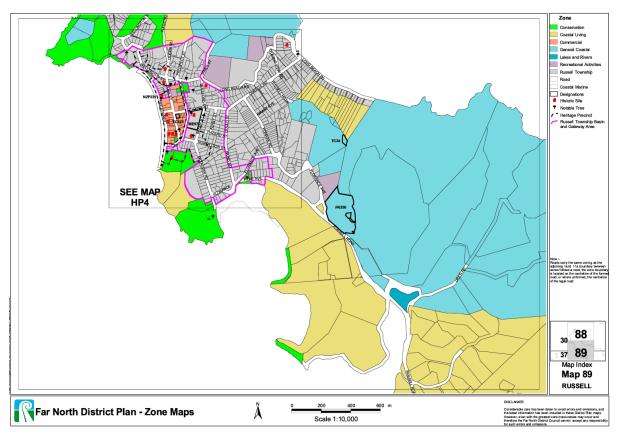


Figure 16. Current FNDC Plan for Russell. Dashed black line shows Heritage Precinct while purple line shows Township Area.

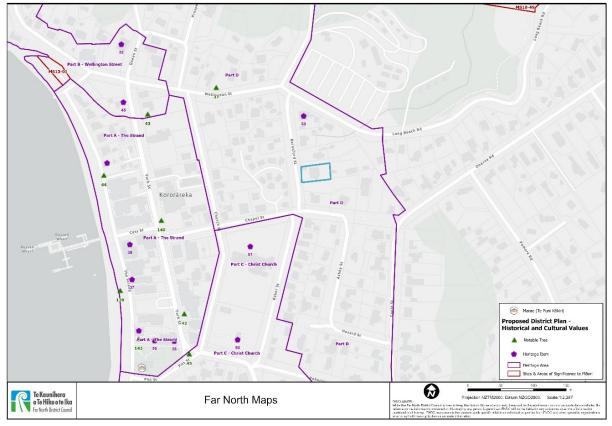


Figure 17. Proposed FNDC Plan for Russell with Heritage Areas outlined in dark purple. Subject property outlined in blue.

Table 2. Stratigraphy of test pits.

Test Pit 1	Test Pit 2	
0-150mm Dark brown loamy topsoil	0-100mm Dark brown loamy topsoil	
150-190mm Partial concrete- light grey with pebbles inset and gravel around	100-250mm 50% pebbly gravel in 50% dark brown loam	
>190mm Buff coloured clay	>190mm Buff coloured clay	



Figure 18. East (back) of house at 5 Beresford Street with two test pits.





Figure 19. Test pit 1.

Figure 20. Test pit 2.

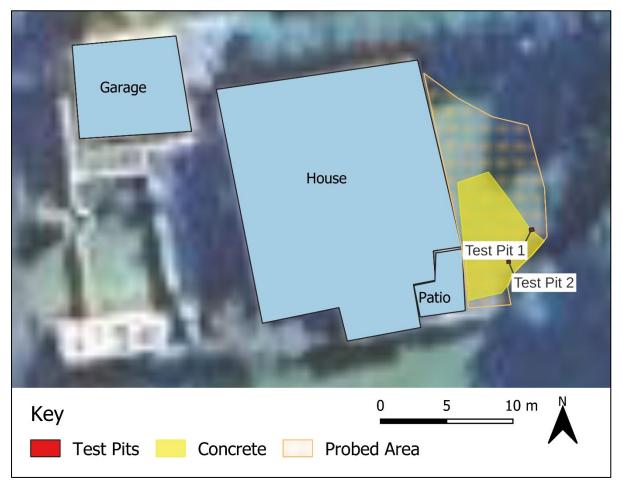


Figure 21. Location of investigated areas from the site visit.

8 Assessment of Archaeological and Other Values

There were no archaeological sites or remains on the subject property to assess. The house itself is historical but is not original to the property and was relocated onto the site sometime between 1953 and 1971.

9 Assessment of Effects and Recommendations

No archaeological remains are expected to be affected by the proposed house addition and pool. There are no archaeological sites, heritage or listed sites present on the property. Both historic research and on site investigations have shown that the back (west) garden of the house at 5 Beresford Street has been modified in the past, probably including some levelling of the slope and laying of gravel and concrete, for the water tank or other small structure visible in the 1971 and 1977 aerial photographs.

No archaeological remains were identified in the footprint of the proposed works by soil probe and two test pits, however the subsoil of the western edge of the proposed works footprint was covered by garden beds and were not investigated. The proposed works will not require an authority from Heritage New Zealand Pouhere Taonga, but there is potential for archaeological materials to remain in that area, although unlikely given the level of past modification and lack of historical structures on the site. Therefore, if other archaeological remains or buried cultural deposits are encountered on the property during cutting of the clay bank, construction or in the course of other ground disturbing activity on the property like trenching for services, such as layers of shell midden, charcoal-rich or burned soils, oven stones, artefacts like worked stone, bottles, ceramics, iron or building materials, or other unusual cuts/fills etc, onsite agents should cease work within 10m of the suspected feature and Heritage New Zealand and Geometria should be contacted for advice on how to proceed.

10 Conclusions

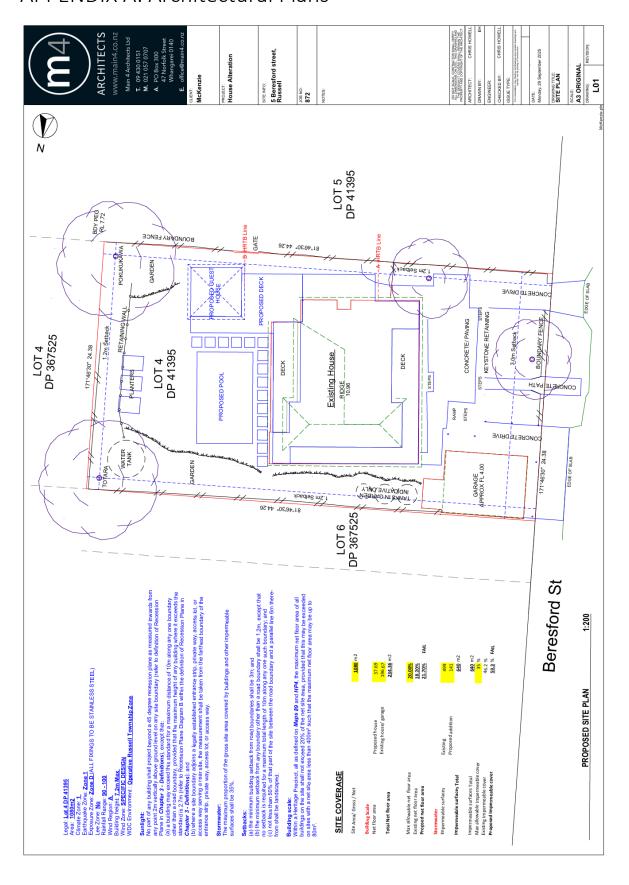
Geometria was engaged by D. & T. McKenzie to assess possible archaeological effects of a planned addition at their property Lot 4 DP 413955, Beresford Street, Russell. The proposal includes a deck extension and guest house addition plus a pool at the rear of the existing building that could potentially modify archaeological remains through shallow earthworks for the extension (max. 400mm) and deeper excavation required for the pool. No archaeological sites are present on the property and no archaeological remains were identified in the area of proposed works through historic research and minor on site investigation and an authority is not required from Heritage New Zealand Pouhere Taonga. However, owing to the significant historical activity in Russell/Kororāreka an accidental discovery protocol has been recommended.

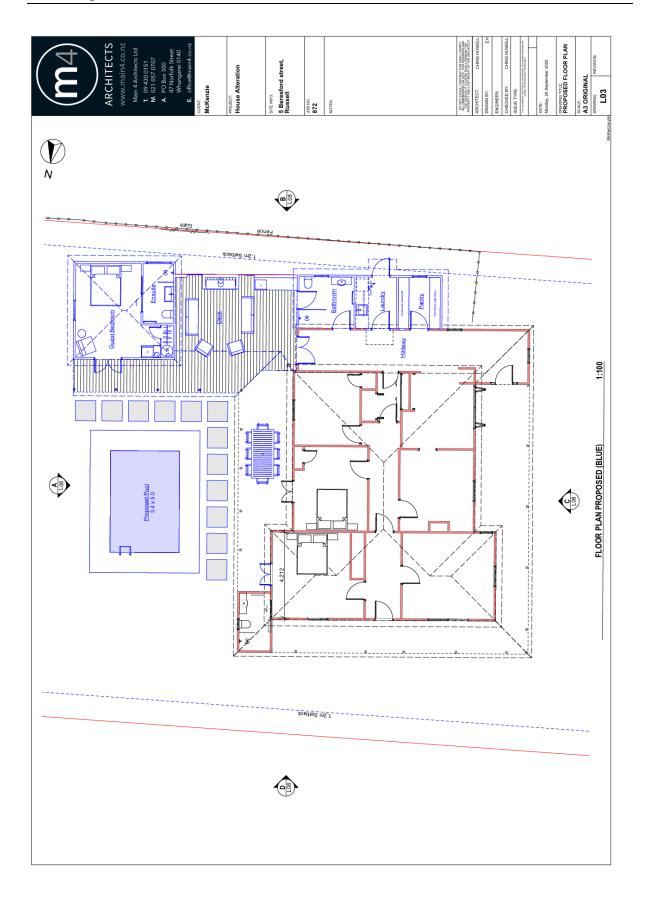
References

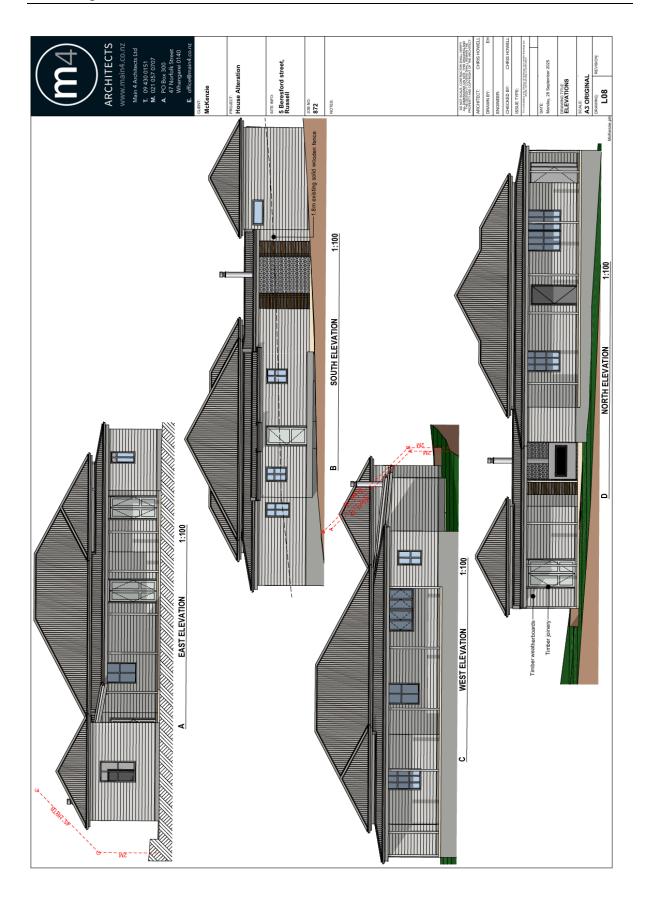
- Berghan, P., 2006. Northland Block Research Narratives VOL. II OLD LAND CLAIMS. Unpublished report for the Crown Forestry Rental Trust. Walhgan Partners, Lower Hutt.
- Best, S. 1995a. Installation of the New Diesel Fuel Tank, The Strand, Russell, by Caltex Oil (NZ) Limited: Archaeological Investigation of Site (Q05 1168). Report for Base Associates.
- Best, S. 1995b. The Arlidge/Hung House Site: Archaeological Investigation of Part Lot 9 Section 9 Russell Township (Kororareka): Interim Report. Report for J.T. Hung and P.G. Arlidge-Hung.
- Best, S. 2000. 47 The Strand, Russell (The Phillips' House): Archaeological Investigation. Unpublished Client Report.
- Best, S. 2003. The Russell Police Station Re-Piling and Drainage Work: Archaeological Site Testing. Report for the New Zealand Police.
- Best, S. and M. Turner, 1997. The Hall House Site, Russell (Q05/1200): Archaeological Investigations. Report for the Department of Conservation Northland Conservancy.
- Callaghan, E. 2007. Archaeological Survey and Assessment of a Proposed Car-park and Two Footpaths in Russell, Bay of Islands. Unpublished Client Report. Auckland: Northern Archaeological Research Ltd.
- Deeds Index 1E County of Bedford. Archives New Zealand, Wellington.
- England, W. 1993. Preliminary Report of Archaeological Investigations in Connection with the Russell Sewerage Scheme. Preliminary report for the NZ Historic Places Trust.
- England, W.1994. Archaeological Investigations in Connection with the Russell Sewerage Scheme.

 Department of Conservation Northland Conservancy Historical Series No. 3.
- Hensley, V. 2003. Archaeological Monitoring Report: 33 Wellington Street, Russell. Report for G.J. Whiteman Trust, Kamo.
- Johnson, L. and E. Callaghan. 2006. Archaeological Survey and Assessment of the Proposed Top Energy Paihia-Russell High Voltage Reticulation Upgrade, Bay of Islands. Unpublished Client Report. Auckland: Northern Archaeological Research.
- Johnson, L. and E. Callaghan, 2014. Archaeological Monitoring of the Robinson Residential Development, 12 Chapel Street, Russell, Bay of Islands (Q05/1171, NZHPT 2014/242).
- Johnson, L. and E. Callaghan, 2021. Archaeological Survey and Assessment of the proposed Classroom Extension and stormwater pipeline, Russell School. Unpublished Report. Auckland: Northern Archaeological Research Ltd.
- Maingay, J. 2002. Archaeological Monitoring of a Cable Trench on the Strand, Russell. Report for the NZ Historic Places Trust.
- Maingay, J. 2003. Archaeological Monitoring of a Drainage Trench at Cass Street, Russell. Report for the NZ Historic Places Trust
- McLean, M. and S. Maingay. 1988. Preliminary Notes on Archaeological Features of Early Pioneer Settlement at Russell, in the Bay of Islands. Unpublished Report Auckland: Department of Conservation.
- Nugent, D. and J. Salmond, 1988. Russell Planning Review. Report for the Department of Conservation, NZ Historic Places Trust.

APPENDIX A: Architectural Plans







APPENDIX B: Site Record Forms

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION	NZAA METRIC SITE NUMBER 005/1170
SITE RECORD FORM (NZMS260)	DATE VISITED (Recorded 5.3.93
NZMS 260 map number Q05	SITE TYPE Historic house
NZMS 260 map name NZMS 260 map edition. Ed. 1	SITE NAME: MAORI OTHER
Grid References Easting 2,6 1,3 0 0	0, Northing 6,6 5 9 3 0,0
 Aids to relocation of site (attach a sketch map) 	
Russell; on east side of Church Street, abo (No. 69 on map with QO5/1161)	out 30m north of Chapel Street.
 State of site and possible future damage Not visible, subsurface remains may be modified. 	fied by Russell Sewerage Scheme.
 Description of site (Supply full details, history, local environme include a summary here) 	ent, references, sketches, etc. If extra sheets are attached,
W. Baker's house recorded by Wheeler on SO	5602
SCIZ MAP Q05/1161	
4. Owner ? Tenar	nt/Manager
Address Addre	ess
5. Nature of information (hearsay, brief or extended visit, etc.)	50.5500
Photographs (reference numbers, and where they are held)	50 - 5602
Aerial photographs (reference numbers, and clarity of site)	
6. Reported by Joan Maingay Fileke	more Markey &
Address Dept. of Conservation Date	MANGALES US 167
P.O.Box 842 Whangarei	47143
7. Key words Historic house site	
8. New Zealand Register of Archaeological Sites (for office use)	
NZHPT Site Field Code	
Latitude S Longitude E	
E 3 Type of site D C Pro	eyent condition and future danger of destruction
A L Local environment today Se	curity code
_ Land classification ' M A Lo	ocal body

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION SITE RECORD FORM (NZMS260)	NZAA METRIC SITE NUMBER Q05/1164 DATE VISITED (Recorded) 7.3.93 SITE TYPE Historic house							
NZMS 260 map number QO5 NZMS 260 map name Bay of Islands NZMS 260 map edition Ed.1 SITE NAME: MAORI OTHER								
Grid References Easting 2, 6 1 2 9 0 6	Northing 6,659300							
Aids to relocation of site (attach a sketch map)								
Russell; west side of York Street, 20m nor	th of Cass Street.							
(No. 29 on map with Q05/1161)								
State of site and possible future damage	.0.0							
Not visible; subsurface remains may be mod	ified by Russell Sewerage Scheme.							
 Description of site (Supply full details, history, local environme include a summary here) 	ent, references, sketches, etc. If extra sheets are attached,							
Masefield's residence, recorded by Wheeler	, 1890, SO 5602.							
SEE MAP QUE/1161								
	1							
	1							
4. Owner ? Tenar Address Addre	nt/Manager							
5. Nature of information (hearsay, brief or extended visit, etc.)	S0 5602							
Photographs (reference numbers, and where they are held)								
Aerial photographs (reference numbers, and clarity of site)								
6. Reported by Joan Maingay Fileke Dept.of Conservation Date P.O.Box 842 Whangarei	4/5/93							
V Manuscards								
Historic house site								
New Zealand Register of Archaeological Sites (for office use). NZHPT Site Field Code								
Laritude S Longitude E								
1010	esent condition and future danger of destruction							
H C	ourity code cal body							
MIN CO	car dody							

NEW ZEALAND ARCHAEOLOGICAL ASSOCIATION	NZAA METRIC SITE NUMBER Q05/1166											
SITE RECORD FORM (NZMS 260)	DATE VISITED (Recorded) 7.3.93											
NZMS 260 map number QO5 NZMS 260 map name Bay of Islands NZMS 260 map edition Ed.1	SITE TYPE Historic workshop SITE NAME: MAORI OTHER											
Grid References Easting 2,6 1 2 9 0,	O. Northing 6,6 5 9 2 0,0											
Aids to relocation of site (attach a sketch map)												
Russell; on west side of York Stree Street.	t, about 30m south of Cass											
(No. 37 on map with Q05/1161)												
State of site and possible future damage												
Not visible; subsurface remains may Scheme.	be modified by Russell Sewerage											
 Description of site (Supply full details history, local environm include a summary here) 	ent, references, sketches, etc. If extra sheets are attached,											
Prior's workshop, recorded by Wheel	er, 1890, SO 5602											
SEE MAD 1205/1161	1											
4. Owner 2 Tena	nt/Manager											
4. Owner 7 Tena Address Address												
,												
Address Addr	ess											
Address Addres												
Address Addr 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held)	ess											
Address Addres	ess											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site)	SO 5602											
Address Addr 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Filek	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Filek Address Dept. of Conservation Date P.O.Box 842	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Filek Address Dept. of Conservation Date P.O.Box 842 Whangarei	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Files, Address Dept. of Conservation P.O. Box 842 Whangarei	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Filek Address Dept.of Conservation Date P.O.Box 842 Whangarei 7. Key words Historic workshop site	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Filek Address Dept. of Conservation Date P.O.Box 842 Whangarei	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Files, Address Dept.of Conservation P.O.Box 842 Whangarei 7. Key words Historic workshop site 8. New Zealand Register of Archaeological Sites (for office use)	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Files, Address Dept.of Conservation P.O.Box 842 Whangarei 7. Key words Historic workshop site 8. New Zealand Register of Archaeological Sites (for office use)	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Filek Address Dept. of Conservation P.O. Box 842 Whangarei 7. Key words Historic workshop site 8. New Zealand Register of Archaeological Sites (for office use) NZHPT Site Field Code Longitude E	SO 5602											
Address Address 5. Nature of information (hearsay, brief or extended visit, etc.) Photographs (reference numbers, and where they are held) Aerial photographs (reference numbers, and clarity of site) 6. Reported by Joan Maingay Files, Address Dept. of Conservation P.O. Box 842 Whangarei 7. Key words Historic workshop site 8. New Zealand Register of Archaeological Sites (for office use) NZHPT Site Field Code Latitude S Longitude E	150 5602 16090 Albert 5/1/93											

Attachment D Stormwater Mitigation Report prepared by Wilton Joubert Limited



Wilton Joubert Limited 09 527 0196 PO BOX 11-381 Ellerslie Auckland 1524

SITE 5 Beresford Street, Russell

LEGAL DESCRIPTION Lot 4 DP 41395

PROJECT Proposed Guest House & Swimming Pool

CLIENT DR & TA McKenzie Family Trust

REFERENCE NO. 143693

DOCUMENT Stormwater Mitigation Report

STATUS/REVISION No. 01

DATE OF ISSUE 1st December 2025

Report Prepared For	Email
DR & TA McKenzie Family Trust	tracey@mckenziecontracting.co.nz

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



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 4 DP 41395					
Site Area:	1,079m²					
Development Type: Proposed Guest House & Pool						
Development Proposals Supplied: Plan Set by Main 4 Architects Ltd (Ref No: 872, dated: 03.11.202						
District Plan Zone: Russell Township Zone						
Permitted Activity Coverage:	<u>35%</u>					
Impermeable Coverage:	Total Existing Impermeable Areas: 507.8m² Total Impermeable Areas Post-Development: 534.61m² (49.5%)					
Activity Status: Restricted Activity						
Roof Attenuation:	Attenuation is to be provided in accordance with the requirements outlined in Section 5 via the existing dual-purpose rainwater tank. Existing Tank – 1 x 25,000 litre Rainwater Tanks (or similar) Dimensions – 3600mmØ x 2600mm high (or greater) 50% AEP & 20% AEP Control Orifice – 44mmØ orifice; located >420mm below the overflow outlet 1% AEP Control Orifice – 65mmØ orifice; located 290mm above the 50% AEP & 20% AEP Control Orifice Overflow – 100mmØ at the top of the tank					
Point of Discharge: To existing stormwater connection if suitable. Alternatic connection to the street catchpit is proposed.						



2. SCOPE OF WORK

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

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

• Plan Set by Main 4 Architects Ltd, including site plan, floor plan and elevations (Ref No: 872, dated: 03.11.2025)

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 Beresford Street, on the northeastern outskirts of the Russell central business district:

5 Beresford Street, Russell, legally described as Lot 4 DP 41395.



Figure 1: Aerial snip from FNDC Maps showing site boundaries (cyan), public wastewater (red), public potable water (blue), public stormwater (green) and 1m contours (yellow)

The surface area of the rectangular shaped property is 1,079m² and can be accessed via two short, paved driveway entrances at the northwestern and southwestern boundary corners.

Existing built development is confined to the approximate western half of the site, where an existing dwelling is situated, along with a garage at the northwestern boundary corner. Aside from the eastern side, the dwelling and garage are generally bound by paving and maintained gardens. The approximate eastern half of the site is covered in lawn, with trees and bush planted across the upslope eastern boundary.

Topographically speaking, aside from the eastern boundary perimeter, the site is near level to gently inclined, falling to the west towards Beresford Road at gradients averaging less than 5°.

The Far North District Council (FNDC) GIS Water Services Map shows the presence of public wastewater and potable water lines on the eastern side of Beresford Street which are assumed to provide the subject site with connections. A public open drain runs along the western side of Beresford Street.



4. DEVELOPMENT PROPOSALS

The proposed works include constructing a guest house, pool and deck on-site as well as removing the existing carport area, as depicted in the plan set by Main 4 Architects Ltd (Ref No: 872, dated: 03.11.2025).

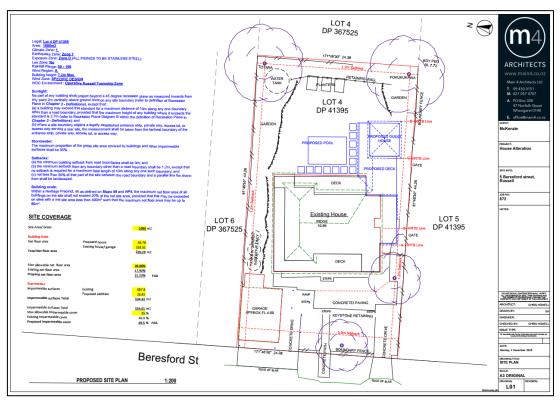


Figure 2: Snip of Plan Set by Main 4 Architects Ltd (Ref No: 872, dated: 03.11.2025)

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

Total Existing Impermeable Areas = 507.8m²

Total Impermeable Areas Post-Development = 534.61m² (49.5%)

District Plan Rules

The site is zoned Russell Township Zone. The following rules apply under the FNDC District Plan:

10.9.5.1.7 – **Permitted Activities – Stormwater Management** - The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 35%.

10.9.5.2.9 – **Restricted Discretionary Activities – Stormwater Management** - The maximum proportion site area covered by buildings and other impermeable surfaces shall be 40%.

The total proposed impermeable area exceeds 40% and does not comply with Permitted Activity Rule (10.9.5.1.7) nor Restricted Discretionary Activity (10.9.5.2.9). Therefore, the proposal is considered a <u>Discretionary Activity</u>. 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.

In accordance with Table 4-1 of the Engineering Standards, Flow Attenuation and Flood Control attenuation will be provided for the proposed impermeable areas in excess of the permitted activity threshold. The Type IA storm profile was utilised for Flow and Flood Control calculations in accordance with TR-55. HydroCAD® software has been utilised in design for a 50% AEP rainfall value of 127mm with a 24-hour duration, a 20% AEP rainfall value of 167mm with a 24-hour duration and a 1% AEP rainfall value of 299mm with a 24-hour duration utilised for calculations. 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:

Stormwater Mitigation - Roof

A proprietary guttering system is required to collect roof runoff from the proposed guest house roof area and direct runoff to the existing potable water tank. 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 existing / proposed roof areas.

The upper section of the potable water tank is to act as a detention volume to achieve Flow Attenuation and Flood Control for the proposed impermeable areas in excess of the permitted activity level.

As per the attached design calculations, the existing tank's overflow should be fitted with flow attenuation outlets as specified below:

Existing Tank 1 x 25,000 litre Rainwater Tank

Tank dimensions 3600mm∅ (or greater) x 2600mm high (or greater)

Outlet Orifice (50% AEP & 20% AEP Control)

44mm diameter orifice; located <u>>420mm below the overflow</u> outlet

- 195mm water elevation (50% AEP Control)
- 2.0m³ storage (50% AEP Control)
- 286mm water elevation (20% AEP Control)
- 2.9m³ storage (20% AEP Control)

Outlet Orifice (1% AEP Control) 65mm diameter orifice; located 290mm above the 50% & 20%

AEP Control Orifice

- 414mm water elevation
- 4.2m³ storage

Overflow Outlet 100mm diameter; located at the top of the tank



Lot 4 DP 41395 Page 6 of 9 Ref: 143693 5 Beresford Street 1st December 2025

Discharge from the existing potable water / detention tank must continue to be transported via sealed pipes to the existing outlet in the catchpit located on the eastern side of Beresford Street. Refer to the appended Site Plan (143693-C200), Tank Detail (143693-C201) and calculation set for clarification.

Stormwater Mitigation - Pool Overflows

To prevent contamination of runoff, pool overflows must not be directed to any part of the stormwater management system. Pool overflows are to be managed by a separate system designed by a suitably qualified professional.

7. STORMWATER RUNOFF SUMMARY

Refer to the appended HydroCAD Calculation output.

Maximum Permitted Threshold Peak Flows - 50% AEP, 20% AEP & 1% AEP Storm Events + CCF

Surface	Area	Runoff CN	50% AEP Peak Flow Rate	20% AEP Peak Flow Rate	1% AEP Peak Flow Rate	
Maximum Permitted Impermeable Area	377.7 m²	98	E 910/a	9 740/2	19.640/2	
Remaining Greenfields	701.3 m²	74	5.81ℓ/s	8.74ℓ/s	18.64 ℓ/ s	

Post-Development Scenario – 50% AEP, 20% AEP & 1% AEP Storm Events + CCF

Surface	Area	Runoff CN	50% AEP Peak Flow Rate	20% AEP Peak Flow Rate	1% AEP Peak Flow Rate
Existing Dwelling & Proposed Guest House directed to potable water tank fitted with attenuation outlets	272.4 m²	98	5.79ℓ/s	8.17 % /s	18.32ℓ/s
Existing Impermeable Areas not directed to tank	262.2 m²	98			
Remaining Greenfields	544.4 m²	74			

Given the design parameters, Flow Attenuation and Flood Control will be achieved for the proposed impermeable areas in excess of the permitted activity threshold.

8. DISTRICT PLAN ASSESSMENT

As the proposed development is not compliant with Permitted Activity Rule 10.9.5.1.7, nor Restricted Discretionary Activity Rule 10.9.5.2.9, it is therefore regarded as a <u>Discretionary Activity</u>.

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

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



(a) the extent to which building site coverage and	Impermeable surfaces resulting from the development
Impermeable Surfaces contribute to total	increase site impermeability by 26.81m ² . Through tank
catchment impermeability and the provisions of	attenuation runoff resulting from the proposed
any catchment or drainage plan for that	development is to be attenuated back to permitted
catchment;	flows for the 50%, 20% & 1% AEP storm events,
	adjusted for climate change.
(b) the extent to which Low Impact Design	Through tank attenuation runoff resulting from the
principles have been used to reduce site	existing / proposed development is to be attenuated
impermeability;	back to permitted flows for the 50%, 20% & 1% AEP
,	storm events, adjusted for climate change.
(c) any cumulative effects on total catchment	Impervious coverage will increase by 26.81m ² .
impermeability;	Impervious severage viii instease sy zaiozini :
(d) the extent to which building site coverage and	Runoff resulting from the proposed impermeable areas
Impermeable Surfaces will alter the natural	is to be collected and directed to stormwater
contour or drainage patterns of the site or disturb	management devices and then to the available
the ground and alter its ability to absorb water;	stormwater connection via sealed pipes. This should
	not worsen the ability of natural ground to absorb
	water in normal conditions.
(e) the physical qualities of the soil type;	Silty / Silty clay soils – moderate drainage
(f) any adverse effects on the life supporting	Runoff resulting from the existing / proposed
capacity of soils;	impermeable areas is to be collected and directed to
	stormwater management devices and then to the
	available stormwater connection via sealed pipes,
	mitigating the potential for contamination of
	surrounding soils and harm to the life supporting
	capacity of soils.
(g) the availability of land for the disposal of	Runoff resulting from the proposed impermeable areas
effluent and stormwater on the site without	is to be collected and directed to stormwater
adverse effects on the water quantity and water	management devices and then to the available
quality of water bodies (including groundwater	stormwater connection via sealed pipes, mitigating the
and aquifers) or on adjacent sites;	potential for contamination of surrounding soils and
	harm to the life supporting capacity of soils.
	Public wastewater connection is available to the site.
(h) the extent to which paved, Impermeable	The existing driveway is necessary to provide access to
Surfaces are necessary for the proposed activity;	the existing dwelling and is not considered excessive.
	The proposed pool is not considered excessive.
(i) the extent to which land scaping and	Existing vegetation and any plantings introduced by the
vegetation may reduce adverse effects of run-off;	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.
(j) any recognised standards promulgated by	Not applicable.
industry groups;	
k) the means and effectiveness of mitigating	Through tank attenuation runoff resulting from the
stormwater runoff to that expected by permitted	proposed development is to be attenuated back to
activity threshold;	permitted flows for the 50%, 20% & 1% AEP storm
	events, adjusted for climate change.
(I) the extent to which the proposal has	Rainfall data was obtained from HIRDS and increased
considered and provided for climate change;	by 20% to account for climate change.
(m) the extent to which stormwater detention	Through tank attenuation runoff resulting from the
ponds and other engineering solutions are used	existing / proposed development is to be attenuated
to mitigate any adverse effects.	



back to permitted flows for the 50%, 20% & 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 (143693-C200 & 143693-C201).

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. 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. The secondary stormwater system, Overland Flow Paths (OLFP), geotechnical requirements, vehicular access and the consideration of road/street water flooding is all assumed to be undertaken by a third party.

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.

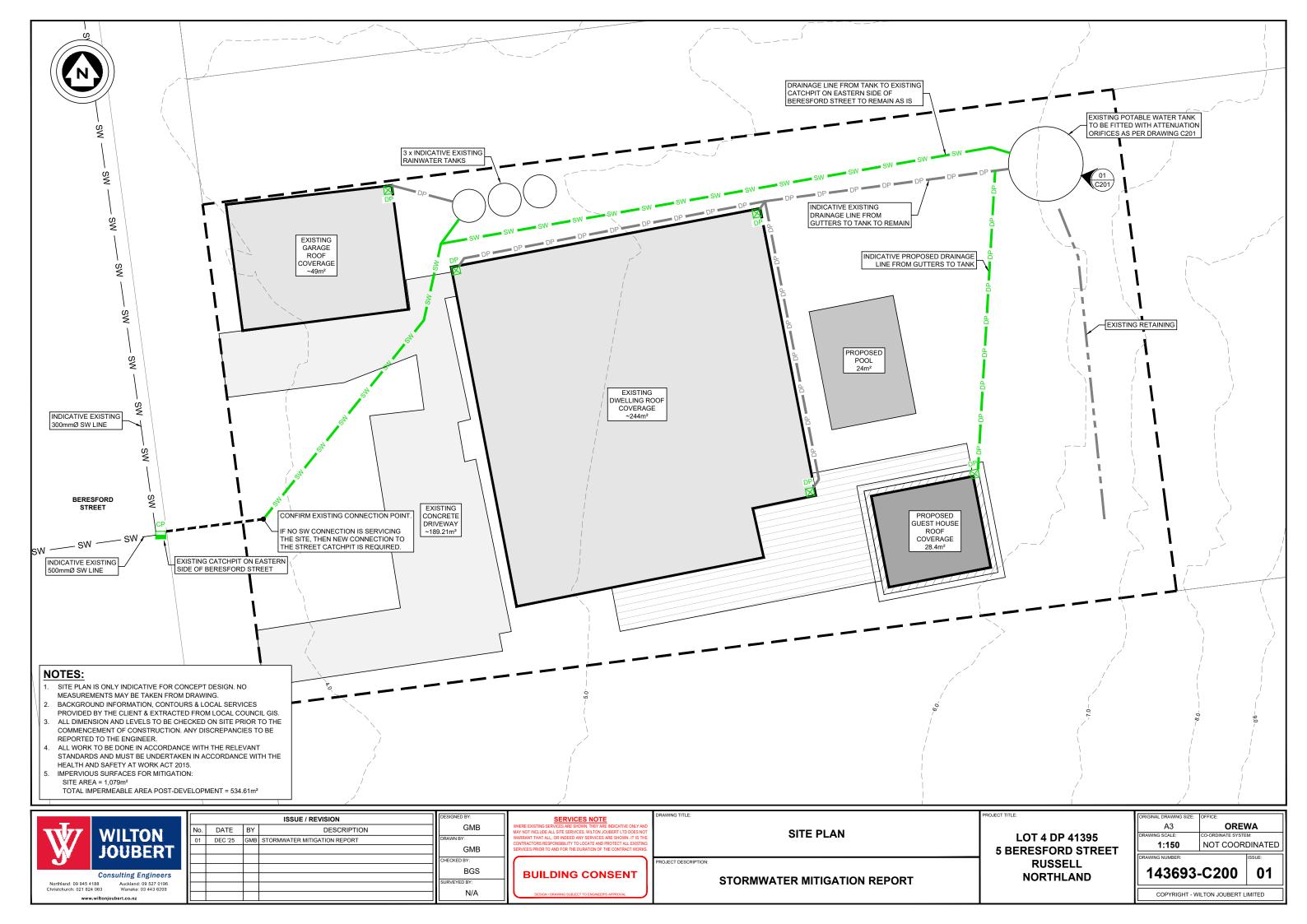
Wilton Joubert Ltd.

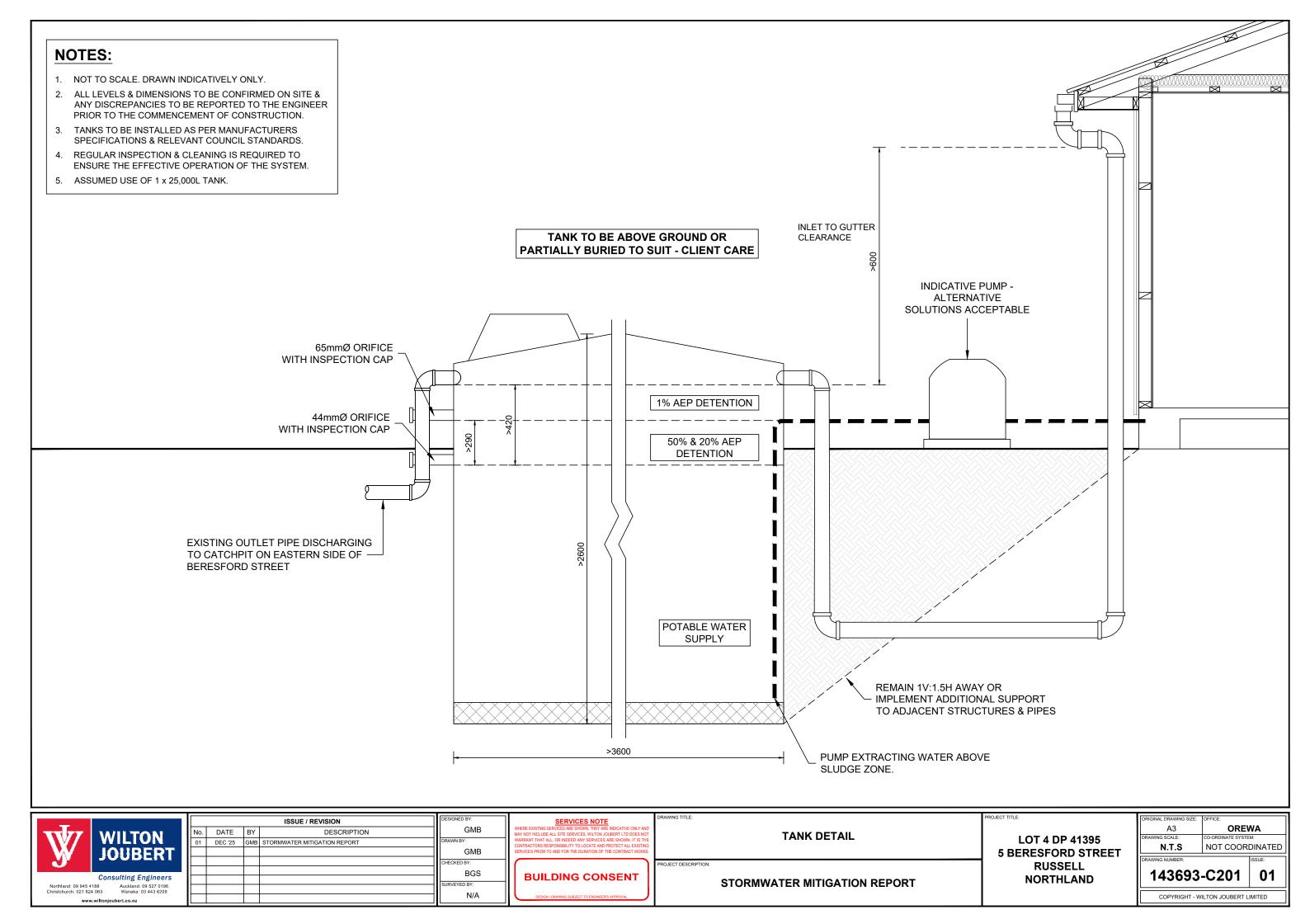
Gustavo Brant Civil Engineer BE(Hons)

REPORT ATTACHMENTS

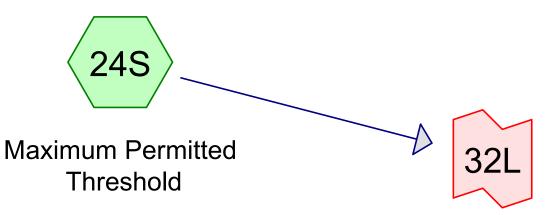
- Site Plan C200 (1 sheet)
- Tank Detail C201 (1 sheet)
- Calculation Set







Permitted Activity Peak Flows



Maximum Permitted Flows









143693

Prepared by Wilton Joubert Limited

Printed 30/11/2025

HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

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=1,078.9 m² 35.00% Impervious Runoff Depth>240 mm

Tc=10.0 min CN=82 Runoff=18.64 L/s 259.4 m³

Link 32L: Maximum Permitted Flows Inflow=18.64 L/s 259.4 m³

Primary=18.64 L/s 259.4 m³

HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 3

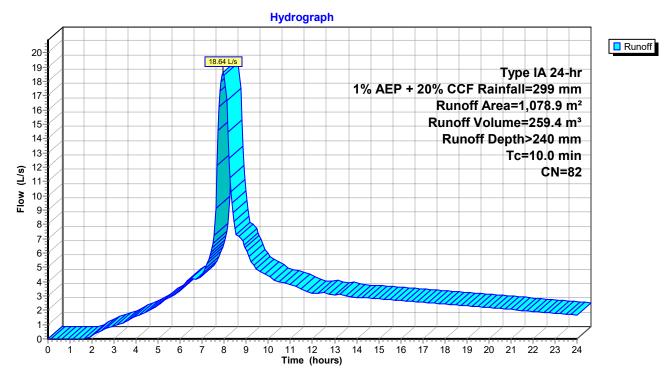
Summary for Subcatchment 24S: Maximum Permitted Threshold

Runoff = 18.64 L/s @ 7.96 hrs, Volume= 259.4 m³, Depth> 240 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=299 mm

A	rea (m²)	CN	Descrip	Description							
	701.3	74	>75% (>75% Grass cover, Good, HSG C							
	377.6	98	Roofs,	Roofs, HSG C							
	1,078.9	82	Weighte	ed Av	/erage						
	701.3		65.00%	65.00% Pervious Area							
	377.6		35.00%	Impe	ervious Are	а					
_		01			0 ''	D					
Tc	Length	Slo	•	ocity	Capacity	Description					
(min)	(meters)	(m/	m) (m/s	sec)	(m³/s)						
10.0		•				Direct Entry,					

Subcatchment 24S: Maximum Permitted Threshold



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 4

Summary for Link 32L: Maximum Permitted Flows

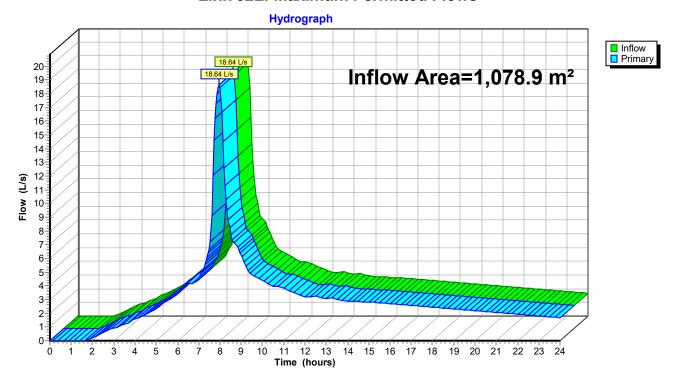
Inflow Area = 1,078.9 m², 35.00% Impervious, Inflow Depth > 240 mm for 1% AEP + 20% CCF event

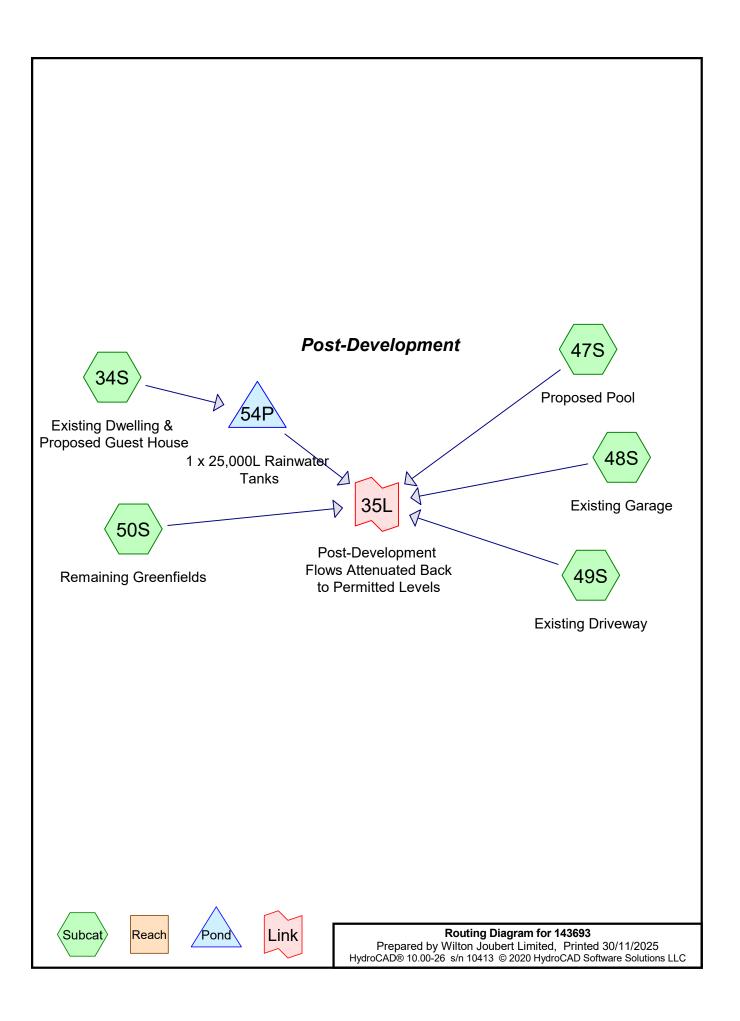
Inflow = 18.64 L/s @ 7.96 hrs, Volume= 259.4 m^3

Primary = 18.64 L/s @ 7.96 hrs, Volume= 259.4 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 Flows





HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

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: Existing Dwelling Runoff Area=272.4 m² 100.00% Impervious Runoff Depth>292 mm

Tc=10.0 min CN=98 Runoff=5.37 L/s 79.6 m³

Subcatchment 47S: Proposed Pool Runoff Area=24.0 m² 100.00% Impervious Runoff Depth>292 mm

Tc=10.0 min CN=98 Runoff=0.47 L/s 7.0 m³

Subcatchment 48S: Existing Garage Runoff Area=49.0 m² 100.00% Impervious Runoff Depth>292 mm

Tc=10.0 min CN=98 Runoff=0.97 L/s 14.3 m³

Subcatchment 49S: Existing Driveway Runoff Area=189.2 m² 100.00% Impervious Runoff Depth>292 mm

Tc=10.0 min CN=98 Runoff=3.73 L/s 55.3 m³

Subcatchment 50S: Remaining Runoff Area=544.4 m² 0.00% Impervious Runoff Depth>213 mm

Tc=10.0 min CN=74 Runoff=8.25 L/s 115.8 m³

Pond 54P: 1 x 25,000L Rainwater Tanks Peak Elev=0.414 m Storage=4.2 m³ Inflow=5.37 L/s 79.6 m³

Outflow=5.05 L/s 79.2 m³

Link 35L: Post-Development Flows Attenuated Back to Permitted Levels Inflow=18.32 L/s 271.6 m³

Primary=18.32 L/s 271.6 m³

HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 3

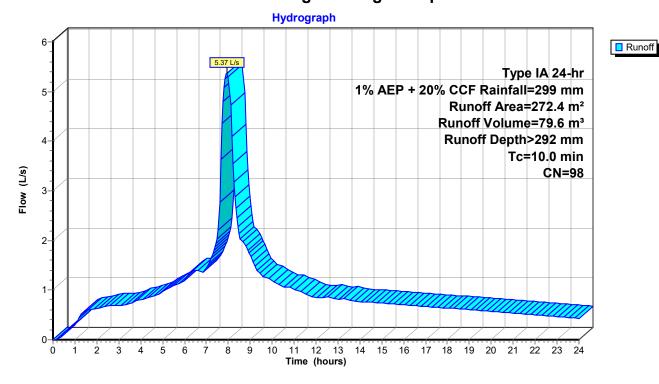
Summary for Subcatchment 34S: Existing Dwelling & Proposed Guest House

Runoff = 5.37 L/s @ 7.94 hrs, Volume= 79.6 m³, Depth> 292 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=299 mm

_	Ar	ea (m²)	CN	De	escription		
		272.4	98	Ro	ofs, HSG	С	
		272.4		10	0.00% lm	pervious Ar	ea
	Tc (min)	Length (meters)	Slo _l (m/r		Velocity (m/sec)	Capacity (m³/s)	Description
_	10.0						Direct Entry,

Subcatchment 34S: Existing Dwelling & Proposed Guest House



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 4

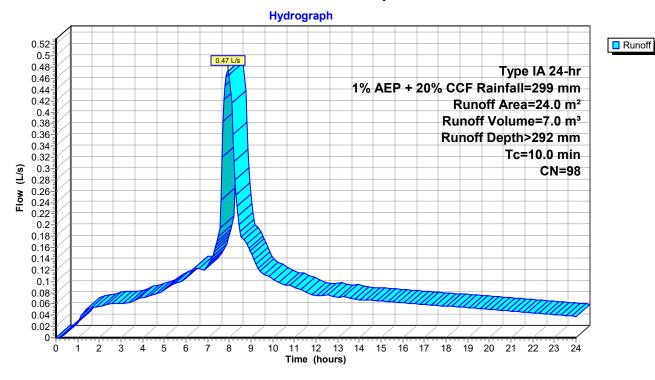
Summary for Subcatchment 47S: Proposed Pool

Runoff = 0.47 L/s @ 7.94 hrs, Volume= 7.0 m³, Depth> 292 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=299 mm

_	Aı	rea (m²)	CN	De	escription		
		24.0	98	R	oofs, HSG	С	
_		24.0		10	0.00% Im	pervious Ar	rea
	Tc (min)	Length (meters)	Slo (m/	•	Velocity (m/sec)	Capacity (m³/s)	Description
	10.0						Direct Entry,

Subcatchment 47S: Proposed Pool



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 5

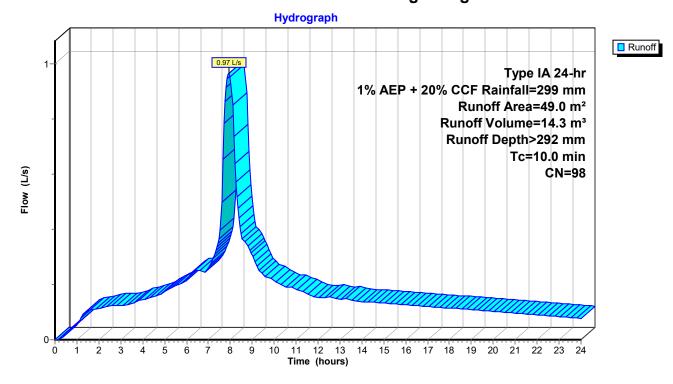
Summary for Subcatchment 48S: Existing Garage

Runoff = 0.97 L/s @ 7.94 hrs, Volume= 14.3 m³, Depth> 292 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=299 mm

	Area (m²)	CN	Description		
	49.0	98	Roofs, HSG	С	
	49.0		100.00% Im	pervious Ar	rea
To (min)	J		e Velocity n) (m/sec)	Capacity (m³/s)	Description
10.0					Direct Entry,

Subcatchment 48S: Existing Garage



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 6

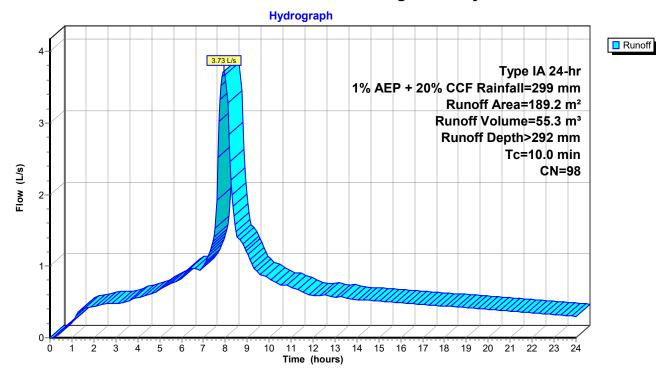
Summary for Subcatchment 49S: Existing Driveway

Runoff = 3.73 L/s @ 7.94 hrs, Volume= 55.3 m³, Depth> 292 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=299 mm

_	Aı	rea (m²)	CN	Dε	escription		
		189.2	98	Ro	ofs, HSG	С	
_		189.2		10	0.00% lm _l	pervious Ar	rea
	Tc (min)	Length (meters)	Slop (m/r		Velocity (m/sec)	Capacity (m³/s)	•
	10.0						Direct Entry,

Subcatchment 49S: Existing Driveway



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 7

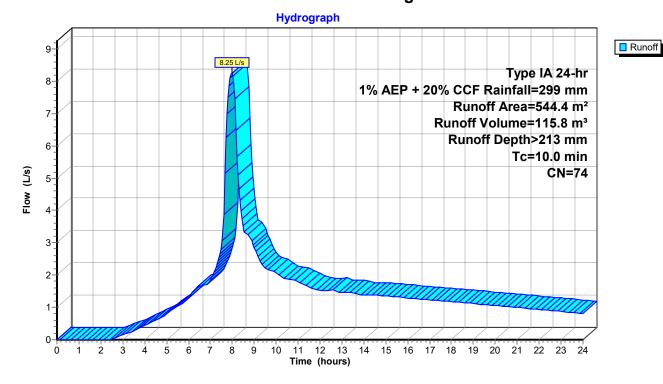
Summary for Subcatchment 50S: Remaining Greenfields

Runoff = 8.25 L/s @ 7.98 hrs, Volume= 115.8 m³, Depth> 213 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=299 mm

_	Ar	ea (m²)	CN [Description				
		544.4	74 >	>75% Grass cover, Good, HSG C				
_		544.4	•	00.00% Pe	rvious Area	a a constant of the constant o		
	Tc	Length		,		Description		
-	(min) 10.0	(meters)	(m/m) (m/sec)	(m³/s)	Direct Entry,		

Subcatchment 50S: Remaining Greenfields



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 8

Summary for Pond 54P: 1 x 25,000L Rainwater Tanks

Inflow Area = 272.4 m²,100.00% Impervious, Inflow Depth > 292 mm for 1% AEP + 20% CCF event

Inflow = $5.37 \text{ L/s} \ \text{@}$ 7.94 hrs, Volume= 79.6 m^3

Outflow = 5.05 L/s @ 8.06 hrs, Volume= 79.2 m³, Atten= 6%, Lag= 7.5 min

Primary = 5.05 L/s @ 8.06 hrs, Volume= 79.2 m^3

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs Peak Elev= 0.414 m @ 8.06 hrs Surf.Area= 10.2 m² Storage= 4.2 m³

Plug-Flow detention time= 15.2 min calculated for 79.1 m³ (99% of inflow)

Center-of-Mass det. time= 11.6 min (655.9 - 644.2)

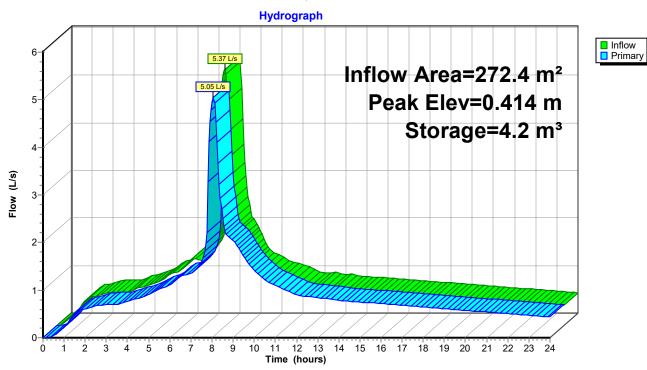
Volume	Invert	Avail.Storage Storage Description
#1	0.000 m	26.5 m ³ 3.60 mD x 2.60 mH Vertical Cone/Cylinder
Device	Routing	Invert Outlet Devices
#1	Primary	0.000 m 44 mm Vert. Orifice/Grate C= 0.600
#2	Primary	0.300 m 65 mm Vert Orifice/Grate C= 0.600

Primary OutFlow Max=5.04 L/s @ 8.06 hrs HW=0.413 m (Free Discharge)

1=Orifice/Grate (Orifice Controls 2.53 L/s @ 1.66 m/s)

-2=Orifice/Grate (Orifice Controls 2.51 L/s @ 0.76 m/s)

Pond 54P: 1 x 25,000L Rainwater Tanks



HydroCAD® 10.00-26 s/n 10413 © 2020 HydroCAD Software Solutions LLC

Page 9

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

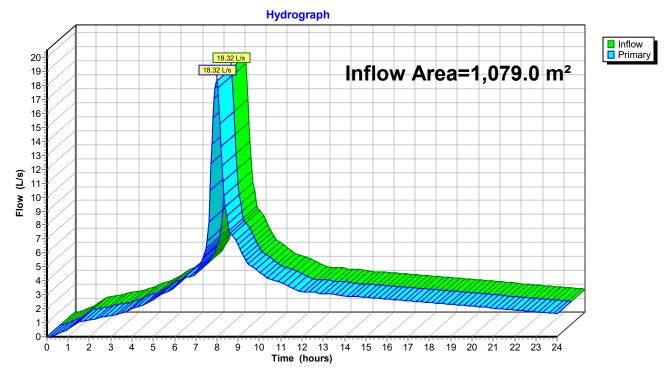
Inflow Area = $1,079.0 \text{ m}^2$, 49.55% Impervious, Inflow Depth > 252 mm for 1% AEP + 20% CCF event

Inflow = 18.32 L/s @ 7.99 hrs, Volume= 271.6 m^3

Primary = 18.32 L/s @ 7.99 hrs, Volume= 271.6 m³, Atten= 0%, Lag= 0.0 min

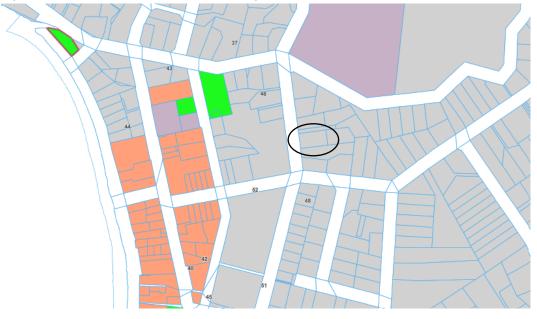
Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.05 hrs

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



Attachment E District Plan maps

Operative Far North District Plan Map



Proposed Far North District Plan Map

