From:	Bombay, Kelly
To:	Planning
Cc:	Campbell Thomson; James Imlach; Ina Savelio
Subject:	Application for resource consent - 20 Bay Road, Warrington
Date:	Thursday, 2 July 2020 04:22:16 p.m.
Attachments:	image001.png r_NZMCA Warrington Site_FINAL_reduced size.pdf Resource-Consent-Application-Form-Feb-2019-filled in_20 Bay Road.pdf

Good Afternoon,

Please find attached an application for resource consent on behalf of the applicant, the New Zealand Motor Caravan Association (NZMCA). I have copied in Senior Planner, Campbell Thompson who we meet with for a pre-application meeting in respect of the proposed activities. The appendices to this application are expected to exceed the size limit for this email. Therefore, I will send these through via wetransfer, so a separate email will be sent with a link to download this information.
We understand that an invoice will be sent following receipt of this application. Invoice details are provided in the application form attached. We would appreciate being copied in to this correspondence to confirm receipt of the application and to follow anything up with the applicant as required.

Speaking to reception today, I also understand that Council can provide the Certificate of Title and that this fee can be included with the final invoice. If this can please be provided that would be great. Please let me know if anything else is required at this stage or any issues with pairing up the appendices being sent separately.

Regards,

Kelly Bombay
BPlan
Senior Planner

Direct: +64-3-341-4719
Mobile: +64-27-200-7367

Stantec New Zealand
Level 3, 6 Hazeldean Road, Addington
PO Box 13052, Armagh
Christchurch 8024

DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti

Application Form for a Resource Consent

50 The Octagon, PO Box 5045
Dunedin 9054, New Zealand
Ph 03 477 4000 | www.dunedin.govt.nz

PLEASE FILL IN ALL THE FIELDS

Application details

I/We New Zealand Motor Caravan Association (NZMCA) (must be the FULL name(s) of an individual or an entity registered with the New Zealand Companies Office. Family Trust names and unofficial trading names are not acceptable: in those situations, use the trustee(s) and director(s) names instead) hereby apply for:

☑ Land Use Consent ☐ Subdivision Consent

I opt out/do not opt out (delete one) of the fast-track consent process (only applies to controlled activities under the district plan, where an electronic address for service is provided)

Brief description of the proposed activity:

The establishment and operation of a members only motor caravan park at 20 Bay Road in Warrington Dunedin. It is proposed to establish a site at 20 Bay Road, Warrington for self-contained camping by NZMCA members, with provision for up to 60 self-contained vehicles or caravans on the site.

Have you applied for a Building Consent? ☐ Yes, Building Consent Number ABA _____ ◆ No

Site location/description

I am/We are the: ☐ owner ☐ occupier ☐ lessee ☐ prospective purchaser of the site (tick one)

Street Address of Site: 20 Bay Road, Warrington Dunedin

Legal Description: Part Lot 1 DP 5855 and Lot 1 DP 10272

Certificate of Title: OT13B/973

Contact details

Name: Kelly Bombay (Consultant/Agent) (applicant/agent (delete one))

Address: PO Box 13052 Armagh Christchurch Postcode: 8141

Phone (daytime): 03 341 4719 Email: kelly.bombay@stantec.com

Chosen contact method (this will be the first point of contact for all communications for this application)

I wish the following to be used as the address for service: ☐ email ☐ post ☐ other _____ (tick one)

Address for invoices or refunds (if different from above)

Name: New Zealand Motor Caravan Association Inc.

Address: PO Box 72147 Papakura 2244 (or preferably accounts@nzmca.org.nz)

Bank details for refunds

Bank Account Name: New Zealand Motor Caravan Association Incorporated

Account Number [redacted]

Ownership of the site

Who is the current owner of the site? Richard John Hatherly

If the applicant is not the site owner, please provide the site owner's contact details:

Address: _____ Postcode: _____

Phone (daytime): _____ Email: hatherlyrichard@gmail.com

Occupation of the site

Please list the full name and address of each occupier of the site:

Site currently vacant / not occupied by residents. Part of the site casually used by Kings High School for outdoor education activities.

Monitoring of your Resource Consent

To assist with setting a date for monitoring, please estimate the date of completion of the work for which Resource Consent is required. Your Resource Consent may be monitored for compliance with any conditions at the completion of the work. (If you do not specify an estimated time for completion, your Resource Consent, if granted, may be monitored three years from the decision date).

January 2021 (month and year)

Monitoring is an additional cost over and above consent processing. You may be charged at the time of the consent being issued or at the time monitoring occurs. Please refer to City Planning's Schedule of Fees for the current monitoring fee.

Detailed description of proposed activity

Please describe the proposed activity for the site, giving as much detail as possible. Where relevant, discuss the bulk and location of buildings, parking provision, traffic movements, manoeuvring, noise generation, signage, hours of operation, number of people on-site, number of visitors etc. Please provide proposed site plans and elevations.

It is proposed to establish the site at 20 Bay Road for camping by NZMCA members with provision for up to 60 self-contained vehicles or caravans on the site. The site will accessed via the existing accessway off Bay Road. Physical site works will be limited and only as necessary to enable safe access and use of the site. A registration kiosk will be provided in the form of a small shed. Refuse and recycling facilities will be provided and emptied on a regular basis. The proposed activity is described in full in Section 3 of the Application for Resource Consent and Assessment of Environmental Effects (AEE) prepared by Stantec dated 1 July 2020.

Description of site and existing activity

Please describe the existing site, its size, location, orientation and slope. Describe the current usage and type of activity being carried out on the site. Where relevant, discuss the bulk and location of buildings, parking provision, traffic movements, manoeuvring, noise generation, signage, hours of operation, number of people on-site, number of visitors etc. Please also provide plans of the existing site and buildings. Photographs may help.

A comprehensive description of the site and existing activity is provided in the AEE.

(Attach separate sheets if necessary)

District plan zoning

What is the District Plan zoning of the site? Split zoning - Coastal Rural and Township and Settlement

Are there any overlaying District Plan requirements that apply to the site e.g. in a Landscape Management Area, in a Townscape or Heritage Precinct, Scheduled Buildings on-site etc? If unsure, please check with City Planning staff.

The Coastal Rural land is also subject to a Natural Coastal Character overlay. Also 'Warrington moa hunting site' (NZAA Reference 144/177 and Plan IDA040, Appendix A.1.1 under the 2GP). See AEE for full reference to zones and overlays.

Breaches of district plan rules

Please detail the rules that will be breached by the proposed activity on the site (if any). Also detail the degree of those breaches. In most circumstances, the only rules you need to consider are the rules from the zone in which your proposal is located. However, you need to remember to consider not just the Zone rules but also the Special Provisions rules that apply to the activity. If unsure, please check with City Planning staff or the Council website.

Please refer to Section 5.6 of the AEE for list of reasons for consent.

Affected persons' approvals

I/We have obtained the written approval of the following people/organisations and they have signed the plans of the proposal:

Name: _____

Address: _____

Name: _____

Address: _____

Please note: You must submit the completed written approval form(s), and any plans signed by affected persons, with this application, unless it is a fully notified application in which case affected persons' approvals need not be provided with the application. If a written approval is required, but not obtained from an affected person, it is likely that the application will be fully notified or limited notified.

Assessment of Effects on Environment (AEE)

In this section you need to consider what effects your proposal will have on the environment. You should discuss all actual and potential effects on the environment arising from this proposal. The amount of detail provided must reflect the nature and scale of the development and its likely effect. i.e. small effect equals small assessment.

You can refer to the Council's relevant checklist and brochure on preparing this assessment. If needed there is the Ministry for the Environment's publication "A Guide to Preparing a Basic Assessment of Environmental Effects" available on www.mfe.govt.nz. Schedule 4 of the Resource Management Act 1991(RMA) provides some guidance as to what to include.

Please refer to the AEE, specifically Section 6, for a comprehensive assessment of effects on the environment.

_____ (Attach separate sheets if necessary)

The following additional Resource Consents from the Otago Regional Council are required and have/have not (delete one) been applied for:

☐ Water Permit ☐ Discharge Permit ☐ Coastal Permit ☐ Land Use Consent for certain uses of lake beds and rivers ■ Not applicable

Declaration

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

I accept that I have a legal obligation to comply with any conditions imposed on the Resource Consent should this application be approved.

Subject to my/our rights under section 357B and 358 of the RMA to object to any costs, I agree to pay all the fees and charges levied by the Dunedin City Council for processing this application, including a further account if the cost of processing the application exceeds the deposit paid.

Signature of Applicant/Agent (delete one):  Date: 02 / 07 / 2020

Privacy – Local Government Official Information and Meetings Act 1987

You should be aware that this document becomes a public record once submitted. Under the above Act, anyone can request to see copies of applications lodged with the Council. The Council is obliged to make available the information requested unless there are grounds under the above Act that justify withholding it. While you may request that it be withheld, the Council will make a decision following consultation with you. If the Council decides to withhold an application, or part of it, that decision can be reviewed by the Office of the Ombudsmen.

Please advise if you consider it necessary to withhold your application, or parts of it, from any persons (including the media) to (tick those that apply):

☐ Avoid unreasonably prejudicing your commercial position

☐ Protect information you have supplied to Council in confidence

☐ Avoid serious offence to tikanga Maori or disclosing location of waahi tapu

What happens when further information is required?

If an application is not in the required form, or does not include adequate information, the Council may reject the application, pursuant to section 88 of the RMA. In addition (section 92 RMA) the Council can request further information from an applicant at any stage through the process where it may help to a better understanding of the nature of the activity, the effects it may have on the environment, or the ways in which adverse effects may be mitigated. The more complete the information provided with the application, the less costly and more quickly a decision will be reached.

Fees

Council recovers all actual and reasonable costs of processing your application. Most applications require a deposit and costs above this deposit will be recovered. A current fees schedule is available on www.dunedin.govt.nz or from Planning staff. Planning staff also have information on the actual cost of applications that have been processed. This can also be viewed on the Council website.

Development contributions

Your application may also be required to pay development contributions under the Council's Development Contributions Policy. For more information please ring 477 4000 and ask to speak to the Development Contributions Officer, or email development.contributions@dcc.govt.nz.

Further assistance

Please discuss your proposal with us if you require any further help with preparing your application. The Council does provide pre-application meetings without charge to assist in understanding the issues associated with your proposal and completing your application. This service is there to help you.

Please note that we are able to provide you with planning information but we cannot prepare the application for you. You may need to discuss your application with an independent planning consultant if you need further planning advice.

City Planning Staff can be contacted as follows:

In Writing: Dunedin City Council, PO Box 5045, Dunedin 9054

In Person: Customer Services Centre, Ground Floor, Civic Centre, 50 The Octagon

By Phone: (03) 477 4000

By Email: planning@dcc.govt.nz

There is also information on our website at www.dunedin.govt.nz.

Information requirements

- [x] Completed and Signed Application Form
- [x] Description of Activity and Assessment of Effects
- [x] Site Plan, Floor Plan and Elevations (where relevant)
- [ ] Certificate of Title (less than 3 months old) including any relevant restrictions (such as consent notices, covenants, encumbrances, building line restrictions)
- [ ] Written Approvals
- [x] Forms and plans and any other relevant documentation signed and dated by Affected Persons
- [x] Application Fee (cash, cheque or EFTPOS only; no Credit Cards accepted)
- [x] Bank account details for refunds

In addition, subdivision applications also need the following information

- [ ] Number of existing lots.
- [ ] Number of proposed lots.
- [ ] Total area of subdivision.
- [ ] The position of all new boundaries.

In order to ensure your application is not rejected or delayed through requests for further information, please make sure you have included all of the necessary information. A full list of the information required for resource consent applications is in the Information Requirements Section of the District Plan.

OFFICE USE ONLY

Has the application been completed appropriately (including necessary information and adequate assessment of effects)?

☐ Yes ☐ No

Application: ☐ Received ☐ Rejected

Received by: ☐ Counter ☐ Post ☐ Courier ☐ Other: _____

Comments: _____

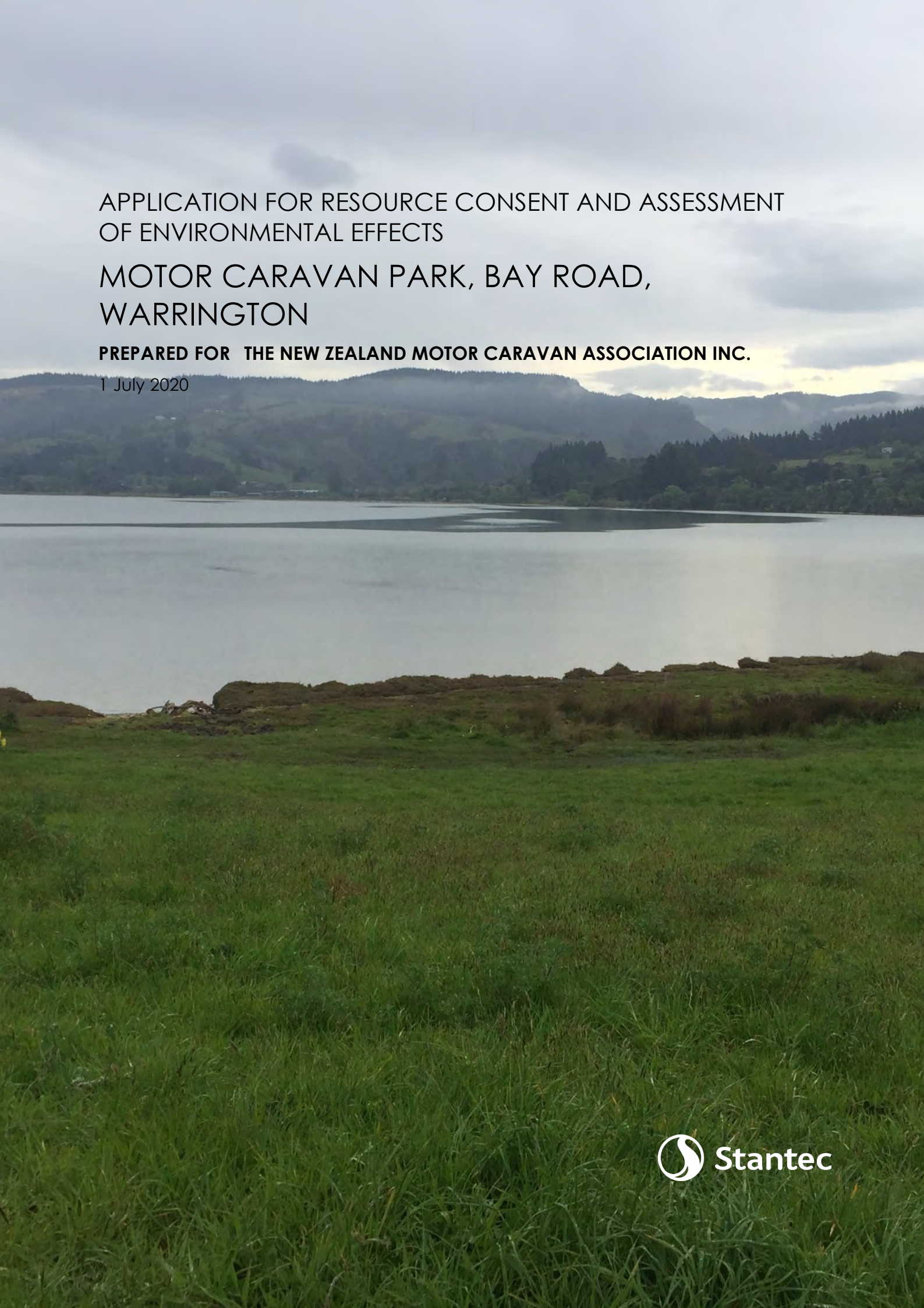
_____

_____

_____

(Include reasons for rejection and/or notes to handling officer)

Planning Officer: _____ Date: _____



APPLICATION FOR RESOURCE CONSENT AND ASSESSMENT OF ENVIRONMENTAL EFFECTS

MOTOR CARAVAN PARK, BAY ROAD, WARRINGTON

PREPARED FOR THE NEW ZEALAND MOTOR CARAVAN ASSOCIATION INC.

1 July 2020

Stantec

This document has been prepared for the benefit of the New Zealand Motor and Caravan Association. No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

This disclaimer shall apply notwithstanding that the application may be made available to the Dunedin City Council and other persons for an application for permission or approval to fulfil a legal requirement.

QUALITY STATEMENT

PROJECT MANAGER	PROJECT TECHNICAL LEAD
Diana Evans	Kelly Bombay

PREPARED BY		
Kelly Bombay		01 / 07 / 2020
CHECKED BY		
Janan Dunning		01 / 07 / 2020
REVIEWED BY		
Janan Dunning		01 / 07 / 2020
APPROVED FOR ISSUE BY		
Diana Evans		01 / 07 / 2020

CHRISTCHURCH
Hazeldean Business Park, 6 Hazeldean Road, Addington, Christchurch 8024
PO Box 13-052, Armagh, Christchurch 8141
TEL +64 3 366 7449, FAX +64 3 366 7780

REVISION SCHEDULE

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
00	30 June	Check and Review	KB	JD	JD	
01	01 July	Final	KB	JD	JD	DE

Resource Management Act 1991

Application for Resource Consent – Form 9

Section 88, Resource Management Act 1991

To: Dunedin City Council (Consents)
PO Box 5045
Dunedin 9054

From: New Zealand Motor Caravan Association Inc
PO Box 72147
Papakura 2244
(Please note different address for service at the end of this form)

1. The New Zealand Motor Caravan Association Inc. (the applicant) applies for the following resource consent:

RMA	Consent	Activity
s.9	Land use	The establishment and operation of a members only motor caravan park at 20 Bay Road in Warrington Dunedin. Resource consents are required for a non-residential activity within the rural coastal and township and settlement zones, in respect of minor infringements of plan parking standards, and earthworks on a scheduled heritage site. The reasons for needing resource consent are described in detail in Section 5 of this application document.

The proposal is fully described in the attached application and AEE, along with the plans and appendices which form this application.

2. A detailed description of the activities to which the application relates:

It is proposed to establish a site at 20 Bay Road, Warrington for self-contained camping by NZMCA members, with provision for up to 60 self-contained vehicles or caravans on the site. The site will be accessed via the existing access strip off Bay Road. A small kiosk for registration by members will be placed on site, minor earthworks and supply of potable water.

3. A description of the site as which the activity is to occur:

The application site at 20 Bay Road forms part of a small coastal peninsula settlement of Warrington. The application site is accessed off Bay Road via an access strip or 'leg in' into the bulk of the site proper. The leg-in is approximately 17 m wide, 135 m long and 0.23 ha in area.

The applicant does not currently own 20 Bay Road. The landowner has recently obtained resource consent from the Dunedin City Council to subdivide the property (SUB-2018-148) creating three freehold lots subject to conditions. The resulting Lot 1 incorporates an existing outdoor education facility operated by Kings High School which will be gifted to the school by the landowner. Lot 3 is a reserve to be vested with the DCC. The balance lot (Lot 2) is currently vacant and upon subdivision will have an area of 2.84ha. It is Lot 2 which is the subject of this application.

The site is currently vacant except for the building in the north-east corner used by Kings High School for outdoor education activities. The remainder of the site is grassed with pockets of shrubbery (some native as well as broom and other noxious weeds).

A full description of the site is provided in Section 2 of this application.

4. The name and address of the owner and occupier of the land to which this application relates is:

Landowner	Legal Description	Comment
Richard John Hatherly	Part Lot 1 DP 5855 and Lot 1 DP 10272	The applicant has entered into a conditional sale and purchase agreement with the landowner, subject to obtaining land-use consent with acceptable conditions.

5. Other activities that are part of the proposal to which this application relates:

There are no other activities forming part of the proposal to which this application relates.

6. Attached is an assessment of the proposed activity's effect 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. Attached is an assessment of the proposed activity against:

a) the matters set out in Part 2 of the Resource Management Act 1991; and

b) any relevant provisions of the applicable documents referred to in section 104(1)(b) of the Resource Management Act 1991, including the information required by clause 2(2) of Schedule 4 of that Act; and

c) the resource management matters set out in the Dunedin District Plan (Second Generation District Plan).

No further information is required to be included in this application by the relevant district or regional plans, the Resource Management Act 1991, or any regulations made under that Act.

.....

Signature of applicant or person authorised
to sign on behalf of the applicant

Date: 1 July 2020

Address for service:

Stantec New Zealand
PO Box 13 052
Christchurch 8141

Attn: Kelly Bombay

Email: kelly.bombay@stantec.com

Tel: +64 3 341 4719

Mob: +64 27 200 7367

New Zealand Motor Caravan Association

Motor Cavaran Park, 20 Bay Road, Warrington

CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1. Introduction

The New Zealand Motor Caravan Association Inc (NZMCA) is a membership-based organisation representing the interests of private motorhome and caravan owners in New Zealand. The NZMCA operate member's only camp sites across New Zealand. These provide a safe and secure place for members to temporarily camp in their self-contained vehicles as they travel around the country.

The applicant seeks resource consent to develop a new site for camping by NZMCA members at 20 Bay Road, Warrington, approximately 20 km northeast of Dunedin. The location of the site is shown in Figure 1-1 below.

Figure 1-1: Location of site at 20 Bay Road, Warrington

It is proposed to establish the site with provision for up to 60 self-contained vehicles and caravans. The key components of the proposal are:

- The existing access strip off Bay Road will be formed with compacted aggregate which will involve minor excavation (to strip approximately 250 mm depth of topsoil) and drained
- Provision of a potable water supply
- Provision of a small sign at gate entrance which includes the words 'NZMCA Members Only'.
- A gate in the accessway recessed 12-15m from the road edge to ensure vehicles are on site / off the road when opening and closing the gate
- Provision of refuse and recycling facilities, i.e. bins emptied on a regular basis by a commercial contractor
- Placement of a small shed on the site for members' use when registering their stay
- Minor earthworks (primarily involving placement of fill) in order to provide an even surface for vehicles and provide additional buffer over areas of cultural interest

The proposal does not include the following:

- Ablution facilities
- Hard stand areas that would require stormwater management (with the exception of the driveway)

- Earthworks in the northwest corner of the site
- Provision of a dump station facility

The full extent of the proposed activities is shown on the Landscape Plan attached at **Appendix A** and described in further detail in Section 3 of this application.

The NZMCA operates 45 member's-only camp sites across New Zealand. Their sites do not provide the level of facilities that are found at conventional commercial campgrounds accessible to the general public, due to the type and certification of vehicles used by NZMCA members. NZMCA site facilities typically include minimal features such as a small registration kiosk, planting to delineate parking aisles, small dump station and water supply area and an area for rubbish and recycling bins. NZMCA sites are similar to the basic and standard campsites operated by the Department of Conservation.

1.1 Purpose of the application

Dunedin currently has two district plans, the Operative Dunedin City District Plan 2006 (ODP), and the Proposed Second Generation Dunedin City District Plan (2GP).

On 20 November 2019 Variation 1 – *Minor Amendments* to the proposed 2GP was notified for public submissions. The submission period closed on 18th December 2019 and the further submission period closed on 13th February 2020. Eight submissions and no further submissions were received to Variation 1. Apart from the provisions in Variation 1 which received submissions seeking amendment (these are shown in Eplan shaded yellow with an orange border), all other Variation 1 provisions are deemed operative[1].

Advice has been received from DCC Senior Planner, Campbell Thompson, who clarified that with the exception of the Inner City Residential Zone (where there is an Appeal over specific rules) all the Residential Zones in the 2GP are no longer subject of Appeal and are deemed Operative. Therefore, consent is applied for under the ODP in respect of the use of the land zoned Rural, but not in respect to other activities on the land zoned Township and Settlement.

Under the ODP, and following the approach taken for existing NZMCA activities in Dunedin, the proposed activity is not deemed to be defined as a commercial residential activity, nor a recreational activity. As it is not specifically provided for as a permitted activity and does not fit comfortably within the above definitions, it is deemed to be non-complying in the Rural Zone.

Under the Second Generation District Plan (2GP) the activity fits within the definition of a 'Campground' as a sub-category of 'Visitor Accommodation'. The application site has a split zoning with the campground activity to occur on land zoned 'Township and Settlement', and 'Coastal'. The campground activity within the Township and Settlement zone requires consent as a restricted discretionary activity. Within the Rural Coastal zone, the campground activity requires consent as a discretionary activity.

Minor infringements of parking standards require resource consent as restricted discretionary activities.

Earthworks are proposed to upgrade the existing driveway and undertake some minor ground reprofiling, site preparation and landscaping. As a condition of both the recent subdivision consent and a land use consent obtained by the owner for the site, no earthworks or development other than the removal of vegetation using hand tools is to occur on the site until an archaeological assessment has been prepared by an appropriately qualified and experienced person. An archaeological authority is also required to be obtained from Heritage New Zealand Pouhere Taonga (HNZPT), and an application will be made concurrently with this application.

As an archaeological authority is yet to be obtained, any earthworks on a scheduled archaeological site requires consent under the 2GP as a non-complying activity

This application contains the information necessary to support the application for the consents required to authorise the works, including an Assessment of Effects on the Environment (AEE). It has been prepared in accordance with section 88 and Schedule 4 of the Resource Management Act 1991 (the RMA).

This application includes a description of the activity concerned, an assessment of the actual and potential effects on the environment, and the methods by which any adverse effects can be "avoided, remedied or mitigated".

[1] As stated on DCC's website https://www.dunedin.govt.nz/council/district-plan/2nd-generation-district-plan

2. Description of the Environment

2.1 Overview

The application site at 20 Bay Road forms part of a small coastal peninsula bound by Blueskin Bay to the west, highly valued for recreational pursuits, and the Pacific Ocean off Esplanade Road to the east. The area north of the site is comprised of low-density housing varied in age, and is used primarily for permanent residential activity with the occasional holiday home. Recent subdivision of formerly pastoral land is expected see an increase in residential activity in the immediate area.

There is an existing freedom camping site at the neighbouring Warrington Domain to the east which is managed by DCC. The Warrington Surf Life Saving Club is adjacent to this on the east coastline. These features are indicated in Figure 2-1 below.

The application site overall consists of a gently undulating plateau above the bay. The settlement of Warrington gives way to Porteous Hill, Hammond Hill and the Silver Peaks Range beyond that provide the inland backdrop to the proposed camping area.

On the western side, the application site rises inland from Blueskin Bay, with an existing coastal pathway outside the site boundary. A broad grass bank forms the main access down to the waters' edge, with the remainder of the western bank dominated by low growing exotic weed species. The scrub is dissected by a small network of trails enabling walking and cycle access to and from the coastal pathway and the bay.

Most of the southern and eastern area of the site is surfaced in pasture grass. Pockets of native and exotic vegetation dominated by Ngaio, bracken, grass species and gorse exist at the top of the plateau on the eastern side. The site is sheltered from southerly winds by a wide strip of mature pines that run the length of the southern boundary. The land immediately beyond the eastern boundary of the site has been restored with native planting (Pittosporum, Mapou, Ti kouka, Toetoe and Harakeke, among others) that has achieved a mature height and ground coverage.

The application site has a split zoning under the 2GP. The 'leg-in' accessway and the bulk of the site (central to eastern boundary) is zoned 'Township and Settlement'. The 'Coastal Rural' zoned portion is L-shaped being approximately 60 m wide from the western side boundary and 43 m wide along the southern boundary. The Coastal Rural land is also subject to a Natural Coastal Character overlay. This zoning is indicated in Figure 2-2 below.

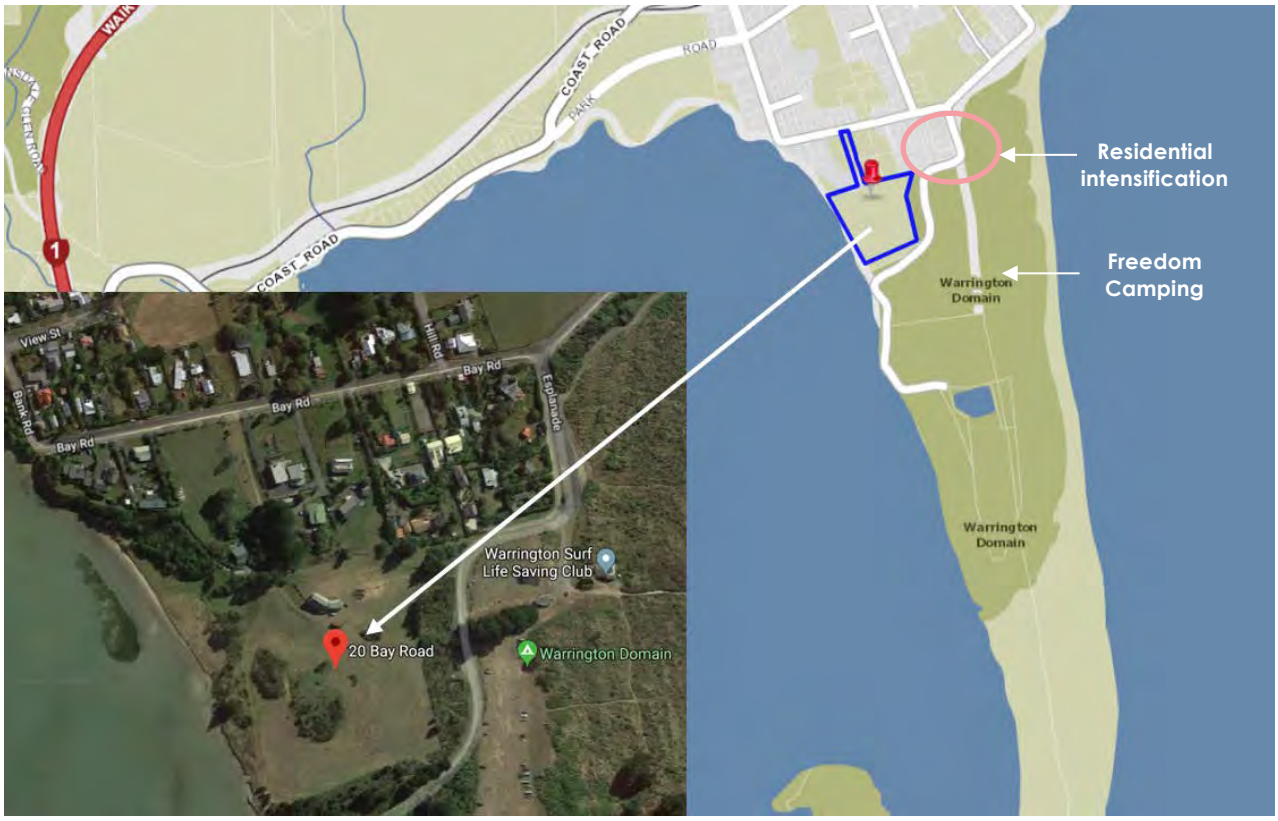


Figure 2-1: Site Features (google maps)

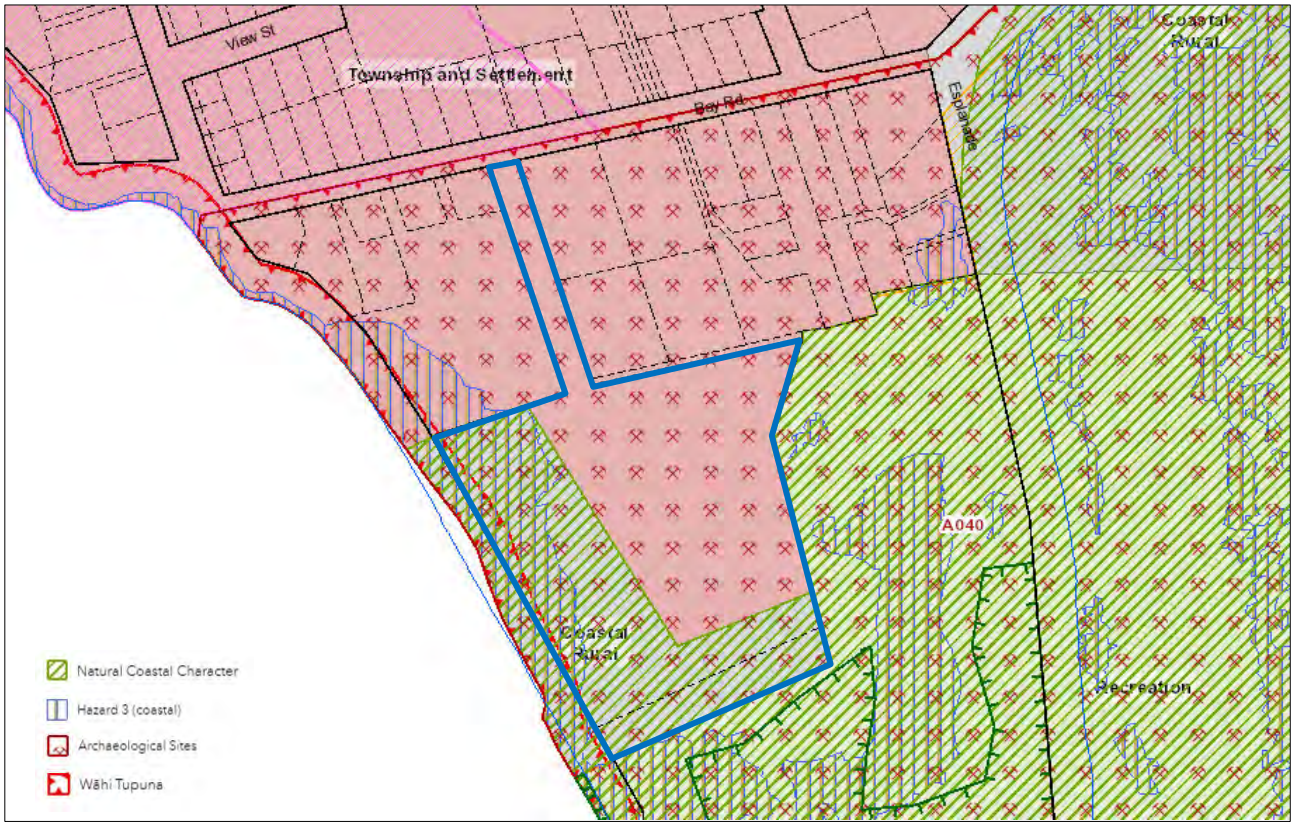


Figure 2-2: Spilt zoning and overlays (2GP plan maps).

2.2 Existing Use

The application site is accessed off 20 Bay Road via an accessway or 'leg in' into the site is approximately 17 m wide, 135 m long and 0.23 ha in area. The accessway is gravel and the western side (within the accessway) has been planted by the adjacent landowner and taped off to isolate the area. The adjacent landowner has an easement over part of the accessway providing shared (but not exclusive) right of way over that part of the accessway.

The site is currently vacant except for a building in the north-east corner which is used as King's High School's 'Classroom by the Sea' for outdoor education activities. The facilities are used by the school every year for their Year 9 camps in February and may be booked by other schools or community groups for activities throughout the rest of the year.

The remainder of the site is grassed with pockets of shrubbery (some native as well as broom and other noxious weeds).

The applicant does not currently own the property at 20 Bay Road. The landowner has recently obtained resource consent from the DCC to subdivide the property into three freehold lots subject to conditions (SUB-2018-148). The resulting Lot 1 will incorporate the existing Kings High School facility, with the land to be gifted to Kings High School by the landowner. Lot 3 is a reserve to be vested with the DCC. The balance lot (Lot 2) is currently vacant and upon subdivision will be 2.84 ha in area. It is Lot 2 which the NZMCA are proposing for use for self-contained camping. The proposed lot arrangement is shown in Figure 2-3 below.

With regard to the authorised use of the existing Kings High School on the site, previous land use applications have been combined with several other subdivision consent applications and decisions, of which have either been withdrawn or their approvals lapsed. In the recent decision document for the subdivision consent (Appendix B), the reporting officer states that the status of the land use activity was uncertain. Therefore, consent was also granted (LUC-2018-555) as part of this recent subdivision to authorise the use of the existing Kings High School facility subject to conditions.

Figure 2-3: Approved Lots 1, 2 and 3

Condition 8 of the land use consent LUC-2018-555 is relevant to this application as it effects the shared accessway and requires:

> *"That the right of way be maintained to a minimum width of 3.5m and have a minimum depth of compacted aggregate of 250mm. The right of way shall be maintained to facilitate surface water run-off and be drained and collected in an approved manner onsite. The intersection point of the right of way with Bay Road shall maintain edge integrity and water table drainage flow in Bay Road, to the satisfaction of the Manager of the Transportation Planning Department".*

The DCC decision document for the combined subdivision and land use consent is attached at **Appendix B** along with the approved scheme plan.

The topography from the middle point within the site, out to the south and east is generally at a flat consistent grade which is the area primarily proposed to be used by the applicant. The rest of the site is slightly undulating, at and around the future common boundary between lot 1 and 2. The site is steep and falls away to the coast from the north west corner. The bulk of the site is at a lower elevation to properties adjoining the northern boundary and to the north of Kings High School.

The images in Figure 2-4 demonstrate the existing site characteristics.

Image 1: Existing accessway to the site looking towards Bay Road. The area to the west (left in the image) is cordoned off to protect planting.

Image 2: Existing driveway looking south (from Bay Road). The site is not visible at this point from the road.

Image 3: View across the site from the south-east corner.

Image 4: Kings High School facility.

Image 5: View across the site. Area to the left showing large mound of exotic weeds

Figure 2-4: Site photos of existing site at 20 Bay Road

2.2.1 Local Transport Network

The preferred access route for the Warrington Domain public freedom camping site is clearly signed at all turning points from the Coast Road/ Park Road intersection (Figure 2-5).

Figure 2-5: Location of signed route to campground at the Warrington Domain

As noted above, there is also a freedom camping site at the neighbouring Warrington Domain which has been heavily utilised over the summer months in recent years. Traffic generated by the freedom camping has been decreased to some extent by the creation of a new freedom camping site within Dunedin[2].

The images in Figure 2-5 demonstrate the existing features within the local road network.

[2] A Dunedin City Council report (dated January 2020) confirmed the number of freedom campers using Warrington Domain had dropped by 36% due to another site opening closer to Dunedin.

Image 6: Warrington Domain / Freedom Camping

Image 7: Bay Road / Hill Road Intersection (looking west)

Image 8: View looking east along Bay Road from driveway of the site.

Image 9: View looking west along Bay Road from the driveway of the site.

Image 10: Bay Road / Hill Road intersection (looking north)

Image 11: Site entrance.

Figure 2-6: Features within the local road network

The 2GP classifies the Coast Road as a Collector Road, with a role of carrying through-traffic and also providing direct property access. All other roads within Warrington are Local Roads, with a primary role of providing direct property access. The average seal width of Warrington roads nearby the site varies between 4.5 m to 8.1 m. Local roads are required by the district plan to be sealed to a width of 5 m.

The majority of roads in Warrington have a metaled footpath on one side of the road. There is generally little to no separation between the edge of seal of the road and the metaled footpath. Because of this, people may use the footpath as the road shoulder, or for parking.

2.3 Cultural heritage

The site has a rich heritage and is recognised as a significant place of pre-European Maori activity on the Otago Coast. The 2GP identifies the site as 'Warrington moa hunting site' (NZAA Reference 144/177 and Plan IDA040, Appendix A.1.1 under the 2GP) and it is therefore subject to the provisions in Section 13, Heritage of the 2GP. Figure 2-7 below shows the heritage overlay under the 2GP.

The overlay identifying archaeological values covers the entire site including the accessway (crossed axes). A strip of the property along the coastline, and around the extent of the peninsula (shown red with triangles) indicates Wāhi Tupuna Mapped Areas. The overlay running adjacent with the coastline identifies Blueskin Bay (ID 16, Section 14 Manawhenua and Appendix A4). The other is Okahau (Warrington) (ID 14). The site is also captured within an overlay affecting the wider area of Pūrākaunui to Hikaroroa to Huriawa (ID 14). The Coastal Rural part of the site is also an area of Natural Coastal Character.

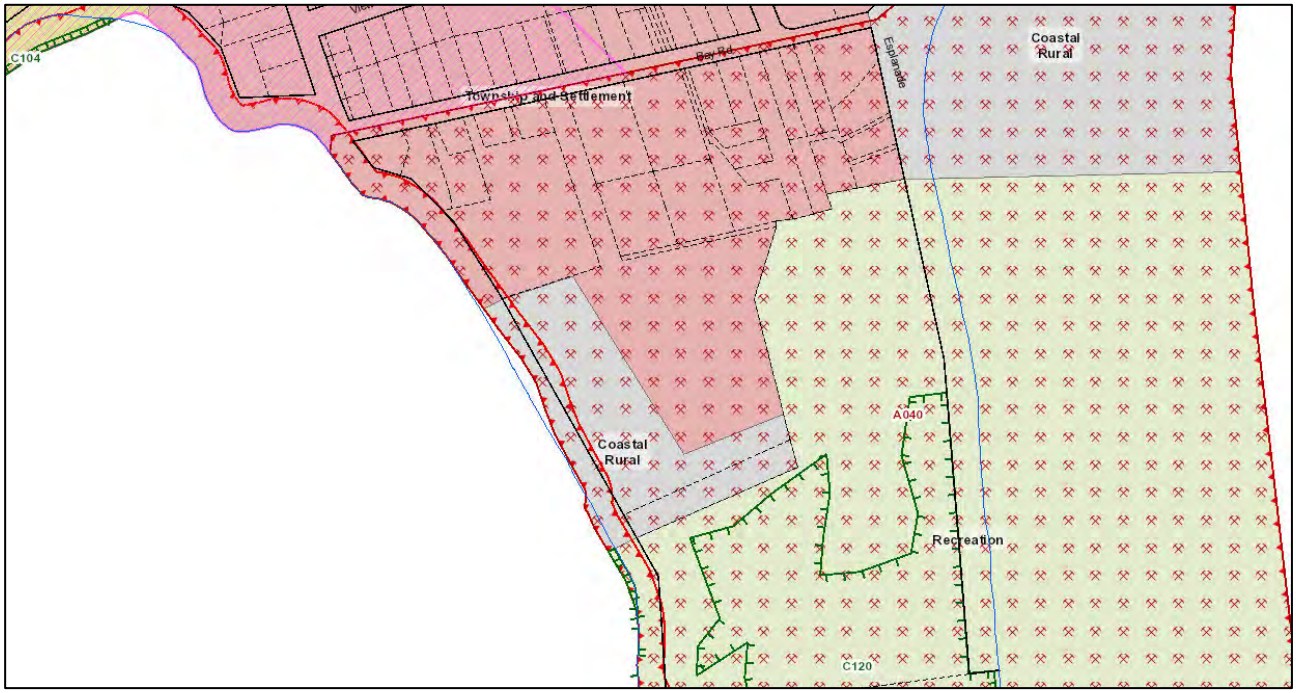


Figure 2-7: Cultural heritage identified by the 2GP

Historic use of the site, and more recently temporary use by NZMCA members by agreement with the current landowner, has resulted in concerns raised by neighbours and the DCC that artefacts below the surface, or at least those especially close to the top of the surface were being exposed or were vulnerable to exposure. The landowner in late 2019 was asked to stop access for vehicles until further assessment of the site was undertaken. This coincided with the landowner seeking to subdivide the land (granted as per decision at Appendix B) and the applicant investigating the permanent use of the site as a campground.

An archaeological assessment has been prepared by New Zealand Heritage Properties (NZHP) to accompany an application for an archaeological authority as required by the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) as discussed in Section 5.2 below. The archaeological assessment is attached at **Appendix C** and should be referred to for a more detailed commentary on the history of the site.

In summary, the archaeological assessment observes that there a total of seven archaeological site recorded within the wider Warrington Spit area. The nature of the sites in this wider area, all Māori midden, oven or occupation sites, indicates heavy usage of the area by Māori prior to European contact. Their assessment has identified two archaeological sites (I44/177 as noted above and I44/178). The NZHP further

describe the moa hunting site at I44/177, a nephrite working site, kāik and pā site. The site is referenced as an important site for the understanding of pre-contact Māori, covering approximately 2ha, despite no systematic excavations having been completed. Site I44/178 is a midden site which is located on the western shore of the Warrington Spit. The site survey conducted by NZHP have identified that both sites I44/177 and I44/178 are present within the property boundaries, with archaeological materials observed on the surface.

Early European settlement dates back to the early 60's as evident by settlement plans and historic newspapers and the St Barnabas Church was formally opened in November 1872. It was in the twentieth century that Warrington began to fully develop as a village. With regard to 20 Bay Road, the NZHP observe from historic research and the archaeological record that the property was occupied by Māori through many phases. After the arrival of European settlers, the property was apparently used as both a nature reserve and a rubbish dump, resulting in the modification of the land to accommodate new tracks and accessways to the shoreline.

2.4 Geology

Site investigations were carried out by Stantec in May 2020[3] confirming the prevailing geology to be silty sands. The ground at the time of testing was dry, with no standing / ponding water. The soils underlying the topsoil were consistent across the site in terms of material type. The testing and results are provided at **Appendix D**. The testing was undertaken to inform future design of surfaces if necessary, for the proposed use as a campground. A letter summarising the geotechnical test results was also drafted for the purpose of seeking further advice from a pavement design engineer. Subsequent advice received is further discussed below with regard to the proposal.

2.5 Coastal Environment

The application site is near to the coast and has an apparent coastal character. The Warrington settlement is situated on elevated land in the north-east corner of Blueskin Bay. Coastal hills surround the township on the north and west sides. A large majority of the site is surfaced in pasture grass. Pockets of native and exotic vegetation, dominated by Ngaio, bracken, grass species and gorse exist at the top of the plateau on the eastern side adjacent to the coastline.

The dunes along the eastern side of the sandspit are characterised as "a well-vegetated dune system with stable back-dunes and dynamic foredunes" (Single, 2015). The sandspit acts as the buffer for Blueskin Bay to protect against the effects of erosion and direct inundation from the open sea (Goldsmith & Sims, 2014)[4].

3. Proposal Description

3.1 Project Overview

It is proposed to establish the site at 20 Bay Road for camping by NZMCA members only, with provision for up to 60 self-contained motorhomes and caravans on the site. The site will be accessed via the existing accessway off Bay Road.

3.2 Campground activity

The site, like other NZMCA sites across the country, will effectively be a safe and secure place for members to park their own vehicles. As such the proposal does not seek to provide facilities beyond those identified above. Physical site works will be limited and only as necessary to enable safe access and use of the site as described in further detail below.

In its present state, the northwest corner of the site is not practical to use for parking due to the topography of land which is undulating and falls at a downward grade toward the coast. Bulk earthworks would be required to modify this area to make suitable which is not proposed at this stage but may be considered in the long term. It is therefore proposed to accommodate up to 60 members' campervans and caravans over the predominantly flat area of the site as indicated on the site plan. The site is

[3] Subject to the approved exploratory authority (NZHPT ref: 2020/540)

[4] Refer to the archaeological assessment for further descriptions on the coastal environment and land transformation.

expected to operate at this full capacity during the peak summer and holiday period, and less than half this during the quieter periods of the year.

The existing access off Bay Road is shared by Kings High School and is required by condition 8 of the land use consent to be maintained to a minimum width of 3.5 m and have a minimum depth of compacted aggregate of 250 mm. The accessway is proposed to be widened to a width of 6 m. The gravel formation will end at the shared way between the camping area and the Kings College site. From this point NZMCA members, as per membership rules, will travel along an unformed track, of which scrub will need to be cleared to enable, and sign in on arrival at a small kiosk on the northern boundary (example in Image 3-1).

Image 3-1: NZMCA registration kiosk

Image 3-2: Rubbish and recycling facilities

A registration kiosk will be provided in the form of a small shed, as identified on the site layout plan, for members to use when registering their stay. The shed will be no bigger than 10 m². Refuse and recycling facilities will be provided and emptied on a regular basis by a commercial contractor (example in Image 3-2).

3.2.1 Site Use and Management

Certified self-contained (CSC) motorhomes and caravans are designed to meet the ablutionary and sanitary needs of the occupants for a minimum of three days without requiring any external services or discharging any waste. CSC vehicles need to comply with NZS5465:2001 *New Zealand Standard for Self-Containment of Motor Caravans and Caravans*.

Site management will be through local members who are appointed as park custodians and via the NZMCA National Office. This site management regime works well for NZMCA parks and is similar to the approach adopted by the Department of Conservation who manage over 200 public campsites nationwide.

During busier times of the year, i.e. in the summer months, NZMCA may appoint a temporary site caretaker to be stationed on site to provide additional site management. The site's design and operation is intended to prevent the general public from accessing the site and the local site custodian and other members also monitor this.

As with other NZMCA parks, all members are required to register their membership and vehicle details in a self-registration book contained in the registration kiosk. Members must abide by the NZMCA Environmental Care Code and Membership Code of Conduct, or risk suspension from membership privileges. This document is attached as **Appendix E**. These site rules are required to be followed and are set out on site within the registration kiosk.

3.2.2 Capacity, duration and parking arrangements

The proposed site layout (refer Landscape Plan in Appendix A) will initially accommodate up to 46 self-contained vehicles per night and it is anticipated that the site will operate at this capacity during peak periods which are typically the main summer months with a focus around public holidays. As members travel tends to be seasonal, NZMCA expects that use during shoulder seasons and winter months will be less than half those numbers even at the busiest times.

Twenty of the 46 parking bays (north to south) are shorter in depth and intended to accommodate conventional motorhomes up to 7 m long. The remaining 26 parking bays have a depth of 13 m and can accommodate motorhomes and caravans (with space also for the towing vehicle to park).

The parking area shaded red in Drawing XYZ (Stage Two) will be able to accommodate an additional ten motorhomes or caravans. However, as discussed further below, the use of this area is expected to require filling and/or other application to land to provide a buffer and barrier over heritage artefacts.

The sizes of member's vehicles vary from relatively small campervans through to large fifth wheelers i.e. a camper trailer connected in the bed of a truck or large towing Ute. This means a strict and delineated site layout is not always appropriate for efficient use of NZMCA sites. The Landscape Plan indicates the general layout of parking bays be delineating aisles allowing for 'oversized' parking bays than necessarily required. As demonstrated in Figure 3-1 below, a parking bay measuring 5.5 m x 10 m can comfortably accommodate an average campervan. The large bays proposed on the Landscape Plan provide for additional space for ease of parking vehicles i.e. those towing caravans, to park perpendicular to the caravan.

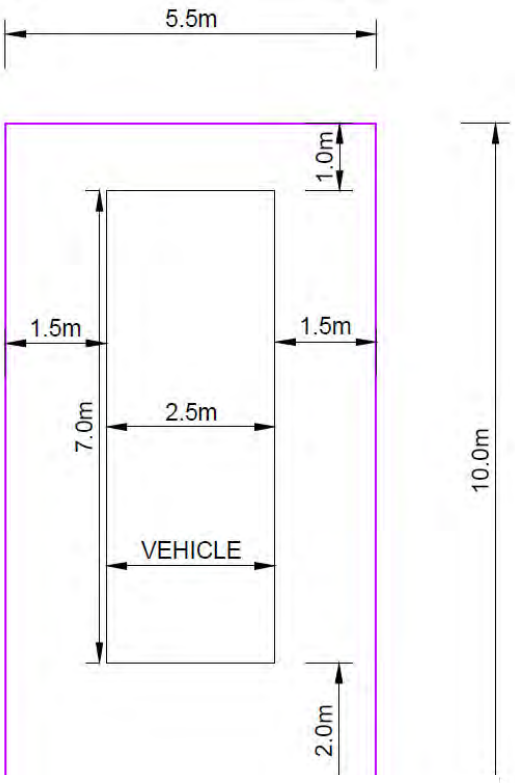


Figure 3-1: Dimensions based on average size of CSC vehicles

Therefore, while the Landscape Plan indicates 56 parking bays, this application seeks authorisation for a capacity of up to 60 CSC vehicles to:

- Use both Stage One and Stage Two areas
- Provide flexibility for the different types of NZMCA member vehicles albeit following the general layout (aisles)
- Allow at least 3 m (as per Figure 3-1) between vehicles particularly during summer when demand is greater, parking arrangements could allow for an additional 4 vehicles
- Enable efficient use of the site, while not compromising the ability to comfortably manoeuvre
- Specify an upward limit to avoid overcrowding.

Individual parking bays will not be marked out or formalised, with preference to maintain the area in grass wherever possible. Upon arrival, members are free to select an area which suits them and is available at the time. However, there is an expectation set out on park signage that members will angle park to ensure the space is used efficiently. The need to maintain internal access and manoeuvring space plus a standard separation distance of around 3m between campers also limits the numbers that can be accommodated. The proposed planting also provides guidance as to where parking aisles are located.

Members will be permitted to stay on site on a temporary basis only – no semi-permanent or permanent residence will be allowed. The usage figures of existing parks show ithe average length of stay per visit by a member is 2-3 consecutive nights. The short duration of stay reflects the NZMCA's objective of providing parks for short term use only.

3.3 Physical works

The applicant would like to maintain the site as near to its current state as possible. Therefore, it is proposed to utilise the majority of the site which is currently at a flat grade but with some minor ground re-profiling, site preparation and landscaping described further below.

The north west corner with an undulating and steep topography is unable to be accessed easily by vehicles without further modification and it is not anticipated that the area will be utilised by the NZMCA for parking at this stage.

With regard to ground disturbance and paving, the intention is to not pave or seal wherever possible. As a condition (condition 8) of the land use consent (**Appendix B**), the accessway which is shared with Lot 1 (Kings High School) is required to be maintained to a minimum width of 3.5 m and have a minimum depth

of compacted aggregate of 250 mm. It is proposed to form the driveway with compacted aggregate involving the removal of approximately 250 mm of topsoil to form a trafficable surface. The depth of topsoil has been identified through site investigations undertaken by Stantec as identified earlier. The results of this investigation are presented in a short memo provided as **Appendix D** of this application.

The grass and vegetative cover across the site is preferred for several reasons:

- Providing hard-surfaced parking areas would require excavation of topsoil which is sought to be avoided over areas of the site due to the risk of disturbing or uncovering heritage artefacts; and
- Use of hard surfaces and marking of parking areas would not be in keeping with the sites existing natural character within the coastal setting.

The existing natural character within the coastal setting contributes to making this site appealing. Hard-surfaced marked parking areas would result in adverse effects on the natural and coastal character of the area as well as adverse amenity effects on nearby properties with visibility of the site. These effects are further assessed in Section 6.4 and 6.5.

Most critically the applicant does not want to disturb the ground wherever possible due to the risk of disturbing or uncovering heritage artefacts. It is noted that DCC has previously raised concerns with the current landowner regarding the effects that vehicles traversing the site may have on the site's cultural heritage. This is further discussed in Section 6.2 below.

The majority of the area identified for camping is fairly flat although with minor variability. Some minor fill or scraping is proposed to provide a more level surface. However, the ability to disturb the ground and place soil or other materials across the site is constrained due to the heritage status of the site as well as conditions of the subdivision and land use consents requiring further assessment and approvals from HNZPT prior to any earthworks or development.

3.3.1 Build-up over areas of cultural vulnerability

The archaeological assessment (Appendix C) states that some artefacts or items of cultural interest were identified close to the surface or exposed at the surface confirming there is minimal buffer over artefacts. This is especially true on the eastern half of the site where it is thought that more significant ground modification has occurred historically leaving this area particularly vulnerable.

In their assessment the NZHP make several recommendations as to the proposed use of the site including, in the first instance, to avoid any area of interest where possible. The NZHP further recommend that areas on the eastern side of the site, where eroded material was identified or thought to be most likely present, be built up where possible to reduce the impact on any features close to the surface of the vehicle traffic passing over, preserving the material in situ.

In acknowledging the site's cultural significance, the applicant has begun consultation with mana whenua via Aukaha. Details regarding consultation to date are further outlined in Section 4 below.

To minimise the potential to uncover or disturb heritage artefacts the applicant proposes to build up and/or provide a barrier over the surface, focusing on the eastern part of the site identified in the archaeological assessment as one of the key areas of interest (see Figure 3-2). This area of interest overlays where the Stage Two parking area is proposed, hence the use of the Stage Two area is dependent upon confirming a capping solution/barrier which is most appropriate to preserve the underlying heritage while being in keeping with the natural character of the site.

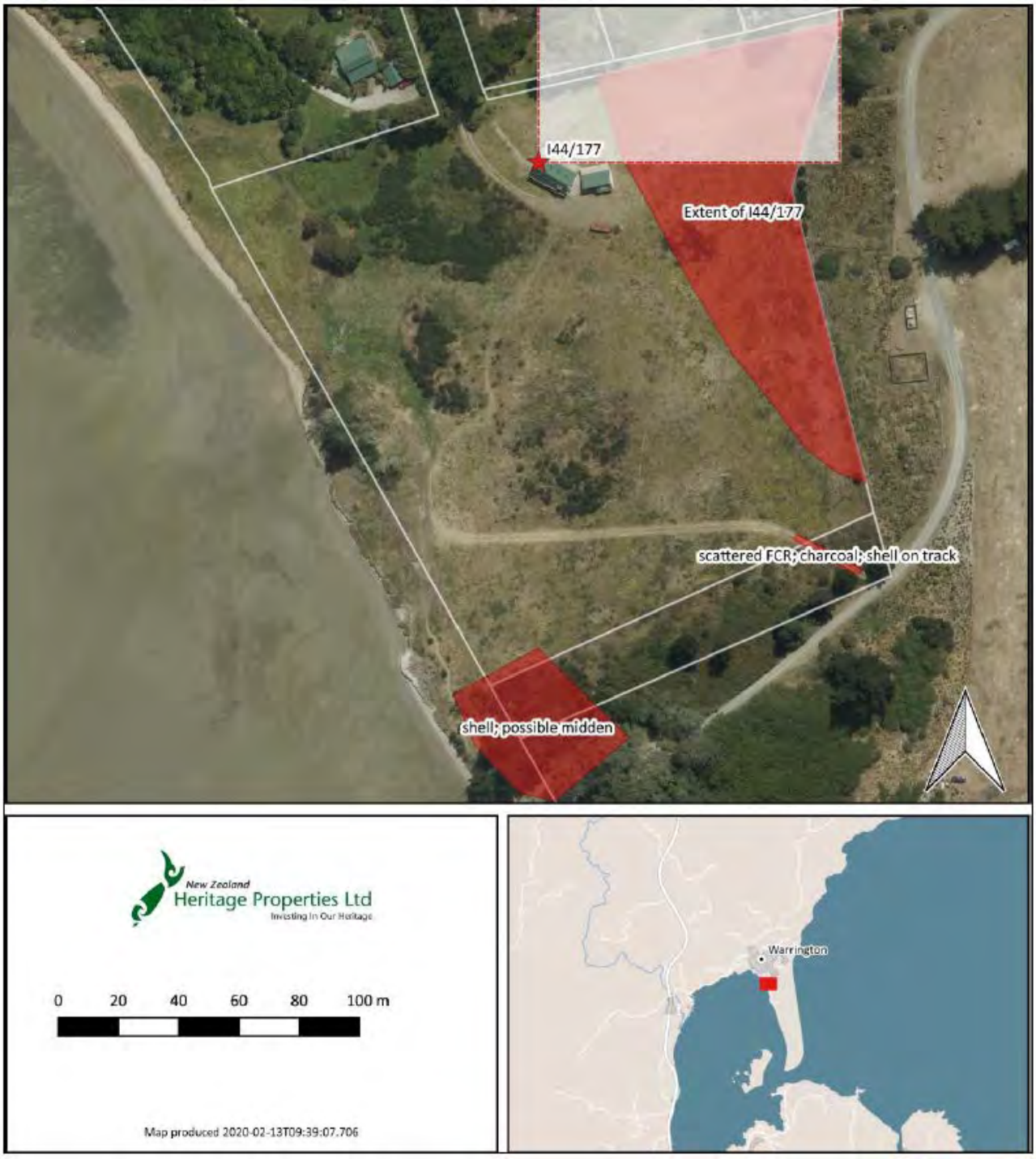


Figure 3-2: Areas of Interest identified by NZHP (Also Figure 7-1 of archaeological assessment)

A pavement options memo has been prepared by Stantec New Zealand (Stantec) to investigate options to successfully allow the historical areas to remain undisturbed while the applicant operates the motor caravan park on the site. The pavement options memo is attached at **Appendix F** of this application. Technical specification will be required for the final design and a condition of consent in this respect is proposed in Section 7.

Note while the word "pavement" is used throughout this application, other than the access driveway, the nature of the proposed development is not for a standard road pavement to be constructed, rather a reinforced or unreinforced soil pavement. As such some of the normal pavement design methods are not directly applicable to this situation.

A grassed soil "pavement" is proposed for the remainder of the site. Three separate grassed pavement designs are described in the pavement options memo, to account for the vehicle circulation area where concentrated traffic movements on site may cause topsoil / turf damage, the identified area of archaeologically significance requiring protection, and the balance of the site.

The areas of higher or concentrated traffic movements, such as near the kiosk / transition from the metalled accessway onto the grassed area and the turning areas at the head of each lane, are at risk of damage if driven on, particularly when wet. Therefore, it is proposed to provide a suitable soil reinforcement in these areas as per the recommendations of the pavement options memo.

The areas identified by NZHP as containing near or at-surface artefacts are most vulnerable, and it is proposed to provide some form of protection from direct traffic loading to ensure any artefacts remain protected and un-damaged. To provide protection in this area it is proposed to complete an "overlay" pavement design, with limited to no excavations being completed, by placing additional imported material above the existing surface level.

In accordance with the pavement options memo, a geotextile fabric and geogrid reinforcement layer are proposed to be laid on the existing surface prior to the overlay.

As noted above, the remainder of the site will require some relevelling / recontouring to ensure positive drainage is maintained. This will generally involve repurposing and importing topsoil as a fill operation rather than a cut fill operation. However, as some scraping may be necessary, it is proposed that the applicant follows the recommendations by NZHP regarding oversight and monitoring.

3.3.2 Landscaping

The proposed landscaping treatment including access, parking and planting is shown in the 'Landscape Plan' attached as **Appendix A**.

The site will be demarcated from the Kings College buildings and surrounding residential properties with native planting to the northern boundary. This multi layered planting is to be of a depth and height to aid in visual screening of camping vehicles from adjacent properties. All planting on site is to be native, and eco-sourced, based on the list provided in the landscape plan.

Parking as part of the Stage 1 proposal is focussed in the western part of the site. Small vehicles will be able to park along two rows or parking bays (20 No.) that run north – south at the edge of the existing scrub. A strip of native planting will be included to the eastern edge of this to further provide screening from adjacent properties. Larger vehicles can park on the southern boundary (18 No.) and opposite, with a 20 m isle between. The eight parks opposite will also have a strip of native planting surrounding. A stand of existing pine trees on the southern boundary is to be retained and managed by the NZMCA to be regenerated to native planting over time.

Stage 2 parking will be along the eastern boundary, subject to agreement on ground treatment and conditions surrounding archaeological protocols to protect artefacts.

3.3.3 Planting

The soil is free draining with a sand base, and the site is largely dry throughout the camping season. The western edge of the peninsula is shown as Sand Dune Forest on the DCC Native Planting Guide. The following species are recommended based on their suitability and to flourish on 'dry sites' in the DCC NPG Sand Dune Forest list[5]. The DCC list is supplemented with native species observed on Esplanade, beyond the eastern boundary of the camping area.

Table 2-1: Recommended planting species

Scientific Name	**Common Name**
Trees	
Dacrycarpus dacridioides	Kahikatea
Melicytus ramiflorus	Mahoe

[5] https://www.dunedin.govt.nz/__data/assets/pdf_file/0006/732858/DCC-NPG-ecosystems-species-list-Sand-dune-forest.pdf

Podocarpus totara	Totara
Prumnopitys taxifolia	Matai
Cordyline australis	Ti kouka
Shrubs	
Griselinea littoralis	Broadleaf
Myrsine australis	Mapou
Pittosporum tenuifolium	Kohuhu
Coprosma lucida	Karamu
Myoporum laetum	Ngaio
Austroderia sp.	Toetoe
Astelia fragrans	Kakahu
Ferns	
Asplenium obtusatum	Coastal spleenwort
Microsorum pustulatum	Hounds tongue fern
Pteridium esculentum	Rarauhe, Bracken fern (areas of restoration only)

Earth disturbance will be required for planting and conditions are proposed which follow recommendations outlined by NZHP including subsurface works being monitored by an archaeologist. In the centre of the site, planting is proposed to form boundaries to the parking spaces as shown on the Landscape Plan. In most areas this will involve only minimal earth disturbance. In the very centre of the site a small gully is currently filled with vegetation and where the proposed parking spaces encroach on this area, vegetation clearance will be necessary.

3.4 Traffic Generation

An Integrated Transport Assessment (ITA) has been prepared in relation to the proposed activity on this site and to identify, from a transport perspective, the expected traffic effects of the proposal. The ITA is included as **Appendix G** to this application and provides:

- Details of the existing local road network;
- An overview of the proposed activities;
- An assessment of the expected transport effects; and
- An evaluation of the proposal against the transportation and signage rules in the 2GP.

In 2016 the NZMCA commissioned a research report which provides data that can be used to calculate vehicle demands at future NZMCA sites. The data is based on traffic data surveys completed at four NZMCA sites over the busiest time of year (approximately 15 % of the year for NZMCA). Off peak surveys were also carried out to determine the typical lower limit for traffic generation at the sites, which represents the majority of the year. The findings of the WSP report have been used to establish the predicted traffic generation rates from this proposal. The research report is included in **Appendix G** for reference.

A vehicle counter was installed on Bay Road, between Hill Road and the Esplanade, for two weeks between 20 December 2019 and 2 January 2020 to determine daily traffic over the holiday period and a vehicle classification count was also completed. This information further informed the ITA.

During the peak summer period, the average daily number of movements at the campground with the Stage 1 development is expected to be about 80 vehicles per day (vpd) with a peak hourly volume of less than 15 vph. With a total of 60 vehicles the volume is expected to be between 98-102 vpd.

The ITA conclude that '*With the low volumes of traffic using the access roads to Warrington already, there is ample capacity to accommodate the additional traffic movements without generating any adverse effects on the network. The increased volumes would not be expected to contribute to any noticeable delays at intersections.*

The assessment of compliance against the District Plan transport rules has concluded that the Bay Road site access will achieve a high level of compliance. Overall, it has been concluded that the proposal can be supported from a transportation perspective'.

The effects of the proposal from a transport perspective are addressed in the assessment of effects in Section 6.3.

3.5 Noise Generation

As previously noted, in using the site NZMCA members are bound by the expectations of the NZMCA Environmental Care Code and Membership Code of Conduct. This sets out the expectation that members will treat others with respect and courtesy and avoid causing visual or noise pollution. Noise will generally be limited to vehicles coming and going, as well as the ambient sound of members talking and the occasional use of generators (mainly in winter). In 2019, a short memo was prepared by WSP for use by NZMCA to inform future noise assessments of NZMCA parks. The noise emissions memo is attached at **Appendix H**.

The noise emissions memo summarises observations of campground activities and provides measurements of their noise emissions.

The noise limits set by the 2GP are outlined below, as relevant to the zoning of receiving properties (properties adjacent to the site):

	7.00am to 7.00pm	**7.00pm to 10.00pm**	**10.00pm to 7.00am**
East – zoned recreation	50 dB LAeq (15 min)	45 dB LAeq (15 min)	40 dB LAeq (15 min); and 70 dB LAFmax[6]
North – Township and Settlement	55 dB LAeq (15 min)	50 dB LAeq (15 min)	40 dB LAeq (15 min); and 70 dB LAFmax[7]

The nearest residential units are approximately 100m (No. 10 and 22 Bay Road) from the northern extent of the parking bays and the small registration kiosk and approximately 80m and 60m respectively from their boundaries. The campground activities are further separated by dense vegetation and/or the existing Kings High School Education facility. With regard to the property at 28 Bay Road parking bays are approximately 70m from the boundary and a further 30m to the building façade. Planting is proposed along the proposed common boundary between the application site (Lot 2) and the Kings High School facility (Lot 1).

Based on the observations in the noise emissions memo, taking into account the separation and screening afforded by the setback of activities and existing and proposed vegetation, noise generated by the proposed camping activities on the site are not expected to exceed the limits set under the 2GP.

3.5.1 Vehicle drive-by noise

The noise emissions memo states that a conservative value for vehicle drive-by noise may be taken as 75 dB LAmax at 7 m, representing the typical vehicle drive-by sound level on gravel. Engine noise was noted as contributing at low frequencies, but the crunch of the gravel was the dominant source of noise in determining the maximum drive-by level. The existing 'leg in' to the site is 17 m wide and the driveway will be formed with compacted gravel aggregate. Members also infrequently arrive during night-time hours. Therefore, noise along the access is not expected to exceed the limits set under the 2GP.

[6] Note - appeal only relates to Port Activity in the Industrial Port Zone as being considered earthworks - small scale; and earthworks for underground fuel storage systems

[7] Note - appeal relates to a Fonterra Limited request to increase the night-time noise emission limits

4. Consultation

4.1 Mana Whenua

The current landowner through the subdivision consent process consulted with Aukaha on behalf of Kāti Huirapa Rūnaka ki Puketeraki, the kaitiaki Rūnaga who's takiwa includes the site at 20 Bay Road. Consultation was also undertaken with Heritage New Zealand Pouhere Taonga (HNZPT). Both parties advised that they did not oppose the application for subdivision provided conditions were included relating to effects on archaeology.

Accordingly, the following consent notice will be registered on the certificate of title for Lots 1 and 2:

i) No earthworks or development other than the removal of vegetation using hand tools shall occur on the site until:

(a) an archaeological assessment has been prepared by an appropriately qualified and experienced person; and

(b) that any necessary approvals from Heritage New Zealand Pouhere Taonga have been obtained.

ii) In the event that an unidentified archaeological site is located during any works on the site, the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol in Attachment 1 applies.

The applicant has undertaken initial consultation through Aukaha with Kāti Huirapa Rūnaka ki Puketeraki. Initial correspondence is provided at **Appendix I**.

The applicant is committed to continuing to work with the Rūnaka to protect the cultural values of the site, while operating the proposed camping ground. The NZMCA are interested in ways in which they can educate members about the cultural significance of the area, for example by way of on-site signage and information through its communication channels.

4.2 Pre-application

A pre-application meeting was held with DCC on the 5th of November 2019. A summary of points are provided as follows:

- In terms of service connections, DCC noted rules regarding condition of pipes and if proposing works in relation to services that CCTV should be undertaken to confirm condition prior to works;
- Need to protect services underneath existing access;
- Access to be 5 m formed, sealed and drained;
- If not proposing hard seal, then provide assessment regarding geology and appropriateness of the proposed treatment in response to activity and site constraints.
  For example we discussed shared/common access and parking areas within the site not necessarily being hard seal. This is to reduce visual effects (limiting hard surfaces within the coastal context) as well as recognising that to seal would require greater excavation which the applicant seeks to minimise as much as possible along the driveway and across the site due to risk/likelihood of disturbing heritage artefacts;
- With regard to natural character, threats include structures (noting that not likely to be an issue in this case where only a small shed is proposed) and vehicles. We discussed considering mitigation including:
  - Boundary treatment
  - Type of fencing if appropriate
  - Breaking up areas with planting
  - Interface with public reserve
  - Interface with coastal area/public access
- Access: As above, would need comments in terms of geology to support an alternative to formation of surfaces for access and parking (i.e. where any dispensation to the requirements are sought);
- Further archaeological assessment required (as per condition of subdivision consent).

The advice discussed at this pre-application meeting has informed further investigations in terms of geology, archaeology and landscaping as proposed in this application.

5. Statutory Context

5.1 Resource Management Act 1991

Section 9(3) of the Resource Management Act 1991 (RMA) prevents any person from, inter alia, using land in a manner that contravenes a rule in a plan unless the activity is authorised by resource consent or is allowed by s10 or 10A of the RMA. The proposed 'campground' activity and earthworks proposed as part of this development will contravene several rules under the operative and proposed district plans. Resource consents are therefore required as described in Section 5.6 below.

5.2 National Environmental Standards and Policy Statements

5.2.1 National Environmental Standard for Assessing and Managing Contaminants in Soil

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS) provides a nationally consistent set of planning controls for the management of activities that disturb contaminated and potentially contaminated land. The applicability of the NES-CS was assessed in the subdivision decision[8] and on the basis of historic aerial photography and a HAIL[9] report from the DCC. The planning officer considered that the provisions of the NES-CS are not applicable to this site because the assessment submitted with the subdivision consent application deemed it unlikely that any past activities would have resulted in land contamination. In the event of a 'discovery' of evidence to the contrary during the development process, the information would be brought to NZMCA's and DCC's attention, and the appropriate precautions taken, and any required approvals sought.

5.2.2 New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement 2010 sets out seven objectives and 29 policies in order to achieve the purpose of the RMA, being to promote the sustainable management of natural and physical resources in relation to the coastal environment of New Zealand.

The extent and characteristics of the coastal environment are outlined in Policy 1 of the NZCPS. This site is near to the coast situated on elevated land in the north-east corner of Blueskin Bay although no activities are proposed within the coastal marine area or area where coastal processes, influences or qualities are significant. However, of relevance to this site, the coastal environment also includes elements and features that contribute to the natural character, landscape, visual qualities or amenity values; and items of cultural and historic heritage in the coastal marine area or on the coast. Therefore, the NZCPS is relevant to this proposal. Further comment is provided in Section 8.2.1 of this application.

5.3 Heritage New Zealand Pouhere Taonga Act 2014

The Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) came into effect in May 2014, repealing the Historic Places Act 1993. The purpose of this act is to promote identification, protection, preservation, and conservation of New Zealand's historical and cultural heritage. Heritage New Zealand Pouhere Taonga (HNZPT) administers the act and was formerly known as the New Zealand Historic Places Trust (Pouhere Taonga).

Archaeological sites are protected under Section 42 of the HNZPTA, and it is an offense to carry out work that may "*modify or destroy, or cause to be modified or destroyed, the whole or any part of that site if that person knows, or ought reasonably to have suspected, that the site is an archaeological site*", whether or not the site has been previously recorded.

An application for an archaeological authority is required to be made in relation to the proposed activity. The archaeological assessment contained in Appendix C describes the statutory requirements, in particular the process and timeframes for the processing of an authority application.

An application for an archaeological authority is proposed to be made following a hui (we anticipate within the next few months) on site with Kāti Huirapa Runaka ki Puketeraki.

[8] SUB-2018-148 and LUC-2018-555
[9] Hazardous Industries and Activities List

5.4 Otago Regional Plans

5.4.1 Regional Plan: Water for Otago

The Regional Plan: Water for Otago (the Regional Water Plan) sets a framework to help manage Otago's freshwater resources, and the actual and potential effects of land use activities on fresh water.

The Regional Water Plan is relevant in relation to stormwater which is defined in the Plan as 'the water running off from any impervious surfaces such as roads, carparks, roofs and sealed runways'. Therefore, rules in relation to stormwater discharge apply where 'stormwater' is generated from impervious surfaces. Under this proposal, stormwater runoff will be generated from the accessway. Compliance with the permitted activity conditions in Rules 12.B.1.8 and 12.B.1.9 of the Regional Water Plan will be achieved.

5.5 Dunedin City Plans

5.5.1 Status of District Plans

Dunedin currently has two district plans, the Operative Dunedin City District Plan 2006 (ODP), and the Proposed Second Generation Dunedin City District Plan (2GP).

Consent is applied for under the ODP in respect of the use of the land zoned Rural, but not in respect to other activities on the land zoned Township and Settlement. All other activities are assessed under the 2GP.

5.5.2 District Plan Rules Assessment

A detailed assessment of the proposal against the provisions of the 2GP and the rural provisions of the ODP is contained in **Appendix J.** The Rules Assessment demonstrates that the proposal does not comply with several rules and as such resource consents are required as identified in Section 5.6 below.

5.6 Reasons for resource consent

The following activities require resource consent under the 2GP:

- The use of land zoned Township and Settlement for 'campground' activities (being a sub-category of visitor accommodation) by NZMCA members. Pursuant to Rule 15.3.3.22 this is a **restricted discretionary activity.**
- The following development activities in a residential zone on a scheduled heritage site, where visible from an adjoining public place:
    - The placement of a small structure which exceeds 2 m² building footprint (the proposed registration kiosk is approximately 10 m²). Pursuant to Rule 15.3.4.20 this is a **restricted discretionary activity**.
    - Parking loading and access which does not comply with performance standards 6.6.1.4, 6.6.1.5 and 6.6.1.6. Pursuant to Rule 15.3.4.22 this is a **restricted discretionary activity**.
- The use of land zoned Rural Coastal for 'campground' activities (being a sub-category of visitor accommodation) by NZMCA members. Pursuant to Rule 16.3.3.38 this is a **discretionary activity**.
- The following development activities in a rural zone on a scheduled heritage site, where visible from an adjoining public place:
    - The placement of a small structure which exceeds 2 m² building footprint (the proposed registration kiosk approximately 10 m²). Pursuant to Rule 16.3.4.17 this is a **restricted discretionary activity.**
    - Parking loading and access which does not comply with performance standards 6.6.1.4, 6.6.1.5 and 6.6.1.6. Pursuant to Rule 16.3.4.19 this is a **restricted discretionary activity.**
- The following Parking, Loading and Access standards under Rule 6.6.1 Car Parking Design:
    - The site (though not steep) does vary in grade and likely to exceed 1 in 20 over some parking areas. Therefore, resource consent is applied for out of caution pursuant to Rule 6.6.1.4 and is a **restricted discretionary activity.**

- Parking areas will not be 'hard-surfaced' or permanently marked. Pursuant to Rule 6.6.1.5 this is a **restricted discretionary activity**.
- It is expected that vehicles may enter / leave the site during night-time hours, however the site is not anticipated to be lit during this time. Pursuant to Rule 6.6.1.6 this is a **restricted discretionary activity**.

- Earthworks on a scheduled archaeological site are proposed without an archaeological authority first being obtained. It is noted that an archaeological authority will be applied for however not obtained at the time of lodging this application. Therefore, pursuant to Rule 8A.3.2.1 and Rule 13.3.3, this is a **non-complying activity**.
- The proposal will likely involve more than 200 m² of earthworks within the Rural Coastal / Natural Coastal Character part of the site. The total area is difficult to determine at this stage as will depend on final agreed treatment/cover of land in places. Therefore, consent is applied for out of caution pursuant to Rule 8A.3.2.3 in anticipation of potentially exceeding the 200 m² threshold and is a **restricted discretionary activity**.

The following activities require resource consent under the ODP:

- The use of land zoned Rural for 'campground' activities (being a sub-category of visitor accommodation) by NZMCA members. Pursuant to Rule 16.3.3.38 this is a discretionary activity.
- The proposed campground activity is not provided for as a permitted activity within the Rural zone, and does not fit comfortably within the definition of either a commercial residential or a recreation activity. Pursuant to Rule 6.5.7 this is a **non-complying activity**.

5.6.1 Activity Status

Under the RMA there is a well-established precedent for bundling together activities considered under different rule classifications where those activities are inextricably linked (i.e. one would not proceed without the other). There is a sufficient relationship between the activities that require resource consent in this case that it is appropriate to treat the application as one requiring overall assessment on the basis of the most restrictive activity. Consequently, the proposal overall is a **non-complying activity**.

6. Assessment of Effects

In accordance with Section 88 and the Fourth Schedule of the RMA, this section of the application provides an assessment of the actual and potential effects on the environment associated with the proposal.

6.1 Permitted baseline

An important consideration for the assessment of effects is the application of what is commonly referred to as the permitted baseline assessment. The purpose of the permitted baseline assessment is to identify the non-fanciful effects of permitted activities and those effects authorised by resource consent in order to quantify the degree of effect of the proposed activity. Effects within the permitted baseline can be disregarded in the effect's assessment of the activity.

In this instance, the site is located partly within the Township and Settlement zone and partly within the Rural Coastal zone. Properties to the north along Bay Road and in the vicinity have been developed for residential use. Further residential development is underway to the north east.

Due to the heritage status of the site, resource consent is required for earthworks in the absence of an archaeological authority. However, should an archaeological authority be obtained, the site may be developed with the following activities being permitted:

- Residential use on land zoned Township and Settlement at a density of not less than 500 m² of site area per residential unit, and may be built up to a height of 9 m. The residential zoned part of the site is approximately 7000 m².
- Community and leisure activities (up to 50 people)
- Accessory buildings for permitted activities

At 2.84 ha, the residential zoned part of the site could potentially be developed for residential use as a permitted activity, provided full compliance with the plan standards is achieved. As this part of the site is generally flat and devoid of structures, there would be little to no impediment to develop at the maximum capacity although access within the lot would need to be considered and may reduce the total capacity of development.

It is useful to consider this baseline when determining the difference in effects between a permitted activity and the proposed campground activity, noting that this proposal does not involve any built structures other than the small registration shed.

6.2 Effects on cultural and historical values

The majority of the area identified for parking is fairly flat with minor undulations. Some minor fill or scraping is preferred to provide a level surface. However, the ability to disturb the ground and place soil or other materials across the site is constrained due to the heritage status of the site as well as the conditions of the subdivision and land use consents requiring further assessment and approvals from Heritage New Zealand Pouhere Taonga (HNZPT) prior to any earthworks or development.

The site is also a Wāhi Tupuna Mapped Area under Manawhenua Section of the 2GP (Section 14) and the specified assessment criteria must be taken into account in relation to vegetation clearance.

Section 5 of the archaeological assessment should be referred to for details on the history of the site and previous investigations. In their assessment and site survey NZHP have identified where they believe the areas of interest to be. These areas are shown in Figure 3-2 above. There are two identified sites of significance, identified as I44/177 and I44/187. NZHP assessed that archaeological site I44/177 has moderate to high archaeological value. It holds high amenity and contextual value as a core part of the larger site complex of the Warrington Spit. Site I44/178 has a low archaeological value as an ephemeral site. While artefacts have been recorded there in the past, one midden has been encountered since. This evaluation is provided in Table 9-1 and 9-2 of the NZHP archaeological assessment.

The NZHP observed that the use of the project area as a formal motorhome and caravan park could increase the risk of damage to the two archaeological sites in the area. The NZHP note that the volume of heavy vehicles is likely to cause earth movement and has the potential to increase the erosion rate along the west coastline. In their assessment the NZHP state *'As earthworks are intended to be minor across the site, keeping with the natural ground and building up as much as possible, it is likely that less than half of the archaeological site I44/177 will be impacted'*.

NZHP commented that the proposed methods being investigated for building up and providing an increase buffer or barrier over the surface will mitigate the potential for damage across the site. Erosion will

be mitigated by the introduction of more plants; however, erosion on the western shore where no planting will take place has the potential to increase.

As described in Section 3.3.1 above, a pavement options memo has been prepared to investigate the different options which could be implemented to successfully avoid disturbing the historical areas while enabling the applicant to operate the motor caravan park on the site. The three options outlined in the memo address the different areas of the site which have variable vulnerability as well as anticipated (frequency of) use.

With particular regard to protection of artefacts in accordance with the pavement options memo, a geotextile fabric and geogrid reinforcement layer are proposed to be laid on the existing surface prior to the placement of a topsoil overlay. This has a two-fold benefit; firstly the geogrid layer helps spread any imposed traffic loading across a wider area minimising the chance of deformation and / or damage to near-surface artefacts. Secondly, the geofabric and geogrid layer provides a physical barrier that will highlight to anyone excavating on site, that they have reached the depth of archaeological significance.

It is proposed that the ground preparation works be undertaken in line with the recommendations by NZHP, and conditions to achieve this are proposed in Section 7 of this document. In addition, earthworks will be undertaken using best practice sediment control management methods to prevent sediment entering drainage pathways to the coastal marine area, or going across property boundaries.

In addition to the proposed ground treatment, in order to further mitigate the potential effects, the applicant is proposing to initially focus the majority of parking (46 No.) within the western part of the site. The proposed parking layout shows one row of parking on the eastern portion of the site to occur as 'Stage Two'. Two rows that run north to south are proposed to accommodate smaller vehicles (hence less weight) and the eastern row will be accessed from the west, which will reduce the need for vehicles to traverse on the eastern portion of the site. A strip of native planting will be included at the eastern edge of parking bays for shorter vehicles to further soften the visual impact of vehicles. This will also provide somewhat of a cordon to the eastern area for parking until such time that the proposed pavement option for the area of vulnerability has been installed. Signage within the kiosk will also be placed to reflect these instructions. This planted strip will likely be a raised mount (see image below) and therefore only minor excavation below the existing ground level will be required.

Image 3: Planted aisles which delineate parking bays

Image 4: Planted aisles which delineate parking bays

Figure 6-1: Examples of planted aisles at other NZMCA sites

During this stage minor filling to even out the surface, and landscaping will be undertaken. The NZHP state that in this southern parking area and towards the west shore, modern disturbance is visible along with a decrease in visible archaeological deposits. Therefore, NZHP believe there is a lower likelihood of encountering archaeological material during earthworks. Hence, the parking along the southern boundary (18 No.) would be retained to accommodate larger heavier vehicles as well as parking opposite. The eight parks opposite will also have a strip of native planting surrounding. Some of the existing vegetation in this area (large patch of vegetation in a hollow part of site) will need to be removed.

These features of the site layout are shown on the Landscape Plan at Appendix A and as Figure 6-2 below.

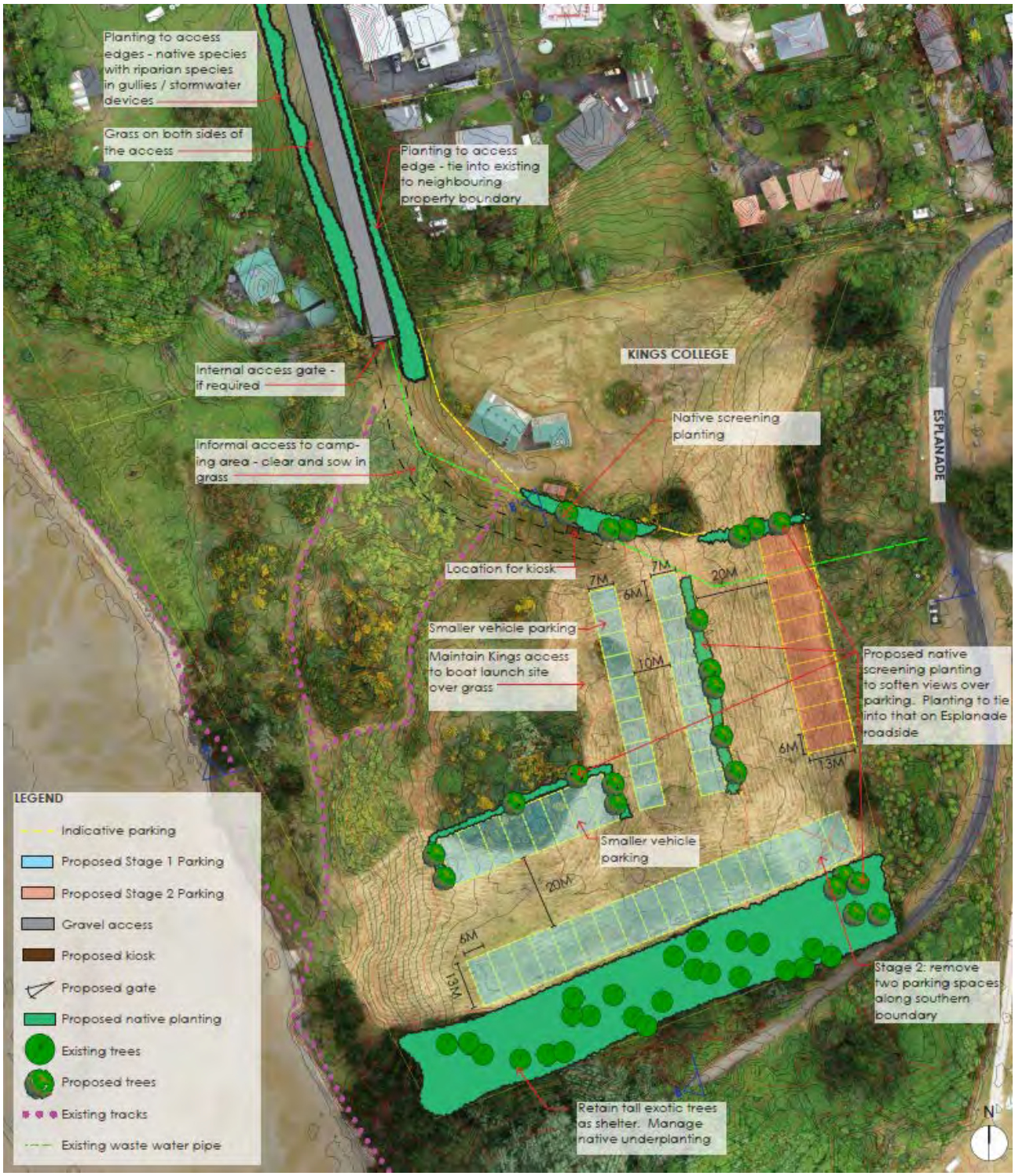


Figure 6-2: Snapshot of Landscape Plan showing proposed layout of parking bays and landscaping

Due to the significance of the site, the applicant will continue to consult with Kāti Huirapa Rūnaka ki Puketeraki and seek their opinion on the mitigation proposed. Notwithstanding, based on the findings and recommendations of NZHP, the proposed pavement treatment and use of the site will have minimal physical impact upon archaeological values of the site. Furthermore, as discussed in later sections, the proposed activity will mean that beyond the physical works proposed, the site will largely be maintained in a more rural state than if it were to be developed for residential purposes. For these reasons, adverse effects on heritage values are assessed to be less than minor.

6.3 Transport Effects

6.3.1 On-site movement and parking (surfacing and marking)

The 2GP requires that parking areas are designed so they are able to be drained from stormwater run-off, are hard-surfaced and that individual parking spaces are permanently marked. Hard surfacing contemplated under the 2GP provisions can comprise of impermeable or permeable surfacing including road metal used with a geogrid material matting or similar, GobiBlock, GrassPavers, PorousPave or hydropavers.

When considering the transport related effects of the proposal, discretion under the 2GP is restricted to 'Effects on the safety and efficiency of the transport network (Rule 6.10.5.6 of the 2GP). With particular regard to non-compliance with gradient, and surfacing and marking of parking areas standards, further assessment criteria are also outlined. The criteria includes that there is little likelihood of mud, stone gravel or other material being carried onto public roads of footpaths due to the topography of the site or materials used.

The applicant proposes to retain the existing grass cover over the site. The existing rural character within the coastal setting is what makes this site appealing. Hard-surfacing all the parking areas and marking these out would result in adverse effects on the existing rural character and coastal qualities of the area as well as adverse amenity effects on nearby properties with visibility of the site. These effects are further assessed in Section 6.4 and 6.5. Hard-surfacing would also require further intervention in terms of stormwater management.

Geotechnical advice (Appendix D) confirms that it is not recommended to construct impermeable paving directly on top of topsoil and therefore to provide a suitable impermeable surface the removal of topsoil would be required. Most critically as discussed in Section 6.2 above, the applicant does not want to disturb the ground wherever possible due to risk of disturbing or uncovering heritage artefacts.

Geotechnical testing confirms the soil is free draining and anecdotally from the temporary use of the site by NZMCA members there were no issues of rucking or trafficability on the site. The pavement options memo (Appendix F) also provides recommendations regarding the final treatment of surfaces and the ability to achieve suitable drainage. For these reasons, the proposed surface treatment is assessed to be fit for use and the effects of the activity as assessed against the matters of discretion are less than minor.

6.3.2 Effects on the safety and efficiency of the transport network

Vehicle movement is fundamental to the operation of the proposed activity. As discussed in Section 3.2.2, the maximum capacity of the site is proposed to not exceed 60 campervans/caravans, with less than half of this expected during quieter times of the year.

The ITA (**Appendix G**) has considered traffic routes, trip generation rates and the impact on the safety of the existing roading network including existing traffic volumes and safety at intersections.

The investigation of the expected traffic generation for the both stages of development indicates that the proposal could generate the following additional vehicle movements per day:

- Off peak season: 33-34 vehicle movements per day
- Peak season: 98-102 vehicle movements per day

The peak hourly traffic generation from the campground for the Stage 1 parking is expected to be less than 15 vehicles per hour (vph) or one vehicle movement every four minutes on average. The ITA states that this is not expected to be noticeable against the existing background movement volume of the network with one movement every one to two minutes. The second stage providing a further 10 sites would be expected to increase the peak hourly traffic in the summer to about 18 vph or one vehicle every three minutes. The ITA states that this level of increase is more likely to be noticeable to residents because of the existing low volumes of the road network but is unlikely to be noticeable to visiting drivers. With the low volumes of traffic using the access roads to Warrington already, there is ample network capacity to accommodate the additional traffic movements with minimal adverse effect on the transport network. The increased volumes resulting from the activity would not be expected to contribute to any noticeable delays at intersections or reduced safety.

The timing of these movements is also important to consider. As NZMCA campsites are a recreational land use, their peak hours do not coincide with typical commuter peak hours. Furthermore, there are no schools near to this site which would result in school and site traffic coinciding.

Overall, the ITA concludes that while these increases appear relatively large, this reflects the low existing volumes on the road network in Warrington. In practice, the increase represents less than one additional movement every four minutes which is unlikely to be noticeable because of the wide variation in hourly and daily volumes on the Warrington roads.

Taking this information from the ITA into account, some comparison could be given to vehicle movements which may be anticipated from permitted residential activities. Based on the residential zoned part of the site being developed to contain one residential unit, an average of between 10 and 12 traffic movements per day might be expected[10]. If the site were to be developed to the maximum density of 14 residential units (based on the residential zoned area of 7000 m²) then 140 to 168 vpd might be expected. Conservatively due to site constraints, if four residential units were developed (approximately a third of what the density allows), then 40 – 48 vehicle movements might be expected daily. With this in mind, the anticipated vehicle movements associated with the proposal are substantially lower than would be anticipated if developing the site in line with the permitted residential density.

For the reasons discussed above, it is concluded the proposal provides for the safe and efficient integration within the existing transport network and that the surfacing within the site is appropriate. The effects of the activity on the safety and efficiency of the transport network are therefore less than minor.

6.4 Effects on residential amenity

The use of residential zoned land for visitor accommodation (campground) is a restricted discretionary activity subject to compliance with relevant performance standards. On land zoned Rural Coastal the use of land for a campground is a discretionary activity.

As this application holds a non-complying activity overall, Councils discretion is unrestricted, however, the matters for discretion are useful for assessing the effects of the campground activity. Effects are restricted to those on surrounding sites' residential amenity and in particular for campground activities:

- Limits on the scale of the activity
- Location of dump stations (for disposal of waste from motor homes) away from boundaries with residential properties
- Restrictions on location and hours of operation of generators to minimise any effects from noise on neighbours
- Road upgrades necessary to handle the amount and type of vehicles anticipated
- Location, screening, or acoustic fencing of communal outdoor living/ gathering areas.

These matters are assessed in the sections to follow.

The site is currently vacant land and no structures are proposed as part of the campground activity with the exception of the small registration shed approximately 10m² and possibly a small wastewater dump station, similar to the public facility at Warrington Domain. The most recent use of the site was as a rural activity (stock grazing), and the eastern corner is currently used by Kings High School for outdoor education.

When viewed from the Warrington Domain, the site is substantially obscured by established mature vegetation along the eastern boundary. Images in Figure 6-1 show the freedom camping area within Warrington Domain. The top of the Kings High School building can be seen in the background in the image on the right.

There are large established trees and vegetation on the northern boundary common with the adjoining property at 10 Bay Road that provide dense screening of the site when viewed from that property. This is similar for the property at 22 Bay Road. The property at 28 Bay Road has a clear view to the south over the site. Their view to the west and out to the coast is understood to be largely obstructed by the existing Kings High School building.

Based on the site visit and site photos it is understood that only 10 Bay Road currently has a clear view west out to the coast over Blueskin Bay.

The pine shelter belt provides dense screening of the site from the south. Due to the length of the driveway and that the site is situated at a lower elevation than the road, the site is not visible from the road.

[10] This is based on 10-12 typical vehicle movements per unit of residential activity in an urban environment. For a rural environment this is reduced to approximately 8 vehicle movements.

Figure 6-3: Freedom camping at Warrington Domain adjoining eastern boundary of the site

6.4.1 Visual effects on landscape and amenity values

The main visual effect associated with the proposal will arise from CSC vehilces parking within the site, primarily due to the nature, colour and design of CSC vehicles. These vehicles are primarily white and are easily discernible. Members may set up their awings, table(s) and chair(s) around the vicinity of their vehicles. Members might on the occasion set up a small tent beside their vehicle (for example children or grand-children sleeping in a tent next to the motorhome) provided the total number of people camping does not exceed the total permitted on the CSC vehicle certificate.

Although these vehicles may be visible, their bulk is less than a typical residential building and/or shed, and as they are temporary will provide for a changing view. As previously noted, the applicant expects that consistent with usage data at other sites, use during shoulder seasons and winter months will be less than half the numbers during the busiest of times and full capacity of their sites usually only reached on a few nights of the year.

Areas of paving will also be avoided, the applicant preferring to maintain the area primarily in grass with the exception of bunded and landscaped aisles as shown on the Landscape Plan (Appendix A). In doing so, the rural character of the application site will dominate for much of the year.

The site will be visually separated from the Kings College buildings and surrounding residential properties with native planting to the northern boundary of the application site and to demarcate parking aisles. This multi layered planting is to be of a depth and height to assist with visual screening of camper vans and vehicles to adjacent properties. Planting will be established or supplemented next to existing vegetation. All planting on site is to be native and eco-sourced, based on the list provided with the appended landscape plan.

While other potential visual effects could arise due from poor site management such as accumulation of rubbish or lack of maintenance, the applicant will provide site management oversight by local members who are appointed as park custodians backed by the NZMCA National Office, and through the implementation of the NZMCA Environmental Care Code and Membership Code of Conduct.

Traffic movements and noise will also have a bearing on amenity. These issues are discussed under Section 6.4.2 below.

In summary, the proposed activities will not be visible from the road or clearly visible from the public area to the east. Visibility of the activity from neighbours to the north (at 10 and 22 Bay Road) is also screened due to existing vegetation and/or the Kings High School building.

While aspects of the proposed activities will be visible from the neighbouring site at 28 Bay Road, they will not detract from views of the coast as these are understood to be obscured by the existing Kings High School activity and adjacent development, and therefore minimised.

Mitigation planting as indicated on the landscape concept plan as well as measures to minimise the development of the site (such as retaining the area in grass) will assist in the visual integration of the development into its rural coastal environment. The proposed camping activities will not be visually

prominent beyond the immediate area and will not dominate or detract from views otherwise characterized by the natural landscape and surrounding residential activity. For these reasons, the visual effects on landscape and residential amenity from the proposal have been assessed as being less than minor.

6.4.2 Operation and noise

In considering the degree to which the hours of operation may affect the residential environment, reference is made to the assessment in Section 6.3.2 above in terms of vehicle movements. The ITA conclusions demonstrate that there is ample capacity to accommodate the additional traffic movements with minimal adverse effect on the network. However, it is more likely to be noticeable to residents due to the existing low volumes of the road network. Vehicles will generate noise as they enter and exit the site, however these movements will occur mainly during daylight hours, between 9:00am and 4:00pm. As noted above, some comparison could be given to vehicle movements as well as other noise generating activities which may be anticipated from permitted residential activities. In comparison, the site being used as proposed would be less occupied throughout most of the year than permanent residences. Vehicle movements would be comparable (depending on the density of development) and residential activity would likely generate greater vehicle movements during peak travel times. As such, any adverse effects on the residential environment arising from the proposal would be less than what could be anticipated to occur with the level of activity associated with residential development.

The noise emissions memo (Appendix H) states that a conservative value for vehicle drive-by noise may be taken as 75 dB LAmax at 7 m from the nearside wheel path, representing the typical vehicle drive-by sound level on gravel. Engine noise contributes to noise effects at low frequencies, but the crunch of the gravel was the dominant source of noise generation in determining the maximum drive-by level. Vehicles entering and existing are also expected to be travelling quite slowly and therefore much more quietly

With particular reference to night-time activities and noise, the conclusions of the noise emissions memo are also useful to inform the anticipated noise effects from the use of generators at stationary campers. With regard to gas-powered generators there is some variation between noise emission levels. The noise emission of a single generator at full load may be conservatively estimated as 63 dB LAeq(15min) at 7 m.

NZMCA members report that they use powered sites (where available) and solar panels in preference to gas-powered generators, but that sometimes generator usage was necessary, particularly in winter. Sites at this campground will not be powered. The noise emissions memo observes that generator usage is typically for no more than 2.5 hours at a time. In order to maintain the semi-rural environment and to limit the possibility of night-time disturbance, the applicant proposes a condition preventing the usage of gas-generators at this site between the hours of 8:00 pm and 8:00 am on any day.

In summary the potential effects on surrounding sites' residential amenity are adequately avoided, remedied or mitigated to be overall less than minor.

6.5 Effects on rural character within coastal setting

The proposed campground has the potential to detract from existing natural patterns and processes within the surrounding landscape and effects on elements and natural features contributing to the coastal setting.

Natural and coastal character is somewhat limited within the site proper where a large majority of the site has been previously modified and used as pastoral land. However, there remains some native vegetation and steep land formation down to the coast particularly in the north-west of the site, in keeping with the coastal setting of the peninsula.

The landscape character of the site will be changed by the development, but the proposed layout and design of the parking and mitigation measures such as planting and proposed treatment of surfaces means that this development can be integrated with the receiving environment without affecting the wider rural character and qualities of the coast. Although vehicles may be visible, their bulk is less than a typical residential building and/or shed, and as they are temporary will provide for a changing landscape and can be better visually absorbed within the broader scale of the peninsula.

Mitigation planting as indicated on the landscape plan as well as measures to minimize the urban feel of the parking bays, such as retaining grass cover, will assist in the integration of the development into the rural coastal environment. The activity will not be visually prominent beyond the immediate area and will not dominate and detract from views otherwise characterized by natural landscapes.

Further, the proposed development will maintain or enhance the quality and character of the coastal character when taking into account the physical, visual, appreciation and cultural attributes of the site, which have largely been addressed in the assessment above.

For these reasons, the effects of the proposal on the rural and landscape character within the coastal setting have been assessed as less than minor.

6.6 Positive effects

The use of this site by NZMCA has positive social, economic and environmental effects to both NZMCA members and to the local community.

While the NZMCA caters for all ages, generally retiree's make-up the larger demographic of members. This means that NZMCA camp sites across the country enable members to camp together in a safe and exclusive area with a minority of younger campers or international visitors freedom camping.

Economically, users of the site will spend money in the local area, visiting nearby businesses for supplies, meals and other tourist attractions. The proposed activity will therefore support domestic tourism which is particularly important in the post-COVID-19 environment.

Despite some clearance of vegetation, the proposed activity will mean that the site will be generally maintained in a somewhat open and rural state with the retention and re-establishment of native vegetation and appropriate management/maintenance of the grassed parking areas.

The anticipated long-term use as a campground will also mean that the site will not be alternatively developed for residential purposes. This protects the site from future urban development, enabling a more open and green space to be maintained and meaning there will be no significant earthworks, structures or other modifications to the current site. This in turn will enable the protection of the cultural heritage of the site in particular, artefacts remaining under the surface in situ. The applicant will continue to work with the Rūnaka to protect the archaeological values of the site, while operating the proposed members' only camping ground. The applicant is interested in ways in which they can educate its members about the cultural and heritage significance of the area, for example by way of on-site signage and information through its communication channels.

6.7 Effects summary

Taking into account the proposed methodologies and appropriate management of camping activities, including proposed landscaping, pavement design, parking layout and compliance with hours of generator usage in response to the sensitivity of the receiving environment, overall the effects discussed above are appropriately avoided, remedied and mitigated to be less than minor.

7. Proposed Consent Conditions

Based on mitigation measures set out within this AEE in order to address the effects that may arise from the proposed activities, the applicant proposes a number of conditions. These are set out in **Appendix K**.

8. Statutory Assessment

8.1 Section 104D

The proposed activity is a non-complying activity under the provisions of the 2GP, as earthworks are proposed on a scheduled heritage site and an archaeological authority. In order for the application to be considered for approval under s104B of the RMA, the proposal must satisfy at least one of the subsections of section 104D of the RMA, known as 'gateway tests'.

Section 104D(1) of the RMA states that:

> *Despite any decision made for the purpose of notification in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either—*

(a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or

(b) the application is for an activity that will not be contrary to the objectives and policies of—

(i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or

(ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or

(iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.

The effects assessment in section 6 of this application demonstrates that the proposal will result in effects on the environment that are less than minor. Therefore, the application satisfies the gateway test under s104D(1)(a).

Notwithstanding, an assessment of the proposal against the objectives and policies of the relevant statutory planning documents is provided in Section 8.2 below. The assessment concludes that the proposal will also achieve the objectives and will be consistent with the policies of the 2GP and the anticipated outcomes for the Dunedin Region. The gateway test under s104D(1)(b) is also satisfied and as such the proposal can be considered and determined under Section 104B.

8.2 Section 104

Section 104 of the RMA sets out the matters to which, subject to Part 2 of the RMA, the consent authority must have regard when determining an application for resource consent. Those matters include any actual or potential effects of allowing the activity, and the relevant provisions of any applicable statutory planning instruments.

The actual and potential effects of the proposed activities are assessed, as required by Section 104(1)(a) of the RMA, within Section 5 of this application. The matters that are of relevance in considering these applications, as required by Section 104(1)(b) of the RMA, are:

- New Zealand Coastal Policy Statement 2010
- Otago Regional Policy Statement;
- Proposed Second Generation District Plan (2GP)
- Operative District Plan (Rural only)

Further, under s104(1)(c), the consent authority is, in the case of a non-complying activity, able to consider any matter which is relevant and reasonably necessary to determine the application.

8.2.1 New Zealand Coastal Policy Statement

The NZCPS contains a number of objectives and policies that are relevant to the coastal environment.

Objectives 1, 2, 3 and 6 of the NZCPS are relevant to the proposal. Objective 1 is to safeguard the integrity, form, functioning and resilience of the coastal environment including maintenance of coastal water quality. Objective 2 is to preserve the natural character of the coastal environment and Objective 3 is to take account of the principles of the Treaty of Waitangi. Objective 6 is to enable people and communities to provide for their social, economic and cultural wellbeing and their health and safety, through subdivision, use and development.

The extent and characteristics of the coastal environment are described in Policy 1, and as discussed in Section 5.1.2, these exist on the application site.

Objective 2 is implemented by Policy 6, which provides for activities in the coastal environment. The visual impacts of the proposal have been considered and are either avoided or mitigated due to separation, screening and landscaping that is in keeping with the existing natural coastal character, and primarily by retaining the open space of the site as free of structures. Policy 13 is also relevant in terms of preservation of natural character. The proposed use will protect the site from future urban development, enabling a more natural rural character to be maintained and means that no significant excavations occur over the site. By avoiding hard-surfacing within the site this also preserves the natural character of the coastal environment.

Objective 3 is implemented by the measures outlined in Policy 2. Outside the immediate vicinity of the proposed activities on the application site, adverse effects on the environment are not anticipated, and

effects on the relationship of tangata whenua with the coastal marine area are not anticipated. The applicant has to date, and will continue to engage with tangata whenua throughout this process to ensure cultural and heritage values of the site are appropriately safeguarded.

For these reasons, the proposal is consistent with intent of the NZCPS.

8.2.2 Otago Regional Policy Statement

The Regional Policy Statement (RPS) sets the direction for the future management of all of Otago's significant resource management issues which includes land, water, air, the coast, built environment, biota, natural hazards, energy and wastes.

The policy statement also seeks to provide for the values held by tangata whenua and the priorities expressed by the wider Otago community.

Three inter-related outcomes are sought in managing the region's resources:

- Otago has high quality natural resources and ecosystems
- Communities in Otago are resilient
- People are able to use and enjoy our natural and built environment

As demonstrated throughout this application, the proposal gives due consideration to the provisions and outcomes of the Otago Regional Policy Statement and is consistent with the anticipated outcomes for the Otago Region.

8.2.3 Dunedin District Plan

Table 8-1 and Table 8-2 identifies the key provisions of the district plans that are relevant to the proposal, finding that the proposal meets the relevant objectives, and is consistent with the policies.

Table 8-1: Key provisions of the 2GP

Relevant Provisions	Comment
Residential Objective 15.2.1 Residential zones are primarily reserved for residential activities and only provide for a limited number of compatible activities, including: visitor accommodation, community activities, major facility activities, and commercial activities that support the day-to-day needs of residents. *Policy 15.2.1.2* *Provide for a limited range of major facility activities and commercial activities, including dairies, registered health practitioners, training and education, and visitor accommodation, where the effects of these activities will be managed in line with objectives 15.2.3 and 15.2.4, and their policies.*	Visitor accommodation may be provided within the residential zone as per this objective. Although the NZMCA vehicles may be visible, their bulk is less than a typical residential building and/or shed, and as they are temporary will provide for a changing view. Areas of paving will also be avoided, the applicant preferring to maintain the area primarily in grass with the exception of bunded and landscaped aisles as shown on the Landscape Plan. In doing so, the open space rural character of the application site will be maintained. This will also reduce the visual impact of the activities on the site. Mitigation planting as indicated on the landscape concept plan as well as measures to minimize the potentially urban feel of the camping activities, such as retaining the area in grass, which will assist in the integration of the development into its rural coastal environment. The proposed camping activities will not be visually prominent beyond the immediate site once vegetation has matured and will not dominate or detract from views otherwise characterized by the surrounding natural landscape and residential activity. For these reasons the proposal will achieve this objective and be consistent with this policy.

Relevant Provisions	Comment
Objective 15.2.3 Activities in residential zones maintain a good level of amenity on surrounding residential properties and public spaces.	The site is not clearly visible from the adjoining public areas (in particular the road and the Warrington Domain to the east) and is screened from neighbouring residential properties to the north with the exception of No.28 Bay Road. The site will be maintained in grass with additional planting strips and continued maintenance of the site. As discussed in Section 6.4, the potential effects on surrounding sites' residential amenity are adequately avoided, remedied or mitigated and will achieve this objective.
Objective 15.2.4 Activities maintain or enhance the amenity of the streetscape, and reflect the current or intended future character of the neighbourhood. *Policy 15.2.4.7* *Only allow schools, emergency services, early childhood education, community and leisure - large scale, sport and recreation, registered health practitioners, training and education, visitor accommodation, supported living facilities, restaurants or retail ancillary to sport and recreation, service stations and stand-alone car parking where they are designed and located to avoid or, if avoidance is not practicable, adequately mitigate, adverse effects on streetscape amenity.*	The site is not clearly visible from the adjoining public areas (in particular the road and the Warrington Domain to the east). As assessed in Section 6 of this application, the effects from locating the proposed camping activities at this site are adequately avoided, remedied or mitigated and therefore, achieves this objective and consistent with this policy.
Rural Objective 16.2.2 The potential for conflict between activities within the rural zones, and between activities within the rural zones and adjoining residential zones, is minimised through measures that ensure: a. the potential for reverse sensitivity in the rural zones is minimised; b. the residential character and amenity of adjoining residential zones is maintained; and c. a reasonable level of amenity for residential activities in the rural zones. *Policy 16.2.2.3* *Require all new buildings to be located an adequate distance from site boundaries to ensure a good level of amenity for residential activities on adjoining sites.*	The site is split zoned, the western part of the site being zoned Rural Coastal. The site is not clearly visible from adjacent residential activity and not visible from the road. The site is currently vacant and grassed and therefore currently has a more rural than residential character. Grass cover will be maintained across the site in keeping with the existing rural character. Clearance of weed species and planting (and maintenance) of native vegetation on the site will enhance the amenity values on the site. Only one small shed is proposed (approximately 10m² in area) and is located at least 90-100 m away from the nearest residential activity. Further to above, natural features will be the most prevalent feature of the site. The proposed parking bays will cover less than 50 % of the site. The highest occupancy at the site is anticipated to occur only over a few nights in a year with less than half occupancy in the shoulder and winter months. The majority of the site will remain in grass and planting. For these reasons the proposal will achieve these objectives and be consistent with the respective policies.
Objective 16.2.3 The rural character values and amenity of the rural zones are maintained or enhanced, elements of which include: a. a predominance of natural features over human made features; b. a high ratio of open space, low levels of artificial light, and a low density of buildings and structures;	

Relevant Provisions	Comment
c. buildings that are rural in nature, scale and design, such as barns and sheds; d. a low density of residential activity, which is associated with rural activities; e. a high proportion of land containing farmed animals, pasture, crops, and forestry; f. extensive areas of indigenous vegetation and habitats for indigenous fauna; and g. other elements as described in the character descriptions of each rural zone located in Appendix A7.	
Transportation <u>Objective 6.2.3</u> Land use, development and subdivision activities maintain the safety and efficiency of the transport network for all travel modes and its affordability to the public. *6.2.3.4 Require land use activities to provide the amount of parking necessary to ensure that any overspill parking effects that could adversely affect the safety and efficiency of the transport network are avoided or, if avoidance is not practicable, adequately mitigated.*	The effects of the additional traffic have been considered and assessed through the ITA and in Section 6 of this application. The proposed vehicle movements are able to be provided for safely with minimal effect on the existing road network and all parking associated with the activity will be provided for on site. Therefore the activity will achieve this objective and is consistent with this policy.
<u>Objective 6.2.4</u> Parking areas, loading areas and vehicle accesses are designed and located to: a. provide for the safe and efficient operation of both the parking or loading area and the transport network; and b. facilitate the safe and efficient functioning of the transport network and connectivity for all travel modes.	The proposal provides for the safe and efficient integration within the existing transport network and that the surfacing within the site is fit for use. The proposed surfacing allows the site to be used safely and efficiently while protecting the unique heritage of the site. The width of the driveway is sufficient to allow the type and number of vehicles (including emergency vehicles), likely to be using it to do so safely and efficiently. The campground (parking activities) are sufficiently setback from neighbouring activities so as not to cause nuisance. For these reasons the proposal will achieve this objective and be consistent with the respective policies.
Manawhenua <u>Objective 14.2.1</u> The relationship between Manawhenua and the natural environment is maintained or enhanced, including the cultural values and traditions associated with: a. wāhi tūpuna; b. mahika kai; and c. occupation of original native reserve land through papakāika.	The proposed development will maintain or enhance the quality and character of the coastal character when taking into account the physical, visual and cultural attributes of the site, which have largely been addressed in the assessment above, and therefore will achieve this objective.

Table 8-2: Key provisions of the ODP

Relevant Provisions	Comment
Rural Objective 6.2.2 Maintain and enhance the amenity values associated with the character of the rural area. Objective 6.2.3 Provide for rural residential development in a sustainable manner to avoid as much as practicable: Locations subject to potential natural hazards; or locations within Landscape Management Areas; Or areas that are identified on District Plan Maps 75, 76 and 77 as containing 'high class soils'; Or areas where development may result in adverse effects on the sustainable provision of infrastructure. Objective 6.2.4 Ensure that development in the rural area takes place in a way which provides for the sustainable management of roading and other public infrastructure. Objective 6.2.5 Avoid or minimise conflict between different land use activities in rural areas. Objective 6.2.6 Maintain and enhance the life-supporting capacity of land and water resources. Objective 6.2.7 Maintain and enhance the natural character and amenity values of the margins of water bodies and the coastal environment.	These objectives and related policies achieve the same purpose as provided for under the proposed 2GP and therefore the assessment provided above shall be referred to in relation to these policies. For the same reasons as outlined above, the proposal will achieve these objectives and be consistent with the associated policies under the ODP.

8.3 Other Matters

Section 104(1)(c) of the Act also states that consideration must be given to "any other matters that the consent authority considers relevant and reasonably necessary to determine the application." There are not considered to be any other matters of relevance.

9. Part 2 of the RMA

The sustainable management purpose and principles of the RMA are set out in section 5, directing that sustainable management of natural and physical resources is to be achieved while enabling communities to provide for their social, economic, cultural and environmental wellbeing.

With respect to the purpose and principles contained in sections 5 to 8 of the Act, the proposed camping activities are consistent with the sustainable management approach of the Act by appropriately maintaining an existing resource while avoiding, remedying and mitigating any adverse effects of the activities on the environment.

9.1 Section 6

Section 6 of the RMA identifies matters of national importance that decision makers are required to recognise and provide for when making resource management decisions. The matters of specific relevance to this proposal are:

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

(e) The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu, and other taonga.

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

The proposed development will maintain the quality and character of the existing rural character within this coastal setting when taking into account the physical, visual and cultural attributes of the site, which have been addressed in the assessment above.

The existing character within the coastal setting is what makes this site appealing. Hard-surfaced parking areas and marking these out have been avoided so as to preserve the landscape and coastal character of the area as well as to reduce the adverse amenity effects on nearby properties with visibility of the site. Existing vegetation will be largely retained with native planting proposed in certain areas. All planting on site is to be native, and eco-sourced, based on the list provided.

With particular regard to protection of the unique cultural heritage of this site, careful consideration has been given to options for provided a protective layer over the existing ground surface. These benefits are two-fold, firstly the geogrid layer helps spread any imposed traffic loading across a wider area of the existing ground minimising the chance of deformation from occurring and / or damage to near surface artefacts. Secondly, the geofabric and geogrid layer provides a physical barrier that will highlight to anyone excavating on site, that they have reached the depth of archaeological significance.

In achieving the purpose of the RMA, the matters of national importance set out in s6 RMA are provided for through the proposed use of the site maintaining the grass cover and landscaping to be in keeping with the existing rural character and the coastal environment setting. Overall, the project provides community and environmental benefits.

9.2 Section 7

Section 7 identifies other matters to which regard must be had by decision makers when considering the appropriateness of resource use and development. The matters of specific relevance to this proposal are:

(a) Kaitiakitanga:

(aa) The ethic of stewardship

(b) The efficient use and development of natural and physical resources:

(c) The Maintenance and enhancement of amenity values:

(f) Maintenance and enhancement of the quality of the environment:

The RMA defines kaitiakitanga as the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Maori in relation to natural and physical resources, and includes the ethic of stewardship. Section 7(a) provides recognition that kaitiaki need to be provided with the opportunity to exercise guardianship of the natural and physical resources within their area of influence in accordance with tikanga Māori.

The applicant has and will continue to engage with Kāti Huirapa Rūnaka ki Puketeraki through this process.

The potential adverse effects on the environment arising from the proposed campground activity at the site will be appropriately managed to ensure any adverse effects are adequately avoided, remedied and mitigated. The applicant aims to efficiently use the site to achieve the desired occupancy without over-crowding and will maintain the site as close to its current natural state as possible. The applicant proposes to furthermore, clear existing weeds and replant native species in keeping with the coastal environment setting. As such, the proposal has particular regard to 7(f).

For these reasons, it is concluded that the matters in section 6 of the RMA are recognised and provided for, regard is had to matters in section 7 of the RMA, and overall the purpose of Part 2 of the RMA will be achieved by allowing this proposal.

10. Conclusion

As a non-complying activity, the consent authority has the discretion to grant or refuse the application. The effects assessment in section 6 of this application demonstrates that the proposal will result in effects on the environment that are less than minor. Therefore, the application satisfies both gateway tests under s104D(1) and can be considered under s104B of the RMA.

The physical works will be managed in a way that minimises any adverse effects on cultural heritage values, while providing adequate surfacing which allows the site to be used safely and efficiently by NZMCA members. The proposal provides for the safe and efficient integration within the existing transport network. With the low volumes of traffic using the access roads to Warrington already, there is ample capacity to accommodate the additional traffic movements without generating any adverse effects on the network. The increased volumes would not be expected to contribute to any noticeable delays at intersections.

Overall, the effects of the proposed activities can be managed so that they are no more than minor. The activity will achieve the purpose of the RMA, and will achieve the objectives and is consistent with the policies of the relevant statutory documents.

Given the minor scale and nature of the effects of the activity, it is considered that this application can be processed on a non-notified basis.

Appendices

Appendix A Landscape Plan

Appendix B Consent Decision 2019

Appendix C Archaeological Assessment

Appendix D Geotechnical Input

Appendix E NZMCA Member Requirements

Appendix F Pavement Options Memo

Appendix G Integrated Transport Assessment

Appendix H Noise Emissions Memo

Appendix I Consultation

Appendix J Rules Assessment

Appendix K Proposed Conditions

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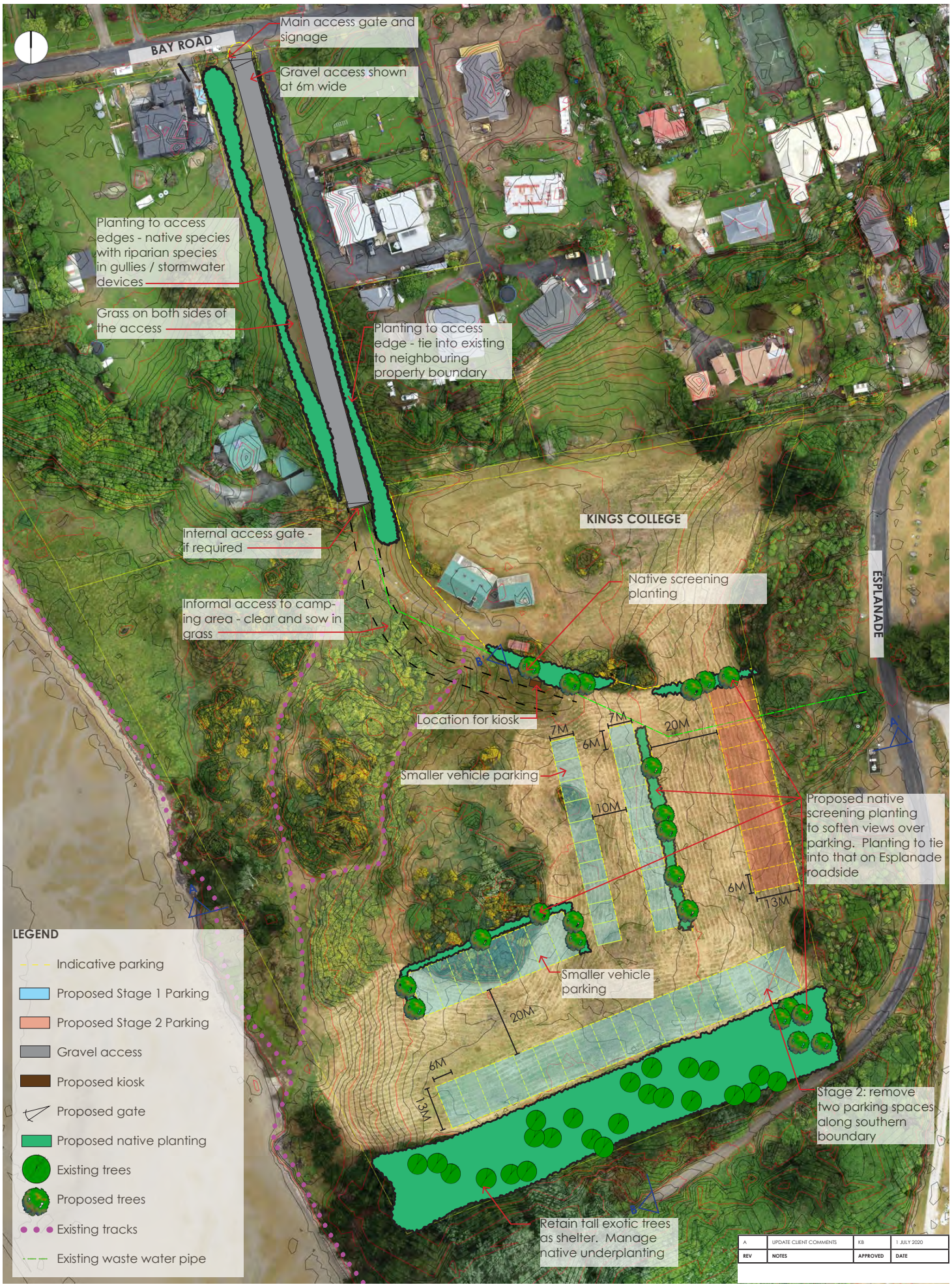
Please visit **www.stantec.com** to learn more about how Stantec design with community in mind.

Stantec

Appendices

Appendix A Landscape Plan



REV	NOTES	APPROVED	DATE
A	UPDATE CLIENT COMMENTS	KB	1 JULY 2020

NZMCA - 20 BAY ROAD WARRINGTON

LANDSCAPE PLAN

SHEET 1 OF 2

1:1000 @ A3

0M 10M 20M 30M 40M 50M

DRAWN	KT	CHECKED	KB	REVIEWED	KB	APPROVED	DE

FOR CONSENT | 30 JUNE 2020

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Landscape Design

The NZMCA site at 20 Bay Road Warrington, lies approximately half an hour drive north of Dunedin via SH1 and the Coast Road. The site, not currently owned by the NZMCA, is vacant except for a building in the north-east corner which is used by Kings High School for outdoor education activities. The NZMCA have used the site for a short-time in the past as a short stay motor caravan park, under a previous informal arrangement with the current land owner. The NZMCA are investigating the permanent use of the site as a campground. Primary access to the site will continue to be from Bay Road. Pedestrian access to the coastal pathway, south of the site, will remain unchanged. Access arrangements with Kings High School will also be maintained.

20 Bay Road forms part of a small coastal peninsula bound by the calm waters of Blueskin Bay to the west, highly valued for recreational pursuits, and the Pacific Ocean to the east. There is an existing freedom camping site at the neighbouring Warrington Domain (managed by Dunedin City Council) off the Esplanade Road to the east. The site overall has a dome shape, with gently undulating plateau above the bay. The settlement of Warrington gives way to Porteous Hill, Hammond Hill and the Silver Peaks Range beyond, that provide the inland backdrop to the site.

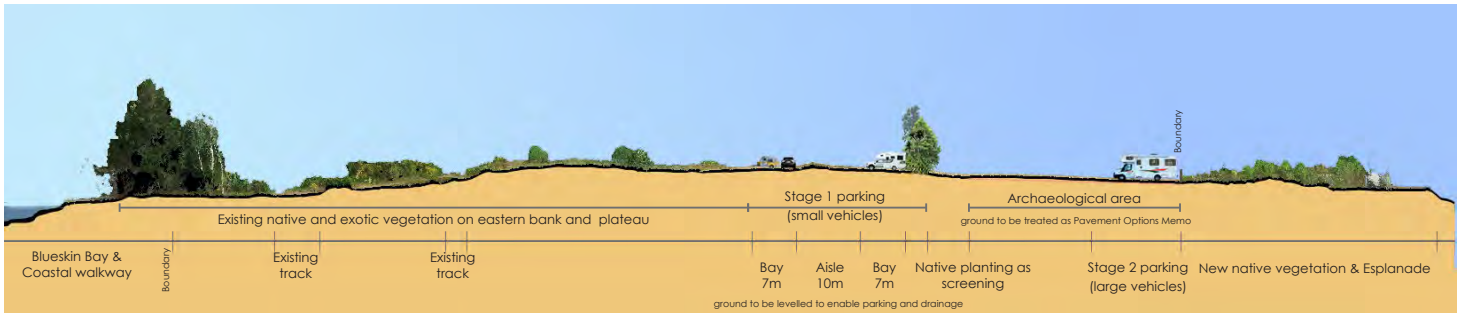
On the western side, the site rises up inland from Blueskin Bay, with the existing coastal pathway outside the site boundary. A broad grass bank forms the main access down to the waters edge, with the remainder of the eastern bank covered in low growing scrub, in predominantly exotic weed species. The scrub is bisected by a small network of trails enabling walking and cycle access to and from the coastal pathway and the bay. The site is surfaced in pasture grass that is maintained by the landowner. Pockets of native and exotic vegetation, dominated by Ngaio, bracken, grass species and gorse exist at the top of the plateau on the eastern side. The site is sheltered from southerly winds by a wide strip of mature pines that run the length of the southern boundary. The land immediately beyond the eastern boundary of the site has been restored with native planting (Pittosporum, Mapou, Ti kouka, Toetoe and Harakeke, among others) that has achieved a suitable height and ground coverage.

Access to the site is from Bay Road, down a gravel driveway, shared with the Kings High School property. The accessway is proposed to be widened to 6m. The gravel formation will end at the shared way between the camping area and the Kings College site. From there NZMCA members, as per membership rules, will travel along an unformed track, of which scrub will need to be cleared to enable, and sign in on arrival at a small kiosk on the northern boundary. The site will be visually screened from the Kings High School buildings and surrounding residential properties with native planting to the northern boundary. This multi layered planting is to be of a depth and height to enable visual screening of camper vans and vehicles to adjacent properties. All planting on site is to be native, and eco-sourced, based on the list provided.

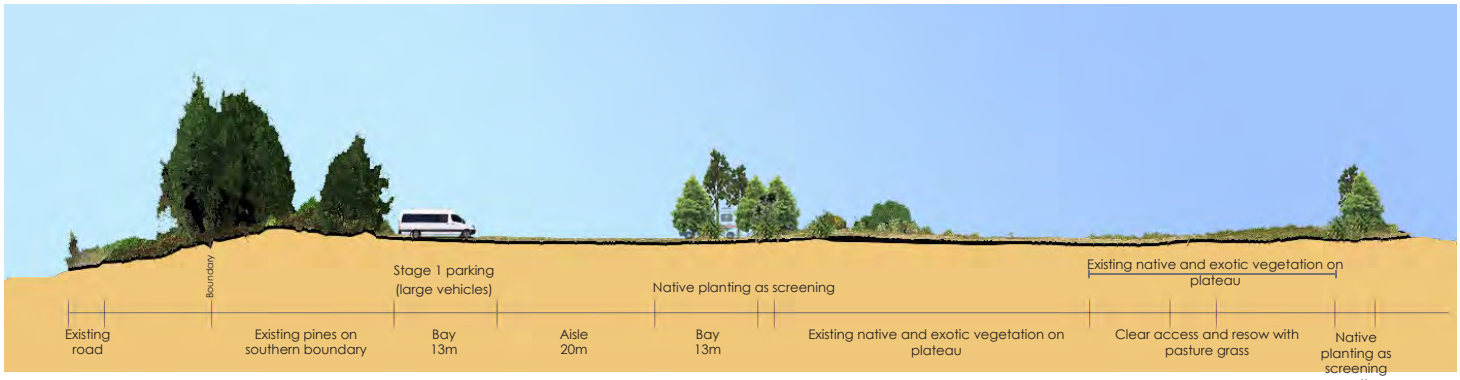
Parking as part of the Stage 1 proposal is focussed in the western part of the site. Small vehicles will be able to park in 20 No. bays, two rows that run north – south at the edge of the existing scrub. A strip of native planting will be included to the eastern edge of this to further provide screening to adjacent properties. Larger vehicles can park on the southern boundary (18 No.) and opposite, with a 20 m isle between. The eight parks opposite will also have a strip of native planting surrounding. The stand of pine trees on the southern boundary is to be retained and managed by the NZMCA.

Stage 2 parking will be along the eastern boundary, subject to archaeological protocols to protect artefacts. Surface treatment and drainage requirements are discussed in the Pavement Options Memo and the application for resource consent.

Cross Sections



Section A-A'



Section B-B'

Plant Lists

The soil is free draining with a sand base, and the site is largely dry throughout the camping season. The western edge of the peninsula is shown as Sand Dune Forest on the Dunedin City Council Native Planting Guide. The following species are recommended based on their suitability as 'generalists' and to flourish on 'dry sites' in the DCC NPG Sand Dune Forest list[1]. The DCC list is supplemented with native species observed on Esplanade, beyond the eastern boundary of the camping area.

Trees

Dacrycarpus dacridioides	Kahikatea
Melicytus ramiflorus	Mahoe
Podocarpus totara	Totara
Prumnopitys taxifolia	Matai
Cordyline australis	Ti kouka

Shrubs

Griselinea littoralis	Broadleaf
Myrsine australis	Mapou
Pittosporum tenuifolium	Kohuhu
Coprosma lucida	Karamu
Myoporum laetum	Ngaio
Austroderia sp.	Toetoe
Astelia fragrans	Kakahu

Ferns

Asplenium obtusatum	Coastal spleenwort
Microsorum pustulatum	Hounds tongue fern
Pteridium esculentum	Rarauhe, Bracken fern - *areas of restoration only*

1 https://www.dunedin.govt.nz/__data/assets/pdf_file/0006/732858/DCC-NPG-ecosystems-species-list-Sand-dune-forest.pdf

NZMCA - 20 BAY ROAD WARRINGTON

LANDSCAPE PLAN

SHEET 2 OF 2

Scale as shown

REV	NOTES	APPROVED	DATE
A	UPDATE CLIENT COMMENTS	KB	1 JULY 2020

DRAWN	KT	CHECKED	KB	REVIEWED	KB	APPROVED	DE

FOR CONSENT | 30 JUNE 2020

Stantec

Appendix B Consent Decision 2019

DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti

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Dunedin 9058, New Zealand
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Email: planning@dcc.govt.nz
www.dunedin.govt.nz

31 October 2019

Richard Hatherley
C/- Paterson Pitts Group
PO Box 5933
Dunedin
Attn: Andrew Robinson

Via email: andrew.robinson@ppgroup.co.nz

Dear Andrew

RESOURCE CONSENT APPLICATION: **SUB-2018-148 LUC-2018-555**
20 BAY ROAD
WARRINGTON, DUNEDIN

Your application for resource consent was processed on a non-notified basis in accordance with sections 95A to 95G of the Resource Management Act 1991. The application was considered by a Senior Planner, under delegated authority, on 31 October 2019.

The Council has granted subdivision consent and land use consent with conditions. The assessment of the application, including the reasons for the decision, is set out in the report attached to this letter. The consent certificates are attached to the rear of this letter.

Please note that the processing of this application could not be completed within the 20 working day time limit prescribed under section 115 of the Resource Management Act 1991. The time limits for the processing of this consent have been extended pursuant to section 37A(2)(a) and 37A(4)(b)(ii) of the Resource Management Act 1991, due to: waiting for the applicant to gain the approval of Heritage NZ; and the extra demands of assessment under the Proposed 2GP.

The consent certificates outline the conditions that apply to your proposal. Please ensure that you have read and understand all of the consent conditions.

You may object to this decision or any condition within 15 working days of the decision being received, by applying in writing to the Dunedin City Council at the following address:

Senior Planner - Enquiries
Dunedin City Council
PO Box 5045
Dunedin 9054

You may request that the objection be considered by a hearings commissioner. The Council will then delegate its functions, powers and duties to an independent hearings commissioner to consider and decide the objection. Please note that you may be required to pay for the full costs of the independent hearings commissioner.

Alternatively, there may be appeal rights to the Environment Court. Please refer to section 120 of the Resource Management Act 1991. It is recommended that you consult a lawyer if you are considering this option.

You will be contacted in due course if you are due a partial refund or you have to pay additional costs for the processing of your application.

Development contributions are payable for this resource consent. A development contribution notice will be sent in due course outlining how the development contribution has been calculated and when payment is required.

Please feel free to contact me if you have any questions.

Yours faithfully

Robert Buxton
Consultant Planner

APPLICATION SUB-2018-148 LUC-2018-555

20 BAY ROAD, WARRINGTON, DUNEDIN

Department: Resource Consents

DESCRIPTION OF ACTIVITY

The application site is comprised of relatively flat to undulating low lying sand dunes, located on the spit between Warrington Domain and Blueskin Bay.

The application site is 3.24ha, an irregular shape and is accessed by a leg-in from Bay Road, between 10 Bay Road to the west and 22 and 24 Bay Road to the east. The leg-in is approximately 17m wide, 135m long and 0.23ha and is centrally located to the bulk of the site. The bulk of the site is bordered to the east and south by a site generally known as the Warrington Domain (and includes the recently created freedom camping area), and is bordered to the west by an unformed road that forms the coastal edge of Blueskin Bay. To the east of the leg-in, the northern boundary of the bulk of the site borders a 4m wide strip of land that runs along the rear of 22, 28 and 30 Bay Road. This strip of land is owned by the Council and is attached to the Warrington Domain at the east, but finishes at the leg-in. To the west of the leg-in, the northern boundary of the bulk of the site borders the rear of 10 Bay Road. The bulk of the site contains the Kings High School education facility, which is located in the northwest portion.

The current application was originally intended to reinstate a previous 4 lot subdivision (DCC consent number A-93059) that never proceeded beyond the s224 stage. However, following consideration of a number of matters, the applicant has provided an amended scheme plan for a 3-lot subdivision. This will involve proposed Lot 1 of 0.5793ha which will contain the existing Kings High School education facility and would be gifted to the school. Proposed Lot 1 would be accessed from Bay Road via a Right of Way (ROW) over proposed Lot 2. Proposed Lot 2 (2.84ha) will make up the residual site including the leg-in, except for proposed Lot 3 (315m^2) which will be vested as reserve. Lot 3 will be a 4m wide strip that runs along the rear boundary of 10 Bay Road, and would be connected to the existing 4m wide strip to the east of the leg-in via a 4m wide Right of Way over the southern end of the leg-in. The applicant states that the proposed strip: "will be gifted to council as reserve, to honour a long-standing agreement between the applicant and council regarding access between council's reserve and the estuary. This land was pledged in lieu of a Reserves Contribution, and its acceptance is documented in the report dated 17 May 1993".

The education facility was granted land use consent on 10 June 1998 (RMA960388, now referenced as RMA-1996-359585). In that consent decision, the 'site' for the education facility was referred to as being 0.5793ha and accessed by a ROW, therefore, the site was Lot 1 of consent A-93059. This site was also referred to in the application and in the notification of the application. The lapse period for RMA960388 was extended twice, first by RMA 2000-0730 and then RMA 2001-0714, to lapse on 10 November 2006.

An application, SUB-2010-78, was made for the subdivision of the subject site into nine lots, however, this application was withdrawn.

A subdivision and land use consent SUB-2011-30 LUC-2011-121 was granted on 5 May 2011, which provided for a two lot subdivision that separated the Residential zone portion (proposed Lot 2 SUB-2011-30) from the Rural zone portion (proposed Lot 1 SUB-2011-30)and vested the Rural zone portion as Local Purpose Reserve. The associated land use consent authorised the existing education facility within a 4000m^2 curtilage (undefined) on Lot 2 SUB-2011-30. The subdivision never proceeded, and the status of the land use consent LUC-2011-121 is uncertain, but possibly lapsed, as it was related to the lapsed subdivision.

The application site is legally described as Part Lot 1 Deposited Plan 5855 and Lot 1 Deposited Plan 10272 (held in Computer Freehold Register OT13B/973) and is 3.2407ha.

REASONS FOR APPLICATION

Dunedin currently has two district plans: the Operative Dunedin City District Plan 2006 (the "2006 District Plan", and the Proposed Second Generation Dunedin City District Plan (the "Proposed 2GP"). Until the Proposed 2GP is made fully operative, both district plans need to be considered in determining the activity status and deciding what aspects of the activity require resource consent.

The activity status of the application is fixed by the provisions in place when the application was first lodged, pursuant to section 88A of the Resource Management Act 1991. However, it is the provisions of both district plans in force at the time of the decision that must be had regard to when assessing the application.

When the application was made decisions on the Proposed 2GP had been released and so all Proposed 2GP rules had legal effect. These rules become fully operative if no appeals are lodged or once any appeals have been resolved. At this stage, some appeals are still live and therefore some of the 2006 District Plan provisions are still considered in this decision. In the case of the applicant's site, the Rural – Coastal zoning minimum site size is appealed.

2006 District Plan

The subject site is zoned partly **Residential 1** (approximately 45% or 1.46ha) and partly **Rural** (approximately 55% or 1.78ha) under the Dunedin City District Plan. The Rural zoned portion is L-shaped being approximately 60m wide from the western side boundary and 43m wide along the southern boundary. To the east and south, the site borders the North Coast Coastal Landscape Preservation Area. The Blueskin Bay boundary, which is within the unformed road to the west of the site, is mapped as "Esplanade Reserve Required" and Area of Significant Conservation Value (ASCV) Estuarine Edge C104, which is described as "Estuary - mudflat, salt rush and reed swamp, succulent herb swamp".

Bay Road is classified as a Local Road.

Note the site is not mapped in the 2006 District Plan as an "Archaeological Site registered by the NZ Historic Places Trust".

Regarding the "Esplanade Reserve Required" notation, the site is closer than 20m to the coastal marine area (CMA). However, I have been advised by the Council's Subdivision Planner that as the site does not directly border the CMA and there is an unformed legal road between the CMA and the application site, then any consideration of an Esplanade Reserve, or any top-up to 20m width, would not apply in this case. This is consistent with the approach taken in SUB-2011-30.

Subdivision

Under Rule 18.5.1(i) subdivision is a restricted discretionary activity within the Rural zone where the resultant site is 15ha or greater. Proposed Lot 2, which will include the Rural zone, will be less than 15ha, and therefore under Rule 18.5.2 any subdivision that does not comply with Rule 18.5.1 is a **non-complying** activity.

Under Rule 18.5.1(iii)(a) subdivision is a restricted discretionary activity in the Residential zones where the proposal complies with Rules 18.5.3 to 18.5.6, 18.5.9 to 18.5.12 and each resulting site complies with minimum net area (500m^2) and frontage requirements (3.5m). Proposed Lot 1 will not have frontage to Bay Road. Due to proposed Lot 1 not having a frontage, in accordance with Rule 18.5.2, the proposed subdivision is a **non-complying** activity.

Land Use

Although the applicant included an application for a land use for infringements of the yard and height plane, the land use rules of the 2006 District Plan that would apply to this activity are considered effectively inoperative.

Proposed 2GP

The subject site is zoned partly **Township and Settlement** (approximately 45% or 1.46ha) and partly **Rural – Coastal** (approximately 55% or 1.78ha).

The site includes the following Overlays: Natural Coastal Character "Warrington to Doctors Point sand spits"; and Hazard 3 (coastal). The Natural Coastal Character mirrors the Rural – Coastal zoning, and the Hazard 3(coastal) overlay covers the lower lying land within the Rural – Coastal zoning beside the Blueskin Bay estuary.

The site includes the following Mapped Areas: Wahi Tupuna (ID 14 "Purakanui to Hikaroroa to Huriawa" and ID 15 "Okahau (Warrington)" 16 "Blueskin Bay"); and Archaeological Site A040 "Warrington moa hunting site".

Bay Road is classified as a Local Road.

Subdivision

Note, the definition of "site" under the Proposed 2GP, states that where a site is divided by two zones that are not both Rural zones, the site is deemed to be divided into two or more sites by that zone boundary.

Rule 16.3.5.1 specifies that subdivision is a restricted discretionary activity in the Rural zones, subject to compliance with the performance criteria. The proposed subdivision will fail to comply with Rule 16.7.4.1(g) which sets the minimum site size for the Rural – Coastal zone at 40ha. Proposed Lot 2, which will include the Rural zone, will be less than 40ha. Accordingly, the infringement of the subdivision proposal with Rule 16.7.4 results in an activity status of **non-complying** pursuant to Rule 16.7.4.3. Guidance on assessment includes Rules 16.12.2.1 and 16.12.5.6.

Rule 15.3.5.2 specifies that subdivision is a restricted discretionary activity in the Township and Settlement zone, subject to compliance with the performance criteria. The proposed subdivision will comply with Rule 15.7.4.1.h which sets the minimum site size for the Township and Settlement zone at 500m^2. The site comprising of the Township and Settlement zoned portion of proposed Lot 2 and all of proposed Lot 1 exceed 500m^2. Accordingly, the subdivision is a **restricted discretionary** activity and the matters of discretion and guidance on assessment include Rules 15.11.4.1.a-d (discretion over risk from natural hazards and the effects on: neighbourhood residential character and amenity; efficiency and affordability of infrastructure; safety and efficiency of the transport network), 15.11.5.2 (discretion over risk from natural hazards), 15.11.5.5 (discretion over effects on heritage values) and 15.11.5.7 and 14.4.2.4 (discretion over effects on cultural values of Manawhenua).

Rules 16.7.3 and 15.7.3 specifies that general subdivision must comply with Rule 9.3.3 Fire Fighting. The proposed subdivision will not include fire fighting water supplies for proposed Lot 2 as this would be determined by how the site is developed. Under Rule 9.3.3.3, contravening these standards is a **restricted discretionary** activity and the matters of discretion are restricted to effects on health and safety and guidance on assessment include Rules 9.5.2.1 and 9.5.3.7.

Rule 15.7.5 specifies that general subdivision must comply with Rule 9.3.3 Service Connections. The proposed subdivision will not include a water connection for proposed Lot 2 as this would be determined by how the residential zone portion of the site is developed. Under Rule 9.3.7.3, contravening this standard is a **restricted discretionary** activity and the matters of discretion are restricted to effects on efficiency and affordability of infrastructure and guidance on assessment include Rules 9.5.2.1 and 9.5.3.12.

Overall the proposed subdivision is considered a **non-complying** activity.

Note Rule 10.3.1 Esplanade Reserves and Strips requires a 20m wide esplanade reserve with a minimum width of 20m along the mean high water springs (i.e. coastal marine area (CMA)). The site is closer than 20m to the coastal marine area (CMA). However, as noted above, I have

been advised by the Council's Subdivision Planner that as the site does not directly border the CMA and there is an unformed legal road between the CMA and the application site, then any consideration of an Esplanade Reserve, or any top-up to 20m width, would not apply in this case.

Land Use

The existing educational facility falls under the definition of School. Under the Proposed 2GP, activities have both a land use activity and a development activity component.

Land Use Activity

The existing education facility, as a school, has an activity status of Discretionary activity (Rule 15.3.3.26). However, the education facility on the 0.5793ha site that will become Lot 1 of this current application has been authorised by resource consent RMA960388 (now referenced as RMA-1996-359585) as mentioned above. There was also land use consent LUC-2011-121 associated with SUB-2011-30 granted in 5 May 2011, that authorised the existing education facility within a 4000m^2 curtilage (undefined) on Lot 2 SUB-2011-30. However, the subdivision never proceeded, and the status of the land use consent LUC-2011-121 is therefore uncertain, but possibly lapsed, as it was related to the lapsed subdivision.

The applicant has stated that *"the school hostel complex was established under a Land-Use consent (RMA 1996-359585) and a subsequent consent (LUC 2011-121). We seek that these provisions be retained."* Given the confusing consenting history of the site, in order to clarify that the land use authorised by RMA 1996-359585 applies within proposed Lot 1, consents RMA 1996-359585 and LUC 2011-121 are to be surrendered and the conditions of RMA 1996-359585 will be replicated within this current consent.

Therefore consent to authorise the existing education facility on proposed Lot 1 will be required as a **discretionary** activity (Rule 15.3.3.26) with guidance on assessment included in Rules 6.12.1, 9.7.2, 14.5.2.1, 15.12.2.1, 15.12.2.3.

Development Activity

Rule 15.6.13.1.a.i requires a setback of 2m from the side and rear boundaries. The applicant has stated that the existing education facility building on proposed Lot 1 will infringe the 2m setback requirement on the internal boundary with proposed Lot 2 by 1m. Under Rule 15.6.13.1.b contravening this standard is a **restricted discretionary** activity with discretion restricted to effects on surrounding sites' residential amenity and effects on neighbourhood residential character and amenity (Rule 15.10.4.1), and assessment guidance is listed in Rules 15.10.2.1 and 15.10.4.1.

The applicant wishes to retain the existing access and parking arrangements for the education facility, which includes the access not being sealed for the first 5m. In terms of required parking spaces, the floor area of the buildings is conservatively estimated (based on the Council's webmap) to be approximately 400m^2, which under Rule 15.5.8.8 (1 space per 30m^2 of gross floor area) would result in a minimum requirement for 13 spaces, including one as a mobility parking space. There is ample space on site to manoeuvre and park this many vehicles, requiring a parking area of 168m^2, and therefore, it is considered no infringement of the minimum car parking requirement is created. Infringements are considered to occur for the following:

- Rule 6.6.1.5 requires parking areas to be hard surfaced and individually marked. Under Rule 6.6.1.5.b contravening this standard is a **restricted discretionary** activity with discretion restricted to effects on the safety and efficiency of the transport network (Rule 6.10.5.1), and assessment guidance is listed in Rules 6.10.2.1 and 6.10.5.1.
- Rule 6.6.1.7 requires parking areas to be illuminated. Under Rule 6.6.1.6.b contravening this standard is a **restricted discretionary** activity with discretion restricted to effects on the safety and efficiency of the transport network (Rule 6.10.5.1), and assessment guidance is listed in Rules 6.10.2.1 and 6.10.5.1.
- Rule 6.6.3.6 requires driveways adjoining a legal road that is hard surfaced must be hard surfaced for a distance of 5m from the edge of the road. Under Rule 6.6.3.6.c

contravening this standard is a **restricted discretionary** activity with discretion restricted to effects on the safety and efficiency of the transport network (Rule 6.10.5.6), and assessment guidance is listed in Rules 6.10.2.1 and 6.10.5.6.

Overall the land use is a **discretionary** activity.

National Environmental Standards

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NES-CS) came into effect on 1 January 2012. The NES-CS applies to any piece of land on which an activity or industry described in the current edition of the Hazardous Activities and Industries List (HAIL) is being undertaken, has been undertaken or is more likely than not to have been undertaken. Activities on HAIL sites may need to comply with permitted activity conditions specified in the NES-CS and/or might require resource consent.

The applicant applied for a HAIL report from the DCC (HAIL-2018-134). That report concluded "No explicit information found regarding HAIL activity". The applicant also states that a search of the Otago Regional Council Contaminated Land database has been undertaken and have advised that the subject property "does not currently appear on the database". The applicant makes the following conclusion:

> *Whilst none of the information sources that we've used, provide absolute evidence that no contamination exists on any part of the site; when all the results from the various information sources are taken in their totality, the likelihood of contamination at a level that would raise concern seems extremely remote. It seems unlikely that anything present on the site, resulting from past activities, will create issues that require mitigation as part of the Resource Management process that is under way. In the event of a "discovery" of evidence to the contrary during our involvement in the development process, we would undertake to bring the new information to the applicants and Council's attention and develop the appropriate mitigation response.*
>
> *In conclusion, we have reviewed retrievable information from a number of sources and have found no evidence of activities or industries on the site that would potentially have led to contamination of the site.*

I have checked the HAIL report which includes historic aerial photography that shows the site does not appear to have ever been developed. Taking the applicant's advice and the HAIL report into account, it is considered that the NES-CS is not applicable to this site.

There are no other National Environmental Standards relevant to this application.

Overall Status

Where an activity requires resource consent under more than one rule, and the effects of the activity are inextricably linked, the general principle from case law is that the different components should be bundled and the most restrictive activity classification applied to the whole proposal.

In this case, there is more than one rule involved, and the effects are linked. As a result, having regard to the most restrictive activity classification, the proposal is considered to be a **non-complying** activity.

WRITTEN APPROVALS AND EFFECTS ASSESSMENT

Affected Persons

The 1996 application (RMA960388, now referenced as RMA-1996-359585) for the establishment of the education facility was processed on a notified basis. The effects of the education facility were assessed by the Hearings Committee as being acceptable at that time,

although some reduction in scale of the proposed activity was made to address residents' concerns. This proposal does not seek to alter the existing education facility activity. The current application will essentially legalise the 0.5793ha site that was referred to in the application and notification of the original 1996 application.

The applicant has consulted with Aukaha who act on behalf of Kāti Huirapa Rūnaka ki Puketeraki, the kaitiaki Rūnanga whose takiwa includes the site the application relates to, and with Heritage New Zealand. Both these parties have advised that they do not oppose the application provided conditions are included relating to effects on archaeology.

No other person or party is considered to be adversely affected by the activity. This is because the environmental effects of the proposal are limited to effects on parties that are existing and less than minor.

Effects on the Environment

Permitted Baseline

Under sections 95D(b) and 104(2) of the Resource Management Act 1991, the Council may disregard an adverse effect of the activity on the environment if the district plan or a national environmental standard permits an activity with that effect.

There is no permitted baseline for subdivision.

Receiving Environment

The existing and reasonably foreseeable receiving environment is made up of:

- The existing environment and associated effects from lawfully established activities;
- Effects from any consents on the subject site (not impacted by proposal) that are likely to be implemented;
- The existing environment as modified by any resource consents granted and likely to be implemented; and
- The environment as likely to be modified by activities permitted in the district plan.

For the subject site, the existing and reasonably foreseeable receiving environment comprises a school education facility and rural and residential activity.

For adjacent land, the existing and reasonably foreseeable receiving environment comprises predominantly residential activity to the north and recreational activities, including camping, to the east and south.

It is against these that the effects of the activity, beyond the permitted baseline, must be measured.

Assessment Matters/Rules

Although the subdivision is for a non-complying activity in which all matters can be considered, the relevant assessment matters in the 2006 District Plan and the relevant assessment rules in the Proposed 2GP, have been used as these are considered to cover the relevant effects. In assessing the subdivision, the most recent lapsed subdivision consent SUB-2011-30 has been taken into consideration, as well as the earlier lapsed subdivision consent A-93059. For the education facility, the existing land use consent RMA960388 (now referenced as RMA-1996-359585) and the conditions, provides the basis for consideration, given that the effects are established and no change is proposed.

1. *Lot Size and Dimensions and Physical Limitations (2006 District Plan 18.6.1(q) & 18.6.1(k); Proposed 2GP 16.7.4.3, 16.12.2.1, 16.12.5.6, 17.10.4.a-I, 17.10.5.2)*
   The proposed subdivision will effectively create a separate site for the existing Kings High School education facility. It will also create opportunity for a pedestrian link between the Warrington Domain and Blueskin Bay estuary. Regarding the proposed pedestrian link,

Council's Parks and Recreation Planner is generally happy with the proposed Lot to be vested in Council as Local Purpose Reserve. The Parks and Recreation Planner did request confirmation on the width of proposed Lot 3 and pedestrian ROW, the condition of the reserve, and any fencing proposed. The applicant has advised that Lot 3 and easement B would be 4m wide, but that no improvements or fencing is proposed given, as noted earlier, that the land is being gifted to the Council.

The arrangement of the sites is considered to be acceptable. The boundary for proposed Lots 1 is effectively the site that was consented for the existing education facility, although it is noted that the stormwater soakage area may be within easement C of proposed Lot 2 and therefore that easement would need to include drainage. The proposal will not create any additional development potential compared to the existing site, which is defined by the density requirements of the Township and Settlement zone, noting that any residential unit on the Rural zoned portion of proposed Lot 2 would require an application for a non-complying activity.

In terms of the existing title, the following was noted in SUB-2011-30:

> *The subject site is subject to Section 308(4) of the Local Government Act 1974 regarding an amalgamation condition (shown on DP 18608) holding Lot 1 DP 10272 with the balance of Lot 1 DP 5855 and Lots 1 and 13 DP 1636. It appears that this amalgamation condition has already, in effect if not fact, been partially cancelled as the subject title is not comprised of all these parcels and 'Part Lot 1 DP 5855' of the title is only a portion of the 'balance of Lot 1 DP 5855' referred to by DP 18608. I expect that the purpose of the amalgamation condition was to ensure that Lot 1 DP 10272 was held with other land to avoid becoming a parcel without access to formed legal road. This is still achieved by OT13B/973 although the land involved is not entirely that listed by DP 18608. For the purposes of this subdivision, the amalgamation condition can be cancelled outright as it is no longer relevant.*

The applicant has been made aware of the cancellation condition in SUB-2011-30, but has advised *"We're slightly puzzled regarding the condition to cancel the amalgamation condition. We haven't been able to find the amalgamation condition on the subject title. We can see the relatively elderly amalgamation condition on DP 18608, but we have no legal interest in the property that that plan relates to."* On this basis there does not appear to be a reason to cancel the amalgamation condition through this consent.

The applicant has requested the removal of the building line restriction from the title. This restriction was to be deleted in Condition 8 of the lapsed subdivision consent A-93059. The following was noted in lapsed subdivision consent SUB-2011-30:

> *A building line restriction imposed in 1990 at the time of DP 21674 restricts building on the subject site within 150m of the Bay Road frontage. It is not known why this building line restriction applies, particularly when there are already a considerable number of dwellings and accessory buildings on other properties built within 150m of the south boundary of Bay Road road reserve. The effect of this building line restriction is to prevent building within the leg-in and about 15m inside the body of the subject site. It appears that the school lodge complies with this building line restriction, and there is no other construction anticipated as a result of this subdivision.*

Given that the lapsed subdivision consent A-93059 occurred prior to the granting of consent for the education facility, and that the lapsed subdivision consent SUB-2011-30 did not remove the building line, I consider the building line restriction should remain. As noted above, the building line prevents buildings within approximately 15m of the northern boundary of the body of the site, and it may have been a consideration in granting consent for the education facility. Once proposed Lot 3 (which is 4m width) is created, the building line restriction would result in a restriction of approximately 11m into proposed Lot 2. This would not affect the bulk of proposed Lot 2, and any development would be expected to be located to the south, away from the education

facility. If proposed Lot 2 were to be further subdivided, then the building line restriction could be reassessed at that time.

In terms of the existing education facility building infringing the 2m yard requirement at the internal boundary of proposed Lots 1 and 2, this infringement occurs beside the proposed ROW for the existing access to the education facility, and therefore no buildings could be built near this infringement. Also, given that the infringement would occur on an internal boundary of the site that is owned by the applicant, affected person approval is considered implicit.

It is also noted that there is a container connected with the education facility that would be on, or over the site boundary. Given that the container is mobile, there is no need to infringe the yard requirement with this structure and the container can either be removed from the site or moved to be 2m from the internal boundary. This can be addressed by condition.

Overall it is considered that the proposed subdivision will provide for an acceptable development of the site.

2. *Infrastructure and Easements (2006 District Plan 18.6.1(d), (e), (i), (j), (n), (o), & (p); Proposed 2GP 9.5.2.1, 9.5.3.7, 9.5.3.12, 9.6.2.4.a, 17.10.4)*

The Development Support Officer for 3-Waters has considered the application and notes that there is water supply and wastewater services in Bay Road, and a Council 200mm diameter wastewater pipe beneath the proposed ROW and across proposed Lot 2. The Development Support Officer notes the education facility has an existing connection to the water supply and the applicant notes that the education facility is rated for a wastewater connection. The Development Support Officer has advised that a water connection will not be required to proposed Lot 2 at this time. Excluding the leg-in, proposed Lot 2 will contain approximately 8305m^2 of Township Settlement zone. Requiring one connection located 600mm into the leg-in could potentially be redundant due to the unknown future development of the site. The Development Support Officer is unsure of how the firefighting needs for this development will be met and requests that the applicant must discuss this with the New Zealand Fire Service.

Conditions are recommended by the Development Support Officer regarding easements, including an easement in gross for the existing 200mm diameter wastewater pipe. Advice notes are suggested by the Development Support Officer in regards to meeting the Code of Subdivision and Development, applying for a water supply connection and meeting fire fighting requirements.

In terms of firefighting, I note that the Proposed 2GP includes performance standards for firefighting, include water storage of 45m^3 for each residential unit. Given that either of proposed lots 1 or 2 could possibly be developed for multi-unit residential development, these requirements can be met at the time of any proposed development. In terms of the existing education facility on proposed Lot 1 (which is of a similar size to a large residential unit), it is noted that land use consent RMA 960388 required as a condition that water tanks having a capacity not less than 46m^3 be installed.

I note that lapsed subdivision consent A-93059 included Condition 7 that required the existing watercourse that crosses the Right of Way to be piped in accordance with the requirements of the DCC Drainage Department. This condition was not included in lapsed subdivision consent SUB-2011-30. In the land use for the existing education facility RMA960388 (now referenced as RMA-1996-359585) Condition 5 required that the right of way be formed to facilitate surface water runoff and be drained. This condition is considered suitable for the existing use of the site, and as noted in 3 below, any future development of the site will need to meet the performance standards for access, and the matter would be addressed then. RMA960388 also included condition relating to water supply and toilet facilities.

Overall I consider that the proposal will be acceptable in terms of infrastructure, given that there is no change of land use proposed, and that suitable easements can be provided to address access and servicing.

3. *Transportation (2006 District Plan 18.6.1(c); Proposed 2GP 6.10.3.1, 6.11.2.7, 6.12.1, 16.12.2, 17.10.4)*

The application was forwarded to the Transportation Planner of Council's Transport Department for comment. The Transportation Planner notes that the existing access to the education facility is acceptable and that, although it is not sealed for the first 5m from Bay Road, this infringement was granted consent under LUC-2011-121 and that infringement can continue as no loose material is being tracked onto the carriageway of Bay Road, and the edge of the seal is not suffering from edge-break. However, the Transportation Planner notes that if any future development did occur on the sites, the access will need to meet the requirements of the Proposed 2GP, including minimum width, with appropriate surface and drainage. The Transportation Planner has suggested that a consent notice be placed on the lots to advise of the access requirement. The Transportation Planner also advise that a formal agreement be drawn up between the owners/users of all private accesses in order to clarify their maintenance responsibilities.

I generally concur with the Transportation Planner. However, I consider that under the Proposed 2GP the access standards are a development performance standard that needs to be addressed for any development of the sites (including any change to the education facility) and can be assessed at that time without the need for a consent notice. I also note that the Proposed 2GP performance standards requiring the parking area to be hard surfaced, marked out and illuminated would result in unnecessary development of the education facility site in a coastal setting, given that the use of the education facility is restricted to 66 days per calendar year. In addition, RMA960388 (now referenced as RMA-1996-359585) required the driveway to be formed to a minimum width of 3.5m using compacted aggregate, and this condition can remain. Other conditions in that consent restricting the use of the site to 66 days per year and the number of people to 35 people would limit the amount traffic generated to a low level.

4. *Hazards (2006 District Plan 18.6.1(t); Proposed 2GP 11.5.2.5, 16.12.2, 16.12.2, 17.10.4)*

Section 6(h) of the Resource Management Act 1991 requires the Council to recognise and provide for the management of significant risks from natural hazards, as a matter of national importance. In addition, under section 106 of the Resource Management Act 1991, the Council may decline the subdivision consent, or it may grant the subdivision consent subject to conditions, if there is a significant risk from natural hazards.

The assessment of the risk from natural hazards requires a combined assessment of:

(a) the likelihood of natural hazards occurring (whether individually or in combination); and
(b) the material damage to land in respect of which the consent is sought, other land, or structures that would result from natural hazards; and
(c) any likely subsequent use of the land in respect of which the consent is sought that would accelerate, worsen, or result in material damage of the kind referred to in paragraph (b).

The application has been considered by the Council's consultant engineer, Stantec New Zealand Ltd.

Stantec notes:

Hazards

From the Hazard Register, street files, and previously sent emails; for both this title and nearby properties

- *Hazard ID 10111 : Intensified Shaking (Possible Earthquake Amplification)*
- *Hazard ID 11407 : Liquefaction (Domain C)*

The ground is predominantly underlain by poorly consolidated marine or estuarine sediments with a shallow groundwater table. There is considered to be a moderate

to high likelihood of liquefaction-susceptible materials being present in some parts of the areas classified as Domain C.

- *Hazard ID 11394 : Coastal Inundation – Projected Sea Level Rise.*

Global Setting
The underlying geology consist of dune sand and is sloping by less than 12 degrees.

Earthworks
The application notes that no earthworks are likely to exceed the district plan provision.

Discussion
Lot 2 requires some earthworks to create a useable platform that will be addressed at the time of building control.

We recommend that the application not be declined on the ground of known natural hazards. There are no general potential instabilities of concern. The proposal will not create or exacerbate instabilities on this or adjacent properties.

Overall, Stantec notes the potential for amplified movement and liquefaction during a significant seismic event, and advises this is normally addressed at building control stage, but recommends specific engineering design be required. Stantec has also suggested conditions regarding earthworks however no earthworks have been included in the application.

I note that the previous subdivision consent SUB-2011-121 included a consent notice requiring specific geotechnical design for any future subdivision or building development, and that condition would appear appropriate for both proposed Lots 1 and 2. For the SUB-2011-121 application, the applicant's provided an engineer's report by ASR Limited titled "Coastal Hazard assessment: Warrington Subdivision" that considered sea level rises, storm surges and tsunami and found the risks to be low to negligible. This current application states the ASR Limited "*report concludes that the risks associated with the site are low to negligible and recommended that a minimum floor level of 2.45m above MLOS be adopted for any future buildings on the site. We concur with this view.*"

In terms of the existing education facility, RMA960388 (now referenced as RMA-1996-359585) addressed hazards by requiring a minimum floor level of 1.3m above mean high water spring tide level and that earthworks minimised risk of erosion. The site for the education facility appears to be above the 6m contour on the DCC Webmap, therefore the floor level condition appears redundant, and would be overtaken by a consent notice requiring engineering design for any new development.

Overall, I consider that a consent notice requiring specific engineering design, addressing both for amplified movement and liquefaction, and potential inundation should be included in the subdivision consent for new developments. Given that the ASR Limited report is nine years old, rather than referring to the recommended minimum floor level of that report, any assessment for inundation should be based on the most recent understanding of the risks.

5. <u>*Amenity Values and Character (Proposed 2GP 10.4.2.2, 16.12.2, 17.8.2.3, 17.10.4)*</u>
The proposed subdivision will create effectively two developable sites (i.e. excluding proposed Lot 3) within the residential zone, and in this regard, the effects of the proposal are largely anticipated by the zoning of the site. Proposed Lot 2 will include all of the Rural zone land (approximately 1.78ha) and therefore the subdivision does not involve any splitting of this portion of Rural zone land. Given that proposed Lot 1 is intended to legalise the existing area used by the education facility, overall, I consider that any adverse effects of the proposal on amenity and character would be less than minor.

In terms of the existing education facility, the effects of this activity have been assessed previously through the hearing of RMA960388 (now referenced as RMA-1996-359585),

and addressed through conditions of that consent which can be replicated in the current land use consent. This included restricting the number of persons attending the facility, the number of days the facility can operate, the hours for outdoor activity and also limiting paths or track linking the education facility with the adjacent reserve. These conditions will ensure the effects of the education facility do not change from the existing consented activity.

6. <u>*Heritage (Proposed 2GP 14.4.2.4, 15.11.5.5 and 15.11.5.7)*</u>
The site is documented as having significant archaeological value, including being representative of the earliest known period of settlement in Otago, and indeed New Zealand, including bones of moa and other extinct birds as well as artefacts typical of the early, Archaic, phase of settlement. The applicant has also provided information relating to some damage from earthworks that occurred between 2000 and 2012, including threats of prosecution by the NZ Historic Places Trust (now Heritage NZ) and discussion on preparing a site damage report and mitigation package. The Archaeological assessment prepared by Richard Walter and Chris Jacomb titled "Archaeological assessment of Damage to the Warrington Archaic Site I44/177" concluded:

> *The Warrington Archaic site {144/177) is clearly a very important archaeological site. It undoubtedly has a lower potential now to reveal significant information about the past than it had when it was largely intact. However, the great rarity of sites from this earliest period of settlement in New Zealand means that any remaining intact deposits must be treated with care.*
>
> *The main conclusion is that very little in the way of intact deposits was encountered during the test-pitting, and that any deposits (including the European period dump site) that might have existed close to the NE boundary are probably preserved under at least 1.5 - 2 m of bulldozed overburden.*
>
> *Another important conclusion is that any such intact deposits should be protected since there may not be much left of the site. The sparseness of the deposits in the western half of the area east of the school suggests that it may be possible to develop this area, with mitigation being achieved through monitoring and excavation. Any decision about modification to the eastern half of this area would have to be based on more extensive test investigations. The matter of the "building line" apparently agreed to by iwi would need to be followed up with Puketeraki Runanga.*
>
> *It may be appropriate to consider approaching the HPT regarding a meeting between the developer, the Trust and a consultant archaeologist about the best future options for management of the archaeological deposits on the land.*

As recommended in that report, and as mentioned earlier, the applicant has consulted with Heritage New Zealand Pouhere Taonga (HNZPT) and reached agreement on a suitable condition to ensure that prior to any future disturbance of the ground (except removal of vegetation using hand tools) an archaeological assessment must be prepared by an appropriately qualified and experienced person; and that any necessary approvals from HNZPT have been obtained. Also, both HNZPT and Aukaha required a condition referring to the Archaeological Discovery Protocol.

I consider that this agreement between the applicant and HNZPT provides an acceptable approach, given that the current application is simply to divide the site based on current usage and no ground disturbance is proposed.

In terms of the existing education facility, RMA960388 (now referenced as RMA-1996-359585) addressed the archaeological effects of the development through conditions of that consent which can be replicated in the current land use consent. These conditions were appropriate for the existing development, but would be overtaken by the agreed consent notice for future developments.

7. *Positive effects*
The creation of a separate site for the existing education facility will provide certainty for that facility to remain operating.

NOTIFICATION ASSESSMENT

Public Notification

Section 95A of the Resource Management Act 1991 sets out a step-by-step process for determining public notification. Each step is considered in turn below.

Step 1: Mandatory public notification in certain circumstances

- Public notification has not been requested.
- There has been no failure or refusal to provide further information.
- There has been no failure to respond or refusal to a report commissioning request.
- The application does not involve the exchange of recreation reserve land.

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

- There are no rules or national environmental standards precluding public notification.
- The application does not involve: a controlled activity; a restricted discretionary or discretionary subdivision; a restricted discretionary or discretionary residential activity; a boundary activity; nor, an activity prescribed in regulations as being precluded from public notification. As a result, public notification is not precluded under Step 2.

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

- There are no rules or national environmental standards requiring public notification.
- The activity will not have, or be likely to have, adverse effects on the environment that are more than minor, as noted above.

Step 4: Public notification in special circumstances

- There are no special circumstances that warrant the application being publicly notified. There is nothing exceptional or unusual about the application that makes public notification desirable.

Limited Notification

Section 95B of the Resource Management Act 1991 sets out a step-by-step process for determining limited notification. Each step is considered in turn below.

Step 1: Certain affected groups and affected persons must be notified

- The activity is not in a protected customary rights area; the activity is not an accommodated activity in a customary marine title area; and, the activity is not on or adjacent to, or might affect, land that is the subject of a statutory acknowledgement.

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

- There are no rules or national environmental standards precluding limited notification.
- The application does not involve: a controlled activity that is not a subdivision; nor an activity prescribed in regulations as being precluded from limited notification.

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

- The application does not involve: a boundary activity; nor, an activity prescribed in regulations that prescribe who is an affected person.

- There are no persons where the activity's adverse effects on the person are minor or more than minor (but are not less than minor). As noted above, the applicant consulted with Aukaha who act on behalf of Kāti Huirapa Rūnaka ki Puketeraki, the kaitiaki Rūnanga whose takiwa includes the site the application relates to, and with Heritage New Zealand. Both these parties have advised that they do not oppose the application provided conditions are included relating to effects on archaeology.

Step 4: Further notification in special circumstances

- There are no special circumstances that warrant the application being limited notified. There is nothing exceptional or unusual about the application that makes limited notification to any other persons desirable.

SUBSTANTIVE DECISION ASSESSMENT

Effects

In accordance with section 104(1)(a) of the Resource Management Act 1991, the actual and potential adverse effects associated with the proposed activity have been assessed and outlined above. It is considered that the adverse effects on the environment arising from the proposal are no more than minor.

Offsetting or Compensation Measures

In accordance with section 104(1)(ab) of the Resource Management Act 1991, there are no offsetting or compensation measures proposed or agreed to by the applicant that need consideration.

Objectives and Policies

In accordance with section 104(1)(b) of the Resource Management Act 1991, the objectives and policies of the 2006 District Plan and the Proposed 2GP were taken into account when assessing the application.

2006 District Plan

The proposal is considered to be consistent with the following objectives and policies:

- **Objective 4.2.1 and Policy 4.3.1 (Sustainability Section)**
  These seek to enhance and maintain the amenity values of the Dunedin area.
- **Objective 4.2.3 and Policy 4.3.2 (Sustainability Section)**
  These seek to sustainably manage infrastructure.
- **Objective 6.2.1 and Policies 6.3.1-3 (Rural/Rural Residential Section)**
  These seek to maintain the ability of the land resource to meet the needs of future generations.
- **Objective 6.2.2 and Policies 6.3.5, 6.3.6, 6.3.11 (Rural/Rural Residential Section)**
  These seek to maintain and enhance the amenity values associated with the character of the rural area.
- **Objective 8.2.1 and Policy 8.3.1 (Residential Section)**
  These seek to ensure that the adverse effects on the amenity values and character of residential areas are avoided remedied or mitigated.
- **Objective 8.2.7 and Policy 8.3.10 (Residential Section)**
  These seek to recognise that some community support activities contribute to the maintenance and enhancement of residential character and amenity.
- **Objective 17.2.1 (Hazards, Hazardous Substances and Earthworks Section)**
  This seeks to ensure the effects on the environment of natural hazards are avoided, remedied or mitigated.
- **Objectives 18.2.1, 18.2.2, 18.2.6 and 18.2.7 and Policies 18.3.1, 18.3.5, 18.3.6, 18.3.7 and 18.3.8 (Subdivision Section)**

These seek to ensure: that subdivision activity takes place in a coordinated and sustainable manner; that physical limitations are identified and taken into account at the time of subdivision activity; that the adverse effects of subdivision are avoided, remedied or mitigated; and that provision is made at the time of subdivision activity for appropriate infrastructure, including management of associated effects.

- **Objective 20.2.2 and Policy 20.3.5 (Transportation Section)**
  These seek to ensure that activities are undertaken in a manner which avoids, remedies or mitigates adverse effects on the transportation network.
- **Objective 20.2.4 and Policy 20.3.6 (Transportation Section)**
  These seek to maintain and enhance a safe, efficient and effective transportation network.

Proposed 2GP

The proposal is considered to be consistent with the following Proposed 2GP objectives and policies:

- **Objective 2.3.1 and Policies 2.3.1.2 (Strategic Directions)**
  These seek to ensure that land and facilities that are important for economic productivity and social well-being, including productive rural land are protected.
- **Objective 2.4.6 and Policies 2.4.6.1-2 (Strategic Directions)**
  These seek to ensure that the character and visual amenity of Dunedin's rural environment is maintained or enhanced.
- **Objective 6.2.3 and Policies 6.2.3.3, 6.2.3.4 and 6.2.3.9 (Transportation Section)**
  These seek to ensure that land use, development and subdivision activities maintain the safety and efficiency of the transport network for all travel methods.
- **Objective 14.2.1 and Policies 14.2.1.3, 14.2.1.4 (Manawhenua)**.
  These seek to ensure that the relationship between Manawhenua and the natural environment is maintained and enhanced.
- **Objective 15.2.2 and Policy 15.2.2.1 (Residential Zones)**
  These seek to ensure that residential activities, development, and subdivision activities provide high quality on-site amenity for residents.
- **Objective 15.2.3 and Policy 15.2.3.1 (Residential Zones)**
  These seek to ensure that activities in residential zones maintain a good level of amenity on surrounding residential properties and public spaces.
- **Objective 15.2.4 and Policy 15.2.4.2 (Residential Zones)**
  These seek to ensure that subdivision activities and development maintain or enhance the amenity of the streetscape and reflect the current or intended future character of the neighbourhood.
- **Objective 16.2.1 and Policies 16.2.1.5, 16.2.1.7 (Rural Zones)**
  These seek to ensure that Rural zones are reserved for productive rural activities and the protection and enhancement of the natural environment.
- **Objective 16.2.3 and Policies 16.2.3.1, 16.2.3.1, 16.2.3.8 (Rural Zones)**
  These seek to ensure that the rural character values and amenity of the rural zones are maintained or enhanced.
- **Objective 16.2.4 and Policies 16.2.4.3-4 (Rural Zones)**
  These seek to ensure that the productivity of rural activities in the rural zones is maintained or enhanced.

Objectives and Policies Assessment

Although consideration should be given to the weight each Plan has, it is noted that the proposed development is considered to be consistent with the relevant objectives and policies of both Plans, and these support the granting of consent. In terms of the rural policies, the subdivision does not change the existing situation whereby some of the site is zoned Rural.

Other Matters

Section 104(1)(c) of the Resource Management Act 1991 requires the Council to have regard to any other matters considered relevant and reasonably necessary to determine the application. The matters of precedent and Plan integrity are considered relevant here. These issues have been addressed by the Environment Court (starting with *Russell v Dunedin City Council* C092/03) and case law now directs the Council to consider whether approval of a non-complying activity will create an undesirable precedent. Where a plan's integrity is at risk by virtue of such a precedent, the Council is required to apply the 'true exception test'. This is particularly relevant where the proposed activity is contrary to the objectives and policies of the district plan and/or the proposed district plan.

In this case, the proposal is a non-complying activity because the Rural zoned portion of the sites in the Rural zone does not meet the minimum lot size and some sites do not have road frontage. It is considered that approval of the proposal will not undermine the integrity of the District Plan as the existing sites also do not meet the minimum lot size, and the subdivision is simply recognising the existing use of the site.

Section 104D

Section 104D of the Resource Management Act 1991 specifies that resource consent for a non-complying activity must not be granted unless the proposal can meet at least one of two limbs. The limbs of section 104D require that the adverse effects on the environment will be no more than minor, or that the proposal will not be contrary to the objectives and policies of both the district plan and the proposed district plan. It is considered that the proposal meets both limbs as any adverse effects arising from this proposed activity will be no more than minor, and the activity will not be contrary to the objectives and policies of both the 2006 District Plan and the Proposed 2GP. Therefore, the Council can exercise its discretion under section 104D to grant consent.

Part 2

Based on the findings above, it is evident that the proposal would satisfy Part 2 of the Resource Management Act 1991. Granting of consent would promote the sustainable management of Dunedin's natural and physical resources.

RECOMMENDATION

After having regard to the above planning assessment, I recommend that:

1. This application be processed on a non-notified basis, pursuant to sections 95A and 95B of the Resource Management Act 1991.

2. The time limits for the processing of this consent be extended pursuant to section 37A(2)(a) and 37A(4)(b)(ii) of the Resource Management Act 1991

3. The Council grant consent to the proposed activity under delegated authority, in accordance with sections 104, 104B, 104C and 104D of the Resource Management Act 1991.

Robert Buxton
Consultant Planner

Date: 31 October 2019

DECISION

I have read both the notification assessment and substantive decision assessment in this report. I agree with the recommendations above.

Under delegated authority on behalf of the Dunedin City Council, I accordingly approve the granting of resource consent to the proposal:

That, having taken into account:
- *the interests of any person who may be adversely affected by the time extension;*
- *the interests of the community in achieving an adequate assessment of effects of a proposal, policy statement or plan, and*
- *its duty under Section 21 to avoid reasonable delay*

the Council has, pursuant to Sections 37A(2)(a)) and 37A(4)(b)(i) of the Resource Management Act 1991, extended the requirement outlined in Section 115 regarding the time in which notification of a decision must be given after the date the application was first lodged with the Council.

and

SUB-2018-148
Pursuant to Part 2 and sections 34A(1), 104, 104B and 104D of the Resource Management Act 1991, and the provisions of the Operative Dunedin City District Plan 2006 and the Proposed Second Generation Dunedin City District Plan, the Dunedin City Council ***grants*** *consent to a* ***non-complying activity*** *being a subdivision of a site into 3 lots, with Lot 3 to be vested as reserve at 20 Bay Road, Warrington, Dunedin, legally described as Part Lot 1 Deposited Plan 5855 and Lot 1 Deposited Plan 10272 (Computer Freehold Register OT13B/973), subject to conditions imposed under sections 108 and 220 of the Act, as shown on the attached certificate.*

LUC-2018-555
Pursuant to Part 2 and sections 34A(1), 104 and 104C of the Resource Management Act 1991, and the provisions of the 2006 Dunedin City District Plan 2006 and the Proposed Second Generation Dunedin City District Plan, the Dunedin City Council ***grants*** *consent to a* ***restricted discretionary activity*** *being the authorisation of the existing education facility on Lot 1 SUB-2018-148, and a setback infringement created by SUB-2018-148, at 20 Bay Road, Warrington, Dunedin, legally described as Part Lot 1 Deposited Plan 5855 and Lot 1 Deposited Plan 10272 (Computer Freehold Register OT13B/973), subject to conditions imposed under section 108 of the Act, as shown on the attached certificate.*

John Sule
Senior Planner

Date: 31 October 2019

DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti

50 The Octagon, PO Box 5045, Moray Place
Dunedin 9058, New Zealand
Telephone: 03 477 4000, Fax: 03 474 3523
Email: planning@dcc.govt.nz
www.dunedin.govt.nz

Consent Type: Subdivision Consent

Consent Number: SUB-2018-148

Purpose:	The subdivision of a site into 3 lots, with Lot 3 to be vested as reserve.
Location of Activity:	20 Bay Road, Warrington, Dunedin.
Legal Description:	Part Lot 1 Deposited Plan 5855 and Lot 1 Deposited Plan 10272 (Computer Freehold Register OT13B/973).
Lapse Date:	31 October 2024, unless the consent has been given effect to before this date.

Conditions:

1. *The proposed activity must be undertaken in general accordance with the approved plans attached to this certificate as Appendix One, and the information provided with the resource consent application received by the Council on 17/12/2018 and further information received 17/4/2019, 18/6/2019, 1/10/2019 and 7/10/2019, except where modified by the following conditions.*

2. *Prior to certification of the survey plan, pursuant to section 223 of the Resource Management Act 1991, the consent holder must ensure the following:*

    a) *Service easement/s are required where any private services including water supply pipes, wastewater/stormwater laterals, stormwater soakage fields or telecommunication and power supply cross property boundaries in favour of the property they service. All easements must be granted or reserved and included in a Memorandum of Easements on the cadastral dataset.*

    b) *The Right of Ways A, B and C over Lot 2 shall be duly created or reserved in favour of Lot 1, and must be shown on the survey plan in a Memorandum of Easements.*

    c) *An easement in gross in favour of the Dunedin City Council is required for Right of Way B over Lot 2, and must be shown on the survey plan in a Memorandum of Easements.*

    d) *An easement in gross in favour of the Dunedin City Council is required over the Council owned wastewater pipe located within the proposed Right of Ways and across Lot 2. The easement must be made in accordance with Section 5.3.4 of the Dunedin Code of Subdivision and Development 2010 and must be shown on the survey plan in a Memorandum of Easements.*

    e) *That Lot 3 shall be shown on the plan as vesting with Council as 'Local Purpose Reserve (Access)'.*

3. *Prior to certification pursuant to section 224(c) of the Resource Management Act 1991, the consent holder must complete the following:*

    a) *The shipping container located on Lot 1 must be removed from the site or relocated so that, following subdivision, the permitted standards for the zone will be met.*

Consent Notices

b) The following consent notices must be registered on the certificate of title for Lots 1 and 2:

i) No earthworks or development other than the removal of vegetation using hand tools shall occur on the site until:

(a) an archaeological assessment has been prepared by an appropriately qualified and experienced person; and

(b) that any necessary approvals from Heritage New Zealand Pouhere Taonga have been obtained.

ii) In the event that an unidentified archaeological site is located during any works on the site, the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol in Attachment 1 applies.

iii) This site shall not be subdivided or built upon without further engineering investigation of the natural hazards affecting this land. The engineering report shall identify any hazards present (including amplified movement and liquefaction, and potential inundation) and suitable mitigation measures, and shall be submitted to the Council with any building consent or resource consent application. No work is to commence on-site until Council is satisfied the hazards can be appropriately and adequately avoided, remedied or mitigated.

Advice Notes:

3-Waters

Code of Subdivision & Development

1. All aspects of this development shall be compliant with Parts 4, 5 and 6 of the Dunedin Code of Subdivision and Development 2010.

Water services

2. Each of Lots 1 and 2 will need a separate water service connection installed. Lot 1 has a water connection. For any development on Lot 2 a separate connection will be required and an "Application for Water Supply" will need to be submitted to the Dunedin City Council for approval to establish water connection.

3. Detail of the water supply application process can be found at http://www.dunedin.govt.nz/services/water-supply/new-water-connections.

4. All aspects relating to the availability of water for fire-fighting should be in accordance with SNZ PAS 4509:2008, being the Fire Service Code of Practice for Fire Fighting Water Supplies, unless otherwise approved by the New Zealand Fire Service.

Stormwater

5. The stormwater soakage field for the education facility needs to be identified, and if it extends on to Lot 2, then easements will be required.

Transportation

6. It is advised that a formal agreement be drawn up between the owners/users of all private accesses in order to clarify their maintenance responsibilities.

7. It is advised that in the event of future development on the site, Transport would assess provisions for access, parking and manoeuvring at the time of resource consent/building consent application.

Telecommunication and Power Supply

8. The telecommunication and power supply systems shall be installed in accordance with the requirements of the Dunedin Code of Subdivision and Development 2010 and the relevant network utility operator.

General

9. In addition to the conditions of a resource consent, the Resource Management Act 1991 establishes through sections 16 and 17 a duty for all persons to avoid unreasonable noise, and to avoid, remedy or mitigate any adverse effect created from an activity they undertake.

10. Resource consents are not personal property. The ability to exercise this consent is not restricted to the party who applied and/or paid for the consent application.

11. It is the responsibility of any party exercising this consent to comply with any conditions imposed on the resource consent prior to and during (as applicable) exercising the resource consent. Failure to comply with the conditions may result in prosecution, the penalties for which are outlined in section 339 of the Resource Management Act 1991.

12. The lapse period specified above may be extended on application to the Council pursuant to section 125 of the Resource Management Act 1991.

13. This is a resource consent. Please contact the Council's Building Services Department, about the building consent requirements for the work.

Issued at Dunedin on 31 October 2019

Robert Buxton
Consultant Planner

DUNEDIN CITY COUNCIL
Kaunihera-a-rohe o Otepoti

50 The Octagon, PO Box 5045, Moray Place
Dunedin 9058, New Zealand
Telephone: 03 477 4000, Fax: 03 474 3523
Email: planning@dcc.govt.nz
www.dunedin.govt.nz

Consent Type: Land Use Consent

Consent Number: LUC-2018-555

Purpose:	The authorisation of the existing education facility on Lot 1 SUB-2018-148, and a setback infringement created by SUB-2018-148.
Location of Activity:	20 Bay Road, Warrington, Dunedin.
Legal Description:	Part Lot 1 Deposited Plan 5855 and Lot 1 Deposited Plan 10272 (Computer Freehold Register OT13B/973).
Commencement Date:	LUC-2018-555 shall commence from the issue of title for Lot 2 of SUB-2018-148.
Lapse Date:	LUC-2018-555 shall lapse five years from the signing of the Stage 2 section 223 certificate of SUB-2018-148.

Conditions:

1. *The proposed activity must be undertaken in general accordance with:*

   a) *the application for RMA960388 (now referenced as RMA-1996-359585) submitted on the 31st of January 1998, including further information provided, and information presented at the hearing; and*

   b) *the approved plans attached to this certificate as Appendix One, and the information provided with the resource consent application SUB-2018-148 and LUC-2018-555 received by the Council on 17/12/2018 and further information received 17/4/2019, 18/6/2019, 1/10/2019 and 7/10/2019.*

2. *At no time shall the facility be available for use by more than 35 persons, including day visitors.*

3. *The facility shall not be used for educational activities for more than 66 days per calender year.*

4. *Subject to Condition 5 below, that at all times when the facility is not used for educational purposes, it may be used by a maximum of three family groups at any one time.*

5. *That no use of the facility may occur between the 10th of December in any year and the 20th of January in the following year.*

6. *Outside activities shall be restricted to the hours of 7.00am to 9.00pm on any day of the week.*

7. *That in times of drought the water supply to the proposed students' accommodation and classroom area may be locked off at the point of supply without compensation for the duration of the drought, at the discretion of the Water Manager. Prior notice, to be given by the Water Business Unit to the Principal of Kings High School, shall be given at least two weeks before the possibility of a shutdown, and at any time seven days before an actual shutdown of the water supply.*

8. *That the right of way be maintained to a minimum width of 3.5m and have a minimum depth of compacted aggregate of 250mm. The right of way shall be maintained to facilitate surface water run-off and be drained and collected in an approved manner on-site. The intersection point of the right of way with Bay Road shall maintain edge integrity and water table drainage flow in Bay Road, to the satisfaction of the Manager of the Transportation Planning Department.*

9. *That all earthworks on the site are to be carried out in a manner that minimises the risk of erosion of sand.*

10. *That any change to the final colours and materials of the buildings shall be provided to Council's Landscape Architect for approval.*

11. *No paths or tracks linking the proposed centre with the adjacent reserve shall be constructed without the written permission of the Contract and Asset Management Department. Consideration by the Department shall be limited to effects on the management of the reserve, and shall not be unreasonably withheld.*

12. *No earthworks or development other than the removal of vegetation using hand tools shall occur on the site until:*

    i) an archaeological assessment has been prepared by an appropriately qualified and experienced person; and

    ii) that any necessary approvals from Heritage New Zealand Pouhere Taonga have been obtained.

13. *In the event that an unidentified archaeological site is located during any works on the site, the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol in Attachment 1 applies.*

14. *That any felling or modification to the existing pine trees on the site shall be under the supervision of a qualified arborist.*

15. *Within one month of the titles being issued for Lots 1 and 2 of SUB-2018-148, the land use consents RMA960388 (now referenced as RMA-1996-359585, and with time extensions by RMA 2000-0730 and RMA 2001-0714) and LUC-2011-121 must be surrendered.*

Advice Notes:

1. All aspects relating to the availability of water for fire-fighting should be in accordance with SNZ PAS 4509:2008, being the Fire Service Code of Practice for Fire Fighting Water Supplies, unless otherwise approved by the New Zealand Fire Service.

2. It is advised that in the event of future development on the site, Transport would assess provisions for access, parking and manoeuvring at the time of resource consent/building consent applications.

<u>General</u>

3. In addition to the conditions of a resource consent, the Resource Management Act 1991 establishes through sections 16 and 17 a duty for all persons to avoid unreasonable noise, and to avoid, remedy or mitigate any adverse effect created from an activity they undertake.

4. Resource consents are not personal property. The ability to exercise this consent is not restricted to the party who applied and/or paid for the consent application.

5. It is the responsibility of any party exercising this consent to comply with any conditions imposed on the resource consent prior to and during (as applicable) exercising the

resource consent. Failure to comply with the conditions may result in prosecution, the penalties for which are outlined in section 339 of the Resource Management Act 1991.

6. The lapse period specified above may be extended on application to the Council pursuant to section 125 of the Resource Management Act 1991.

7. This is a resource consent. Please contact the Council's Building Services Department, about the building consent requirements for the work.

Issued at Dunedin on 31 October 2019

Robert Buxton
Consultant Planner

Appendix One: Approved Plans for SUB-2018-148 & LUC-2018-555 (scanned images, not to scale)

Attachment One: Archaeological Discovery Protocol

HERITAGE NEW ZEALAND
POUHERE TAONGA

Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol

Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place in New Zealand that was associated with human activity that occurred before 1900 and provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand (see Section 6). For pre-contact Maori sites this evidence may be in the form of Taonga (artefacts) such as toki (adzes) or flake tools as well as bones, shells, charcoal, stones etc. In later sites of European/Chinese origin, artefacts such as bottle glass, crockery etc. may be found, or evidence of old foundations, wells, drains or similar structures. Pre-1900 buildings are also considered archaeological sites. Burials/koiwi tangata may be found from any historic period. Archaeological sites are legally protected under Sections 42(1) & (2) of the Heritage New Zealand Pouhere Taonga Act 2014.

In the event that an unidentified archaeological site is located during works, the following applies;

1. Work shall cease immediately at that place and within 20m around the site.
2. The contractor must shut down all machinery, secure the area, and advise the Site Manager.
3. The Site Manager shall secure the site and notify the Heritage New Zealand Otago/Southland Archaeologist (contact details are below).
4. If the site is of Maori origin, the Site Manager shall notify the Heritage New Zealand Otago/Southland Archaeologist and the appropriate Iwi groups or kaitiaki representative of the discovery. The Site Manager must ensure there is access to the site for the Heritage New Zealand Otago/Southland Archaeologist (or an independent archaeologist approved by Heritage New Zealand) and the appropriate Iwi groups or kaitiaki representative to enable appropriate cultural procedures and tikanga to be undertaken, so long as the site is not disturbed.
5. If human remains (koiwi tangata) are uncovered the Site Manager shall advise the Heritage New Zealand Otago/Southland Archaeologist, NZ Police and the appropriate Iwi groups or kaitiaki representative and the above process under 4 shall apply. **Remains are not to be moved until such time as both Iwi and Heritage New Zealand have responded.**
6. Works affecting the archaeological site and any human remains (koiwi tangata) shall not resume until Heritage New Zealand gives written approval for work to continue. Works affecting the site will likely require an Archaeological Authority applied for under the Heritage New Zealand Pouhere Taonga Act 2014. Further assessment by an independent archaeologist may be required to make an application for an Archaeological Authority.

p (64 03) 470 2364 a Otago Southland Area Office, 109 Princes St, Dunedin a P.O. Box 5467, Dunedin 9058 w heritage.org.nz

7. Where Iwi so request, any information recorded as the result of the find such as a description of location and content, is to be provided for their records.

It is an offence under S87 of the Heritage New Zealand Pouhere Taonga Act 2014 to modify or destroy an archaeological site without an Authority from Heritage New Zealand irrespective of whether the works are permitted or a consent has been issued under the Resource Management Act or Building Act.

Heritage New Zealand Regional archaeologist contact details:

Dr Matthew Schmidt
Archaeologist Otago/Southland
Heritage New Zealand Pouhere Taonga
PO Box 5467
Dunedin

Ph. +64 3 470 2364, mobile 027 240 8715
Fax. +64 3 4773893

mschmidt@heritage.org.nz

Appendix C Archaeological Assessment

Draft for Resource Consent

New Zealand
Heritage Properties Ltd
Investing In Our Heritage

20 Bay Road, Warrington

Archaeological Assessment for Site No. I44-177 and I44-178

Report Prepared for NZMCA
Author: Victoria Ross
Reviewed by: Dawn Cropper
Submitted: June 2020

Draft for Resource Consent

New Zealand Heritage Properties Ltd
Investing In Our Heritage

20 Bay Road, Warrington

Archaeological Assessment for Site No. I44/177 and I44/178

Report Prepared by:
New Zealand Heritage Properties Ltd
Salisbury House | 106 Bond Street | Dunedin
T 03 477 3933 | F 03 477 3928 | E info@heritageproperties.co.nz
www.heritageproperties.co.nz

Project Details

Archaeological Site No.	**I44/177, I44/178**
Site Address	20 Bay Road, Warrington (Lot 1 DP10272 and Part Lot 1 DP5855, Block I, Waikouaiti District)
Client	New Zealand Motor and Caravan Association
Client Contact	James Imlach
Client Address	james@nzmca.org.nz
Report Authors	Victoria Ross
Reviewed By	Dawn Cropper
Approved Archaeologist	Dawn Cropper
Report Submitted	June 2020
Report Submitted To	Heritage New Zealand, NZMCA, Aukaha Inc.

Ownership and Disclaimer

Cover Photo: Anonymous. (1910). Warrington Beach, File: 2779 01 027A, [Photograph]. Dunedin: Hocken Snapshop.

Executive Summary

New Zealand Heritage Properties Ltd (NZHP) has been commissioned by James Imlach on behalf of New Zealand Motor and Caravan Association (NZMCA) to prepare an archaeological assessment of 20 Bay Road, Warrington (Lot 1 DP10272 and Part Lot 1 DP5855, Block I, Waikouaiti District), to accompany the archaeological authority application as required by the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA 2014). NZMCA proposes to create a formal motorhome and campervan park at the location, providing a stable driveway and ample space for parking 46 vehicles. 20 of these 46 parking bays (north to south) are shorter in depth and accommodate conventional motorhomes up to 7 metres long. The remaining 26 parking bays have a depth of 13 metres and can accommodate motorhomes and caravans (with space also for the towing vehicle to park). To do this, they propose stages of development, including clearance of a small amount of vegetation, planting of native species, excavation of some areas to level and stabilise the land, and building up of some areas for levelling. This project area encompasses the whole of Lot 1 DP10272 and the majority of Part Lot 1 DP5855, Block I, Waikouaiti District, on the spit at the southern end of Warrington. The northeast corner of the property will not be developed as this area will be vested to Kings College, with shared access through the northern accessway.

This archaeological assessment has identified that the proposed works have the potential to affect two sites, I44/177 and I44/178. I44/177 was recorded by Allingham in the early 1980s, with the site varyingly described as a moa-hunter site, nephrite working site, kāik and pā site (Anderson, 1989; Anderson & Smith, 1996; Hamel, 2001). The site is referenced as an important site for the understanding of pre-contact Māori, covering approximately 2ha, despite no systematic excavations having been completed. I44/178 is a midden site is located on the western shore of the Warrington Spit, also recorded by Allingham in the 1980s. A site survey conducted for this assessment, have identified that both sites I44/177 and I44/178 are present within the property boundaries, with archaeological materials observed on the surface. NZHP believes there is a high likelihood of archaeological material being encountered during the proposed development, and that an archaeological authority be sought for these works.

Archaeological sites affected by the NZMCA motorhome and caravan park development at 20 Bay Road.

NZAA Site Id	Site Location	Brief Description
I44/177	E 1412783 N 4934860	Midden/cultural layers containing moa and other extinct birds, also artefacts.
I44/178	E 1412797 N 4934480	A midden/occupation layer with artefacts.

Based on the results of this archaeological assessment, NZHP makes the following recommendations:

1. As a first principle, every practical effort should be made to avoid damage to any archaeological site, whether known, or discovered during any redevelopment of the site.
2. An archaeological authority under Section 44 of the HNZPTA 2014 should be obtained from the HNZPT prior to any modification of the site.
3. A site instruction document and contractor briefing document should be prepared for NZMCA. Before the start of any on-site works, all contractors should be briefed by an archaeologist on the legislative requirements of working within archaeological sites.
4. NZMCA should undertake consultation with takata whenua to ensure all areas of cultural sensitivity are appropriately protected.
5. If re-development plans are altered from those reviewed by NZHP for this assessment (Appendix A), then HNZPT need to be alerted in the first instance.
6. All subsurface works should be monitored by an archaeologist. Any archaeological features or recovered material should be appropriately recorded and analysed.
7. Before site works commence notification should be given with at least 2 working days' notice, to HNZPT, Aukaha. An invitation should be extended for a representative from local rūnaka to attend site during all earthworks.

8. If at any stage during the redevelopment Māori material is discovered, NZHP should be called in the first instance. NZHP will assist the NZMCA to contact all relevant parties, including HNZPT, and Aukaha. If Māori material does exist in the area to be developed, damage to this should be minimised. Any Maori artefacts will be, prima facie, property of the Crown and will be submitted to the appropriate institutions.
9. A full report on any archaeological material that is found should be prepared and submitted to the HNZPT within one year of the completion of archaeological site works.

Abbreviations

Abbreviation	Definition
HNZPT	Heritage New Zealand Pouhere Taonga
HNZPTA 2014	Heritage New Zealand Pouhere Taonga Act 2014
NZAA	New Zealand Archaeological Association
NZHP	New Zealand Heritage Properties Limited
NZMCA	New Zealand Motor and Caravan Association
RMA 1991	Resource Management Act 1991

Acknowledgements

New Zealand Heritage Properties acknowledges and thanks the following individuals who assisted in this project:

- James Imlach on behalf of NZMCA for providing documents and information relating to the history of the site.
- Kelly Bombay and Lee Paterson, Stantec, for assisting in the technical information for the proposed development.
- Tania Richardson, on behalf of Aukaha, for coordinating with NZHP to ensure takata whenua values are incorporated within the assessment process
- Jessie Hurford for monitoring the geotechnical testing and supplying GIS maps.

Table of Contents

List of Figures

List of Tables

1 Introduction

New Zealand Heritage Properties Ltd (NZHP) has been commissioned by James Imlach on behalf of NZMCA to prepare an archaeological assessment of 20 Bay Road, Warrington (Lot 1 DP10272 and Part Lot 1 DP5855, Block I, Waikouaiti District), to accompany the archaeological authority application as required by the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA 2014). This project area encompasses the whole of Lot 1 DP10272 and the majority of Part Lot 1 DP5855, Block I, Waikouaiti District, on the spit at the southern end of Warrington (Figure 1-1). The northeast corner of the property will not be developed as this area is vested to Kings College, with shared access through the northern accessway.

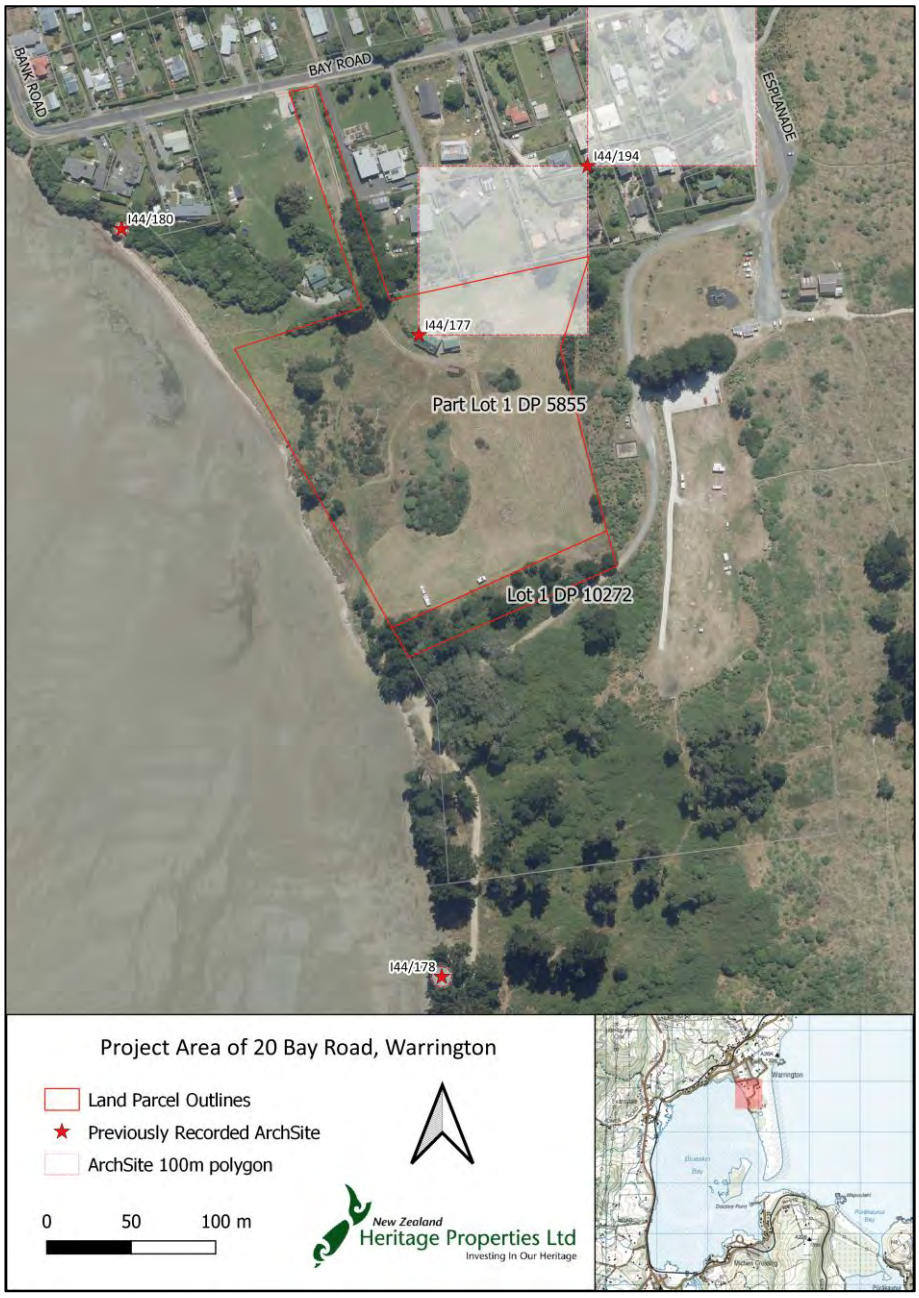

Figure 1-1. Location of project area at 20 Bay Road, Warrington (Lot 1 DP10272 and Part Lot 1 DP5855, Block I, Waikouaiti District). Including previously recorded archaeological sites.

NZMCA propose to develop large areas of the combined property at 20 Bay Road, creating a formal motorhome and caravan park, with a new sealed accessway. The research completed as part of this assessment has shown that archaeological sites I44/177 and I44/178 extend or are located within the project boundaries. I44/177 was recorded by Allingham in the early 1980s, with the site varyingly described as a moa-hunter site, nephrite working

site, kāik and pā site (Anderson, 1989; Anderson & Smith, 1996; Hamel, 2001). The site is referenced as an important site for the understanding of pre-contact Māori, covering approximately 2ha, despite no systematic excavations having been completed. I44/178 is a midden site is located on the western shore of the Warrington Spit, also recorded by Allingham in the 1980s. A site survey conducted for this assessment, have identified that both sites I44/177 and I44/178 are present within the property boundaries, with archaeological materials observed on the surface. NZHP believes there is a high likelihood of archaeological material being encountered during the proposed development, and that an archaeological authority be sought for these works.

1.1 Project Outline

NZMCA propose to complete development across the portion of the site not included in the vestment to Kings College. This area of the site includes the accessway (shared with Kings College), the east and south portions of the property where the land is mostly open with a slope to the south and access to the boat launch on the southwest of the site. NZMCA proposes to create a formal motorhome and campervan park at the location, providing a stable driveway and ample space for parking 46 vehicles. 20 of these 46 parking bays (north to south) are shorter in depth and accommodate conventional motorhomes up to 7 metres long. The remaining 26 parking bays have a depth of 13 metres and can accommodate motorhomes and caravans (with space also for the towing vehicle to park).. To do this, they propose stages of development (Figure 1-2), including clearance of a small amount of vegetation, planting of native species, excavation of some areas to level and stabilise the land, and building up of some areas for levelling. Geotechnical investigations have been carried out at the site under an exploratory authority (2020/540) to inform the development plans.

Stantec, contracted by NZMCA, have planned for keeping the natural treatment of the ground where possible to mitigate impact on both the cultural and environmental resources of the land. A draft plan of the site has been provided in Figure 1-3. To do this, minor excavation is planned for the driveway area in the north of the site. This will then be built up where needed and sealed to a width 5m, to provide a durable and stable accessway for both the caravan park and Kings College. Planting will be completed the west side of the drive with established trees kept on the east. A gate will be installed at the roadside, with a second internal access gate installed if required, in line with the Kings College buildings. These gates will require minor excavations for postholes.

Native bush and trees are planned for screening around the driveway, northern side of site (below Kings College) and the southern boundary. This will tie in with the existing vegetation where possible but will involve some earth disturbance for planting. In the centre of the site, planting is proposed to form boundaries to the parking spaces. In most areas this will involve only minimal earth disturbance. In the very centre of the site a small gully is currently filled with vegetation; where the proposed parking spaces encroach on this area, vegetation clearance will be necessary.

Across the majority of the site, as stated, a small amount of levelling of the ground surface will be undertaken to provide formal parking spaces for motorhomes and campervans. To do this minor scraping of the site will take place, while the majority of this levelling will be accomplished by introducing fill to bring the ground level up. Stantec are investigating options to do this by a combination of a geotextile matting below sand or gravel where appropriate. This will act to protect the cultural material below the surface while providing a solid platform for the carparks. These works are aimed to be completed as part of the Stage 1. Stantec have identified that there is the opportunity to slightly alter this stage of plans if areas of high archaeological risk are identified where excavations were to take place.

A small kiosk is to be installed at the south end of the driveway. This is to be within the gravelled area at the boundary between the Stage 1 and Stage 2 areas. The kiosk will require minor excavations. Slightly east of the kiosk, a small dump station is proposed. This will also require minor excavations.

Figure 1-2. Planned stages of development, as provided by Stantec. Red stars mark current accessways, with the blue line showing the property boundary.

Figure 1-3. Development plans for 20 Bay Road, as provided by Stantec.

2 Statutory Requirements

The legislative requirements relating to archaeological sites and artefacts are detailed in the following sections. There are two main pieces of legislation that provide protection for archaeological sites: the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA 2014) and the Resource Management Act 1991 (RMA 1991). Artefacts are further protected by the Protected Objects Act 1975.

2.1 Heritage New Zealand Pouhere Taonga Act 2014

The HNZPTA 2014 came into effect in May 2014, repealing the Historic Places Act 1993. The purpose of this act is to promote identification, protection, preservation, and conservation of New Zealand's historical and cultural heritage. Heritage New Zealand Pouhere Taonga (HNZPT) administers the act and was formerly known as the New Zealand Historic Places Trust (Pouhere Taonga).

Archaeological sites are defined by this act 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)

Additionally, HNZPT has the authority (under section 43(1)) to declare any place to be an archaeological site if the place

(a) was associated with human activity in or after 1900 or is the site of the wreck of any vessel where that wreck occurred in or after 1900; and

(b) provides, or may be able to provide, through investigation by archaeological methods, significant evidence relating to the historical and cultural heritage of New Zealand.

Archaeological sites are protected under Section 42 of the act, and it is an offense to carry out work that may "modify or destroy, or cause to be modified or destroyed, the whole or any part of that site if that person knows, or ought reasonably to have suspected, that the site is an archaeological site", whether or not the site has been previously recorded. Each individual who knowingly damages or destroys an archaeological site without having the appropriate authority is liable, on conviction, to substantial fines (Section 87).

Any person wishing to carry out work on an archaeological site that may modify or destroy any part of the site, including scientific investigations, must first obtain an authority from HNZPT (Sections 44(a,c)). The act stipulates that an application must be sought even if the effects on the archaeological site will be no more than minor as per Section 44(b). A significant change from the Historic Places Act (1993) is that "an authority is not required to permit work on a building that is an archaeological site unless the work will result in the demolition of the whole of the building" (Section 42(3)).

HNZPT will process the authority application within five working days of its receipt to assess if the application is adequate or if further information is required (Section 47(1)(b)). If the application meets the requirements under Section 47(1)(b), it will be accepted and notice of the determination will be provided within 20 to 40 working days. Most applications will be determined within 20 working days, but additional time may be required in certain circumstances. If HNZPT requires its own assessment of the Maori values for the site, the determination will be made within 30 working days. If the application relates to a particularly complex site, the act permits up to 40 days for the determination to be made. HNZPT will notify the applicant and other affected parties (*e.g.*, the land owner, local authorities, iwi, museums, *etc.*) of the outcome of the application.

Once an authority has been granted, modification of an archaeological site is only allowed following the expiration of the appeals period or after the Environment Court determines any appeals. Any directly affected party has the right to appeal the decision within 15 working days of receiving notice of the determination. HNZPT may impose conditions on the authority that must be adhered to by the authority holder (Section 52). Provision exists for a review of the conditions (see Section 53). The authority remains current for a period of up to 35 years, as specified in the authority. If no period is specified in the authority, it remains current for a period of five years from the commencement date.

The authority is tied to the land for which it applies, regardless of changes in the ownership of the land. Prior to any changes of ownership, the land owner must give notice to HNZPT and advise the succeeding land owner of the authority, its conditions, and terms of consent.

An additional role of HNZPT is maintaining the New Zealand Heritage list, which is a continuation of the Register of Historic Places, Historic Areas, Wahi Tapu, and Wahi Tapu Areas. The list can include archaeological sites. The purpose of the list is to inform members of the public about such places and to assist with their protection under the Resource Management Act 1991.

2.2 Resource Management Act 1991

The RMA 1991 defines historic heritage as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, and it may include historic sites historic sites, structures, places, and areas; archaeological sites; and sites of significance to Māori. It should be noted that this definition does not include the 1900 cut-off date for protected archaeological sites as defined by the HNZPT Pouhere Taonga Act 2014. Any historic feature that can be shown to have significant values must be considered in any resource consent application.

The heritage provisions of the RMA 1991 were strengthened with the Resource Management Amendment Act 2003. The Resource Management Amendment Act 2003 contains a more detailed definition of heritage sites and now considers historic heritage to be a matter of national importance under Section 6. The act requires city, district, and regional councils to manage the use, development, and protection of natural and physical resources in a way that provides for the well-being of today's communities while safeguarding the options of future generations.

Under the RMA 1991, local authorities are required to develop and operate under a district plan, ensuring that historic heritage is protected. This includes the identification of heritage places on a heritage schedule (or list) and designation of heritage areas or precincts and documents the appropriate regulatory controls. All heritage schedules include, but are not limited to, all items on the New Zealand Heritage List/Rārangi Kōrero. Additional sites of significance to the local authority may also appear on the schedule.

The regulatory controls for historic heritage are specific to each local authority. However, most local authorities will require resource consent under the RMA 1991 for any alterations, additions, demolition, or new construction (near a listed place) with HNZPT being recognised as an affected party. Repair and maintenance are generally considered permitted activities.

The RMA 1991 requires local authorities to develop and operate under a district plan. The Dunedin City District Plan identifies the significance of historic buildings to the character of Dunedin, noting that these buildings are irreplaceable and the city is critically dependent on them. Buildings are listed on the DCC Heritage Register (Schedule 25.1) for several reasons, including their architectural quality, historical associations, or other intrinsic values worthy of protection, and the council aims to protect these buildings in order to maintain the character of the townscape. The register includes all HNZPT Category 1 and Category 2 listed buildings in Dunedin, which have been evaluated according to criteria outlined in the HNZPTA 2014.

Iwi/hapu management plans are planning documents that are recognised by an iwi authority, relevant to the resource management issues, including heritage, of a place and lodged with the relevant local authority. They have statutory recognition under the RMA 1991. Iwi Management Plans set baseline standards for the management of Maori heritage and are beneficial for providing frameworks for streamlining management processes and codifying Maori values. Iwi Management Plans can be prepared for a rohe, heritage inventories, a specific resource or issue or general management or conservation plans (NZHPT, 2012).

Aukaha (formerly Kāi Tahu Ki Otago) is a representative of the Kāi Tahu tangata whenua in Warrington and the wider Otago area. Kāi Tahu Ki Otago Natural Resource Management Plan was lodged with the Otago Regional Council in 2005. This plan covers mostly natural resources; however, wāhi tapu, mahika kai, and the cultural landscape are all addressed for each geographical area the plan covers.

2.3 Protected Objects Act 1975

The Protected Objects Act 1975 was established to provide protection of certain objects, including protected New Zealand objects that form part of the movable cultural heritage of New Zealand. Protected New Zealand objects are defined by Schedule 4 of the act and includes archaeological objects and taonga tuturu. Under Section 11 of the Protected Objects Act 1975, any newly found Maori cultural objects (taonga tuturi) are automatically the property of the Crown if they are older than fifty years and can only be transferred from the Crown to an individual or group of individuals through the Maori Land Court. Anyone who finds a complete or partial taonga tuturu, accidentally or intentionally is required to notify the Ministry of Culture and Heritage within:

(a) 28 days of finding the taonga tuturu; or

(b) 28 days of completing field work undertaken in connection with an archaeological investigation authorised by HNZPT.

3 Methodology

An archaeological assessment is required to accompany an application for an archaeological authority, as stipulated in the HNZPTA 2014. In order to assess the archaeological resources of the project area, NZHP conducted detailed documentary research, examined records of previously recorded site within the vicinity of the project area, and carried out an on-site visit.

NZHP consulted numerous sources of documentary evidence in order to determine the historical context of the project area. The results of the documentary research are provided in Section 5.3. The sources utilised in this research include:

- NZAA ArchSite Record Forms
- HNZPT Digital Library
- PapersPast
- Statistics New Zealand
- Blueskin Days, by I. Church, Strachan S., and Strachan J.
- The Archaeology of Otago, by Jill Hamel

Section 6 documents the previous investigations of the sites within the project area.

A site visit was conducted by Dr Dawn Cropper and Victoria Ross, NZHP, on 5 February 2020, and a summary of the on-site observations is provided in Section 6.2.

The assessment of archaeological and other values is based on criteria established by HNZPT (NZHPT, 2006):

- The **condition** of the site(s).
- Is the site(s) unusual, **rare or unique**, or notable in any other way in comparison to other sites of its kind?
- Does the site(s) possess **contextual value**? Context or group value arises when the site is part of a group of sites which taken together as a whole, contribute to the wider values of the group or archaeological, historic or cultural landscape. There are potentially two aspects to the assessment of contextual values; the relationship between features within a site, and the wider context of the surroundings.
- **Information potential**. What current research questions or areas of interest could be addressed with information from the site(s)? Archaeological evaluations should take into account current national and international research interests, not just those of the author.
- **Amenity value** (e.g. educational, visual, landscape). Does the site(s) have potential for public interpretation and education?
- Does the site(s) have any special **cultural associations** for any particular communities or groups (e.g., Maori, European, Chinese.)

The overall level of significance was determined based on the evaluation of the criteria listed above; however, it is not possible to fully understand the archaeological significance of subsurface sites, features, and materials uncovered during the site works. It is important to recognise that the significance of a site may change on the basis of what is found during the work programme.

After determining the history of the site(s) and evaluating its archaeological value, NZHP assessed the effects of the proposed work on the site. Specifically, NZHP considered the following matters as outlined by HNZPT (NZHPT, 2006):

- How much of the site(s) will be affected, and to what degree, and what effects this will have on the values of the site(s).

- Whether the proposed work may increase the risk of damage to the site(s) in future. For example, change from farming to residential use may make sites vulnerable to increased pedestrian and vehicular activity.
- Whether a re-design may avoid adverse effects on the site(s). It is recognised that detailed evaluation of alternatives may be beyond the scope of the archaeological assessment, however, some consideration of alternatives should be considered where possible.
- Possible methods to protect sites, and avoid, minimise or mitigate adverse effects should be discussed. These will form the basis of any recommendations in the final section.

Measures of reducing the potential adverse effects on the site(s), management of the archaeological resources, and mitigation of information loss were considered.

4 Physical Environment and Setting

The Warrington area is characterised by a small settlement and a large sand spit. The settlement of Warrington is situated on elevated land in the north-east corner of Blueskin Bay. Coastal hills surround the township on the north and west sides, with the dunes on the east and the sandspit protruding from the south of the township, protecting Blueskin Bay from the open ocean (Goldsmith & Sims, 2014)(Figure 4-1). Dunes continue down both the east and west sides of the sandspit, with wide sandy beaches on the east only. With the estuary leading into Blueskin Bay, the area is populated with various shellfish, most commonly cockles. Hills on the southern side of the bay at Doctor's Point and Māpoutahi, overlook the bay and sandspit.

Figure 4-1. Topographical map of the Warrington and Blueskin Bay area, showing the mountainous terrain on the western side, and coastal dunes with beaches on the east. Map layer utilised is LINZ NZ Topo 50.

4.1 Land Transformation

The dunes along the eastern side of the sandspit are characterised as "a well-vegetated dune system with stable back-dunes and dynamic foredunes" (Single, 2015). The sandspit acts as the buffer for Blueskin Bay to protect against the effects of erosion and direct inundation from the open sea (Goldsmith & Sims, 2014). Single reports that the beach on the eastern side of the sandspit is experiencing progradation averaging +4.4m/yr^{-1} (measured between 1990 and 2014).[1] According to Goldsmith and Sims, activities such as excavation or vegetation clearance that disturb the form of the sandspit and its vegetation cover may compromise the natural buffering ability of the spit itself (2014). This could result in further changing of the shape of the spit, influencing how storm surges and tsunamis effect the bay and surrounding area inland. As the dunes and sand formations are at this stage increasing and moving seaward (by up to 230m at the northern end of the spit between 1958 and 2013)(Figure 4-2), this has actually increased the buffering effect against coastal hazards for the Blueskin Bay communities, including the

[1] Measurements taken between 1862 and 1968 showed a total change of +30m, averaging +0.28m/yr^{-1} (Single, 2015).

inland areas of Warrington (Goldsmith & Sims, 2014). Despite this the dunes remain sensitive to rapid erosion during strong storm surges, with recovery a slow process.

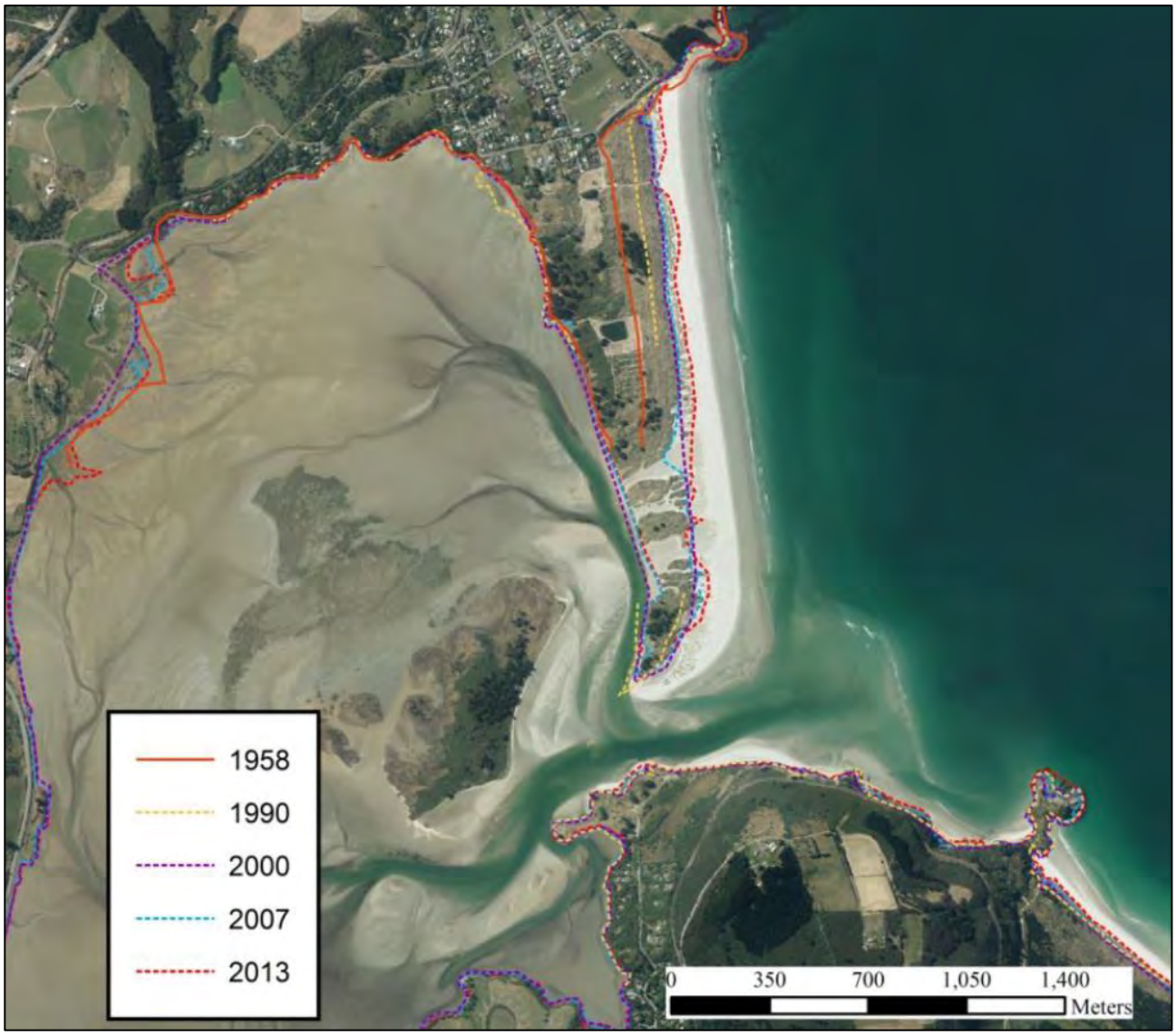

Figure 4-2. DCC map showing coastal changes at the Warrington Spit from 1958 to 2013 (as presented in Goldsmith & Sims, 2014).

5 Historical Background

Warrington is located at the north end of Blueskin Bay. It is located within Merton Riding, in the Waikouaiti County. While the land here is dominated by dune and estuarine landscapes, documentary evidence indicates that occupation of the Warrington area began as early as the so-called "moa-hunter period" Māori. Evidence of occupation and activity by mana whenua continues, in intermittent phases, through to the contact period and early colonial periods, through to the current day. The Māori and European histories of the area are discussed below.

5.1 Overview of Māori Activity in Warrington

As part of the larger Blueskin Bay area, Warrington was one of many places seen as a prime location for settlement due to its access to kai moana and sea birds (Pullar, 1957). Warrington and Blueskin Bay contained a number of occupation areas prior to European occupation. There are historic references to a Māori village at Warrington and as well as Kahuti (Blueskin) living at Doctor's Point. Early occupation at Warrington has been identified from the later 1800s, as Aparata Renata (AKA Alfred Reynolds) reported "before arriving at the end [of Warrington Beach] the site of an ancient Maori[sic] residence is passed, on which no end of fine implements have been found, together with moa eggs almost complete. There are some very interesting stone floors of native construction here the use of which has not been satisfactorily explained so far" (Renata, 1894).

Within the wider Warrington Spit area there are a total of seven archaeological sites recorded (Figure 5-1). I44/177 and I44/178, both Māori occupation and midden sites are situated within the project area and are discussed in Section 5.3 below. Discovered by Brian Allingham, site I44/194 is a midden site to the north east of the project area, dating to the later period (Allingham, 1989). I44/200 is located to the south of I44/178, and records exposed shell middens covering roughly 60m x 30m (NZAA, 2019). Stone flakes were recorded at this site, although shell is the main component of the midden. This site was also recorded by Allingham, in 1986. In 1983 Brian Allingham also recorded site I44/125 to the northeast of the project area, at the corner of Esplanade and Church Road. This site records a narrow terrace with possible oven stones, although no midden or other cultural material has been recorded at this location. 100m north of the most western point of the project area lies I44/180. This site is recorded to be the location of a shell midden that is eroding out of the banks, similar to I44/178. This site, also recorded by Allingham in 1983, has little written on the site record form, except for "History and extent of site unknown" (NZAA, 2019). The final site within the Warrington Spit area is I44/179, which was identified as an oven site eroding from a low bank at the edge of the estuary to the east of Bay Road. The site was not relocated during the 2006 updates and is believed to have been completely lost to erosion.

The nature of the sites in this wider area, all Māori midden, oven or occupation sites, indicates heavy usage of the area by Māori prior to European contact. As Hamel refers to the area as a kāik, and early references discuss the "Warrington Beach" in general as site of early Māori occupation, it is fair to say that for a long time the archaeological sites that are located within the beach and spit area have been treated as a site complex, rather than separate and unrelated archaeological sites (Hamel, 2001).

In many of the large-scale discussions of early and late mana whenua occupation of the Otago region, the Warrington Spit area is referenced varyingly as a moa-hunter site, nephrite working site, kāika and pā site (Anderson, 1989; Anderson & Smith, 1996; Hamel, 2001). The site is generally discussed as an important site for the understanding of pre-contact Māori, covering approximately 2ha, despite no systematic excavations having been completed. Allingham generally discusses the Warrington Spit as a site complex, showing intermittent occupation, with fringe sites dotted along the coast. The high number of midden sites along the coast are likely indicative of further settlements or encampments. According to Allingham and Pullar, the "Māori name for the site at the time of European contact was Okahau, and apart from being a popular settlement, the area was reportedly a meeting place for foot travellers passing over the inland ranges to places such as the Kaikorai estuary or Central Otago" (Pullar, 1957).

Figure 5-1. Map of previously recorded archaeological sites recorded within the Warrington Spit area (NZAA, 2019).

5.2 Pākehā Occupation and the Establishment of Warrington

The Warrington area was initially called Warrenton and the reason for the change to Warrington is uncertain (Church, Strachan, & Strachan, 2007). European settlement in the Warrington area began prior to the establishment of the official village. A Crown Grant plan from 1863 gives the indication that the area was occupied relatively early, as almost all of the sections in the area had been purchased (Figure 5-2). This plan also showed that land had been set aside for a scenic reserve, a quarry, and a school site.

Figure 5-2. Crown Grant plan of Warrington area 1863 (Otago Crown Grant Index Records Maps, 1863).

The earliest indication of settlement in the area is seen in historic newspapers in an advertisement placed in 1865 (Otago Daily Times, 1865). This advertisement was for a number of animals and agricultural items to be sold at "Warrington Park, Blueskin District," (Otago Daily Times, 1865). In 1866, it was advertised that "Warrenton Park Farm" was for sale, with the listing stating that the farm consisted of "about 400 acres, with good House, Sheds, and fenced in Paddocks," (Otago Daily Times, 1866). Other advertisements of animals from farms in the area were placed during the late 1860s, reflecting the agricultural environment of the area.

Discussion of the establishment of an Anglican church in the area began in the early 1870s, with a foundation stone laid in April 1872 (Evening Star, 1872a). Prior to this, some 40 settlers would meet for services at the residence of Mrs Pitt, indicating a strong necessity for a church to be constructed (Evening Star, 1872b). Land for the church was donated by Mrs. W. A. Pitt from her property in Warrington (Evening Star, 1872b; Moore, 1958). The full funds for its construction had been raised from a concert in Dunedin held earlier in the year (Evening Star, 1872a). The St Barnabas Church was formally opened in November 1872 (Church et al., 2007). This opening event was very popular, with many travelling from Dunedin to visit, and it was noted that "so crowded was the Church that not a few were unable to gain admittance," (Otago Witness, 1872). St Barnabas' and its grounds were officially consecrated in June 1873 (Otago Daily Times, 1873).

At this time, the Warrington area was situated on an important route northward from Dunedin to Waikouaiti. Thus, one of the major undertakings of works in Warrington was the formation of the Coast Road, which the later settlement was built around. In 1874, Captain Pitt was advised that as soon as the Waikouaiti Road Board received his rates, work on the Warrington Road would begin. Pitt had previously gone bankrupt, and so it is not surprising that the Board were waiting on his money before works began (Otago Daily Times, 1870). In 1876, it was announced that a Post Office was opened at Warrington, with post from Dunedin arriving daily (Otago Daily Times, 1876).

In 1877, Captain Pitt subdivided his land at Warrington Estate, between the Coast Road and the sand spit (Church et al., 2007). J. E. F. Coyle mapped out five blocks and 25 sections ranging from two to fifteen acres, naming Park, Bank, Bay, Hill and Church Roads, and an Esplanade with access off Church Road (Church et al., 2007; Otago Daily Times, 1877). These sections were described as being "in close proximity to the Main North Trunk line of railway, have a frontage to the Ocean and Blueskin Bay, with a background of magnificent timbered land," (Otago Daily Times, 1877). The sale of the sections occurred in mid-1877 (Church et al., 2007). Around this time, the Education Board sanctioned the establishment of a school at North Blueskin, close to Warrington (Otago Witness, 1877a). In December 1877, it was announced that the settlement at Warrington was going to be extended (Evening Star, 1877).

By December 1877, the railway line from Sawyers Bay, and subsequently Dunedin, had been laid as far as Warrington, with the line planned to be opened late in the month (Otago Witness, 1877b). It was announced in January 1878 that a station would be built in Warrington (Otago Daily Times, 1878). Following this announcement, the new extension of Warrington was carried out, with the five large blocks subdivided into 18 sections on Station and Meadow Roads, and the Village of Warrington of 16 quarter-acre sections were laid out between the station and the coast road (Church et al., 2007). During the advertisement of these sections it was noted that "a portion has been set apart and surveyed for a township," and that Warrington "must inevitably become the most favourite watering place in Otago," (Evening Star, 1878).

Only a few houses were built in the new subdivisions initially, those of the Downes, Ferguson, and Bremner families (Church et al., 2007). In an 1880-81 directory, 16 men were recorded at Warrington. Over time the population expanded, as some staff at the Seacliff Asylum built their homes in Warrington (Church et al., 2007). The best-known house in Warrington was the Manor House, built in 1896 by Charles Ritchie Howden, which still stands today (Moore, 1958). Races were frequently held at Warrington until well into the twentieth century, with some 600 people attending the event in 1881 (Evening Star, 1881). In 1887, Sir George McLean established the Warrington stud farm, situated mid-way between Warrington and Omimi (Moore, 1958). This farm bred a number of successful horses, the farm described as being the "show place of Otago," (Moore, 1958).

It was in the twentieth century that Warrington began to fully develop as a village. The population had increased to 108 by 1901 (Statistics New Zealand, 1901). A plan of the settlement from the 1901 military maps shows a number of buildings located around the railway line (Figure 5-3). Numerous farms can be seen around the settlement.

The township and its beach became a popular resort spot with its white sands and large safe breakers, more accessible than the beach at close-by Waitati (Moore, 1958). Many Dunedin families had summer homes at Warrington in the early twentieth century (Figure 5-4, Figure 5-5). One of the most notable residents was Arthur Barnett who rented the Manor House in 1901 (Moore, 1958). Barnett later bought the Presbyterian Church and converted it to a residence (Moore, 1958). Further development of the area, including the construction of a rest home and a school within the township, did not occur until the twentieth century.

Figure 5-3. Warrington in 1901 from the Military Maps.

Figure 5-4. View overlooking Warrington 1912 showing a number of residences. (Crombie, 1912).

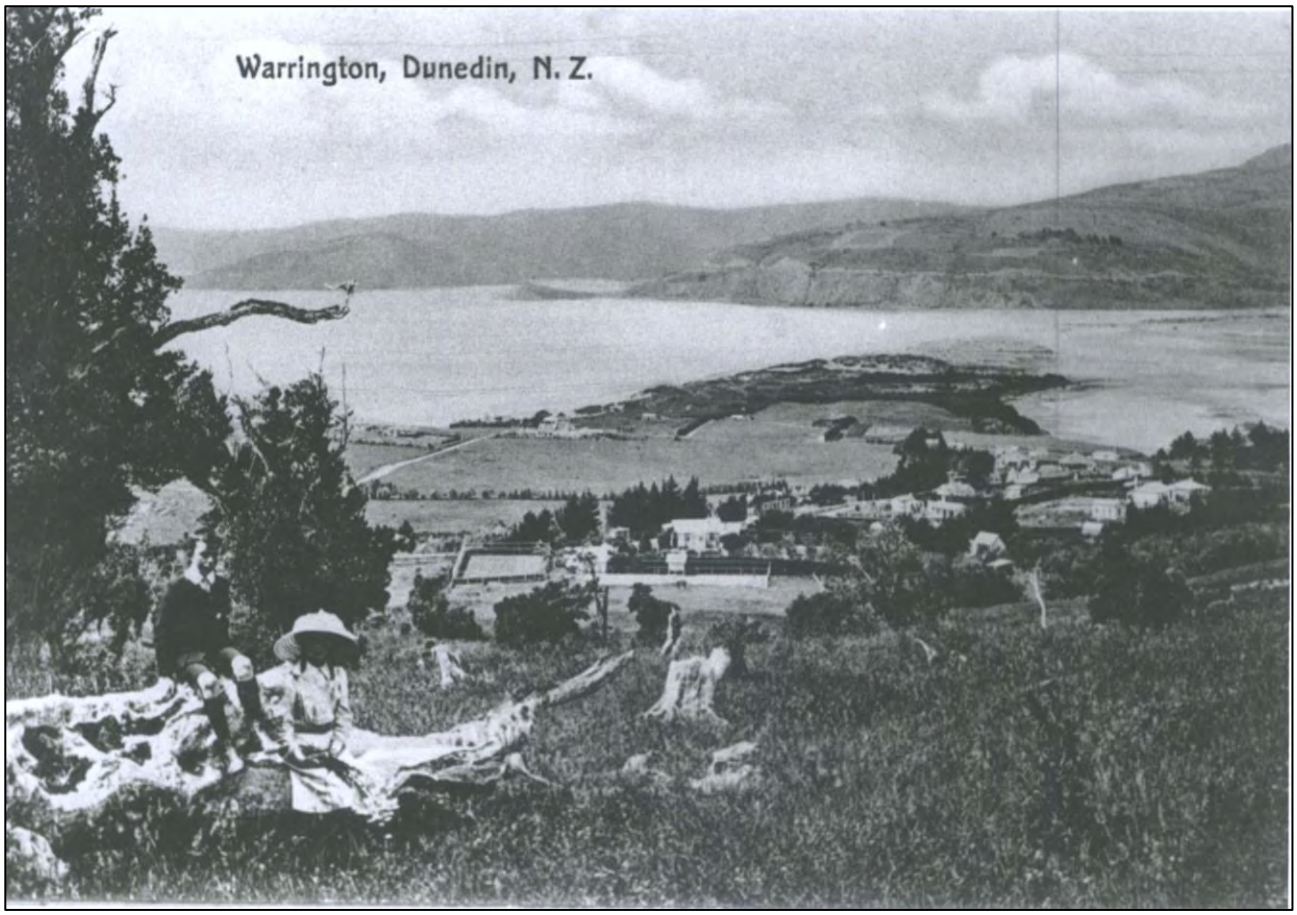

Figure 5-5. A circa 1910 photograph looking out over the Warrington beach area (Anonymous, 1910).

5.3 The History of 20 Bay Road, Warrington (I44/177 and I44/178)

The project area at 20 Bay Road, Warrington, has a history that echoes the surrounding area. Historic research and the archaeological record have shown that the property was occupied by Māori through many phases. After the arrival of European settlers, the property was apparently used as both a nature reserve and a rubbish dump, resulting in the modification of the land to accommodate new tracks and accessways to the shoreline. While ArchSite places only one archaeological site within the property, this assessment indicates a second site likely extends into this area as well (Figure 5-6).

5.3.1 Site I44/177

Site I44/177 was recorded in 1983 following a site visit completed by Brian Allingham in 1982, with numerous subsequent site visits. Allingham submitted a report on his site visits to I44/177 in June and July of 1983 (available as additional documentation for site I44/177 in the online SRF, NZAA, 2020). Allingham recorded what was termed as the "Warrington Moahunter site" and identified the site as being located at the northwest end of Warrington domain within an area of stablised sand dunes, with the area defined by the presence of black sand, heat-shattered stones, shell fragments, and moa bone. Allington suggests that adzes (types 1A, 2A and 4A), harpoon points, minnow lures, slate knives and silcrete blades held in the Otago Museum likely originated from this site. These were collected largely by H. D. Skinner in the early twentieth century. A later phase of site use was also identified, with the area utilised as a rubbish dump during the nineteenth and twentieth century.

Allington notes that the site may have been recorded unofficially as early as 1894 by Alfred Reynolds (under the name Aparata Renata) in the *Otago Witness*. Reynolds discusses a site of "an ancient Maori residence… on which no end of fine implements have been found, together with moa eggs almost complete" (Renata, 1894).

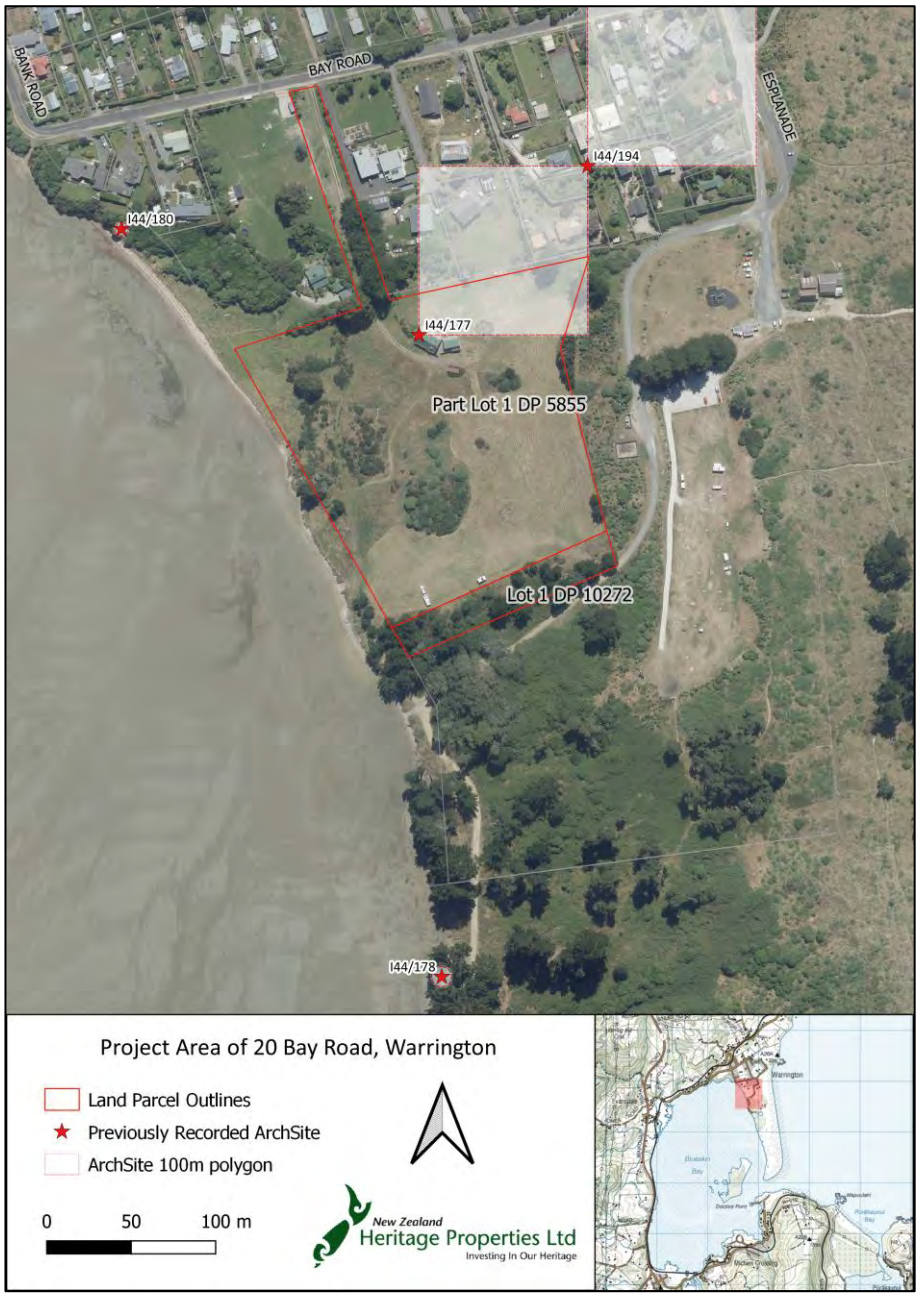

Figure 5-6. Project area with previously recorded archaeological sites in the area.

The site had been well fossicked by the early twentieth century, with it hypothesised that an A. Hamilton visited and reported on the site in 1904 and 1905;[2] however, Allingham notes that development and fencing of the area probably restricted public access since approximately 1900. A circa 1910 photograph looking out over the spit shows the area cleared and with divisions indicating fences (Figure 5-5). The exact site location remained unrecorded until Allingham visited the site in June of 1982. At this time, he photographed and mapped the area, as well as collected moa bones and artefacts from the surface.

Allingham revisited the site on many occasions, with reports submitted to New Zealand Historic Places Trust (NZHPT, now HNZPT) on site visits in combination with members of the University of Otago, in 1984, 1986, 1987 and 1989 (Allingham, 1986, 1987, 1989; Kooyman, 1984). Further details of the archaeological investigation of this site are provided in Section 6.

[2] Allingham makes this hypothesis in his site record form, however it is unclear what publications or reports this is referring to, as no references are given.

The work completed by Allingham resulted in the site at Warrington being included in many of the large-scale discussions of early and late Māori occupation of the Otago region, referenced varyingly as a moa-hunter site, nephrite working site, kāik and pā site (Anderson, 1989; Anderson & Smith, 1996; Hamel, 2001). The site is generally discussed as an important site for the understanding of pre-contact Māori, covering approximately 2ha, despite no systematic excavations having been completed

5.3.2 Site I44/178

A second, less known, archaeological site is also located on the boundary of the project area. This is I44/178, first recorded by Allingham in the same 1982-1983 visit as I44/177. This site is located on the western shore of the Warrington Spit, covering approximately 150m of the shore. Like many in New Zealand, the beach area is designated a legal road; however, based on Allinghams site plan I44/178 forms much of the western boundary of the project area. Allingham's original site record form records a blackened sand layer with sparse cultural material including mixed Māori midden deposits and cultural material, with European fence posts. Allingham's plan marks the area at the north west of the project area as the find spot for silcrete and basalt flakes. Little seems to have been recorded of this site, apart from its existence and a few artefacts that were taken to the Otago Museum, and no further authorities or site reports have been submitted to the current HNZPT. It would seem that this site is generally included in the larger site complex discussed across this beach under I44/177. The main threat to I44/178 was noted as natural erosion. The site appears to have been revisited during the 2006 field surveys completed by NZHPT, with the online NZAA ArchSite record noting the site is visible and still eroding along the shore. No formal investigations of the site have been carried out.

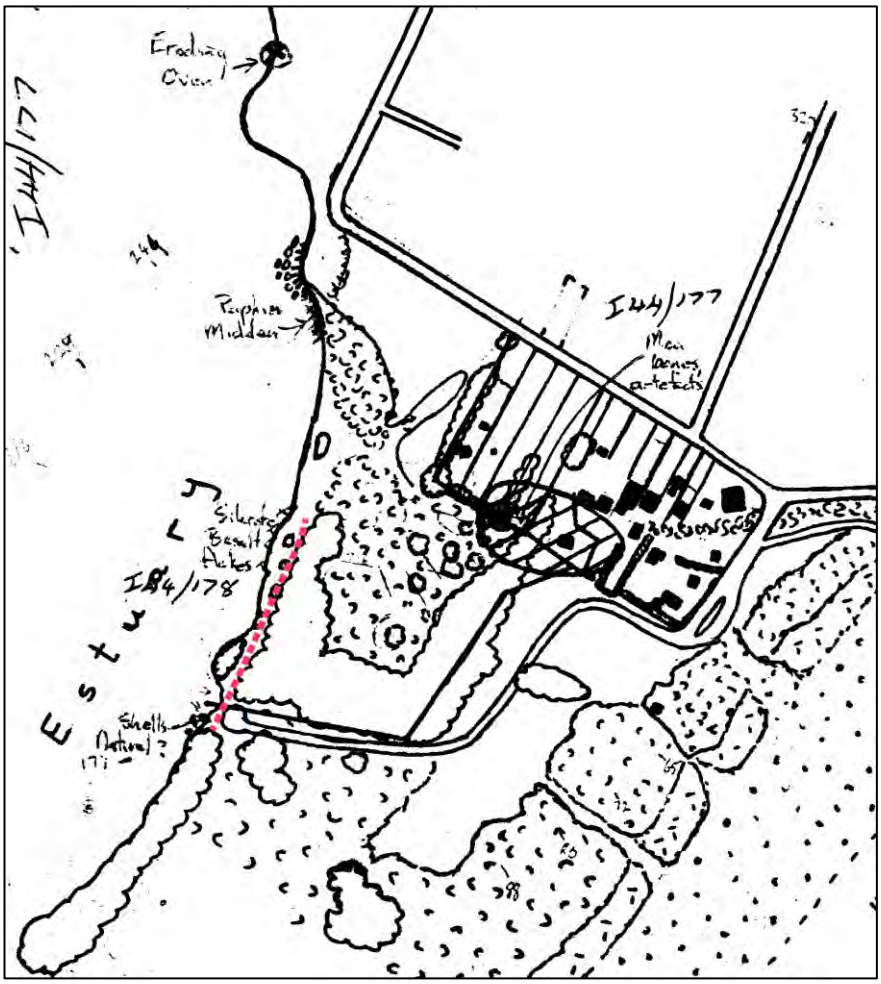

Figure 5-7. Site plan of archaeological sites at Warrington Beach, by Allingham, in his 1983 site record form for I44/177 and I44/178. Recorded extent of I44/178 marked by red dashed line.

5.3.3 Pākehā History of 20 Bay Road

20 Bay Road, Warrington, was originally surveyed as Part Sections 1 and 2 of 50, Waikouaiti Survey District (Otago Crown Grant Index Records Maps, 1863). This was owned by George James Warren, along with the large sections of land covering much of the Warrington area going north (Figure 5-8). The 1901 Military Map (Figure 5-3) shows the eastern half of Past 2 now occupied by Howden's Manor house, with a few other smaller houses marked. At this point, the area included as 20 Bay Road was not occupied. While Allingham mentioned a rubbish dump on the property within the SRF, no further documentation could be found associated with this.

Figure 5-8. Close up of the 1862 Waikouaiti Survey District Crown Grants Index Map (Otago Crown Grant Index Records Maps, 1863).

A 1944 subdivision map indicates the land included as Part 1 of 50 was subdivided, starting to resemble the current land parcel (Figure 5-9). A 1961 map of the Lot shows the owner being a R.C. Bishop, of Dunedin and the southern portion of the lot being subdivided further; the surrounding land parcels within the spit are also owned by "R.C. Bishop of Dunedin & Warrington Improvement Society Inc." (Figure 5-9). Despite this, historic aerial images from 1958 and 1985 show buildings on the north and eastern lots, with no structures in the project area; however, varying levels of forestry and dune formation are evident (Figure 5-10). While the archaeological site record form for I44/177 references a European period rubbish dump on the site, this is not visible within the historical records, maps or photographs.

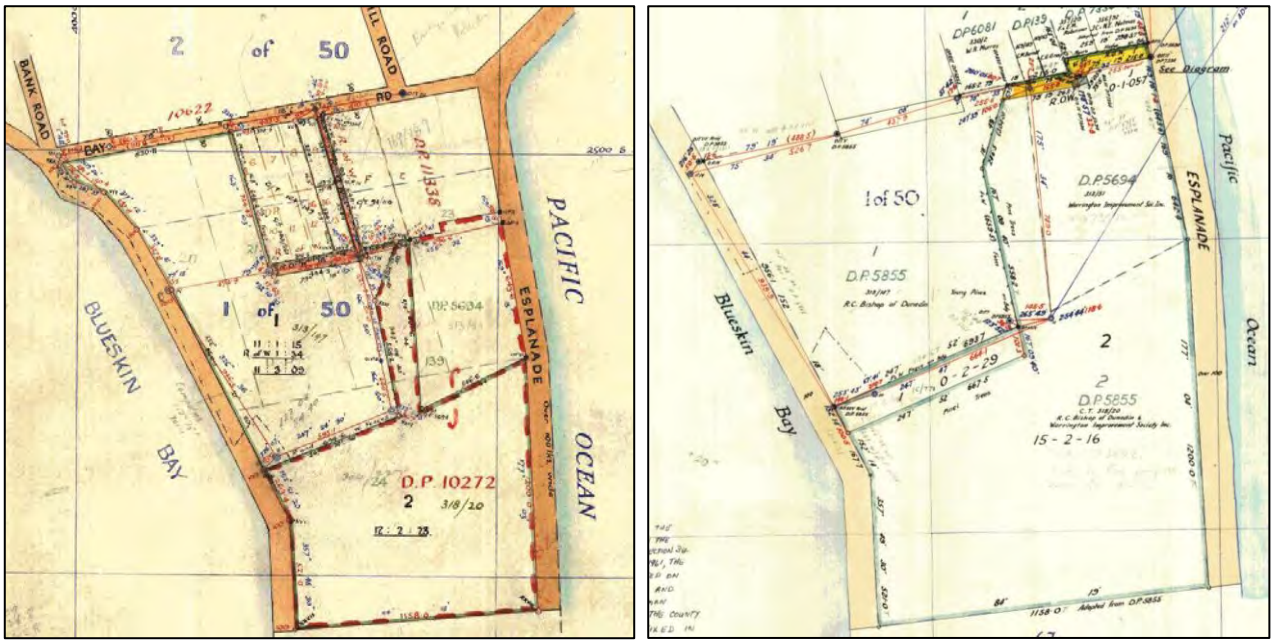

Figure 5-9. Left: 1944 subdivision map of the section, showing the new blocks to the east being separated from the main Part Section 1 (Paterson, 1944). Right: 1961 map showing the owner of much of the Warrington Spit is R.C. Bishop of Dunedin and Warrington Improvement Society Inc. (Warburton, 1961).

Figure 5-10. Retrolens photographs showing no structures within the project area. Left: 1958 (LINZ, 1958). Right: 1985 (LINZ, 1985).

6 Previous Archaeological Investigations

The Warrington area has long been the findspot for Māori archaeological sites, with reports dating to as early as the 1890's. The area was one of early interest to New Zealand's budding archaeologists at the turn of the twentieth century, along with other known settlement areas such as Whareakeake. These sites have fallen prey to fossickers and developers over the years, while remaining important sites for the archaeological communities understanding of Māori occupation within the area. Two archaeological sites intersect with the current project area: I44/177 and I44/178; these sites have been introduced above, and specific details of prior investigations at I44/177 are discussed further in this section. No formal investigations of I44/178 have been carried out.

6.1 Previous Investigations of I44/177

The exact site location for I44/177 remained unrecorded until Allingham visited the site in June of 1982. At this time, he photographed and mapped the area, as well as collected moa bones and artefacts from the surface. When he returned in June of 1983, he recorded the site was freshly disturbed, with portion of a basalt adze, silcrete and green basalt flakes found in the spoil of a bottle-collectors disturbance (Figure 6-1). A minnow lure shank was also exposed on the surface. Allingham returned with Jill Hamel to record the disturbed spoil. Within this they recorded prehistoric artefacts and "obvious midden"; the prehistoric material included fire cracked rocks (FCR), shell, moa bones and artefacts. During recording Allingham noted that lenses of prehistoric material within the stratigraphy of the European rubbish dump, to a recorded depth of 1.7m, presumably from the use of the surrounding dune sand to cover the rubbish. This visit found no intact Māori deposits. The area recorded in this visit falls in the most eastern point of the project area (see Figure 6-2).

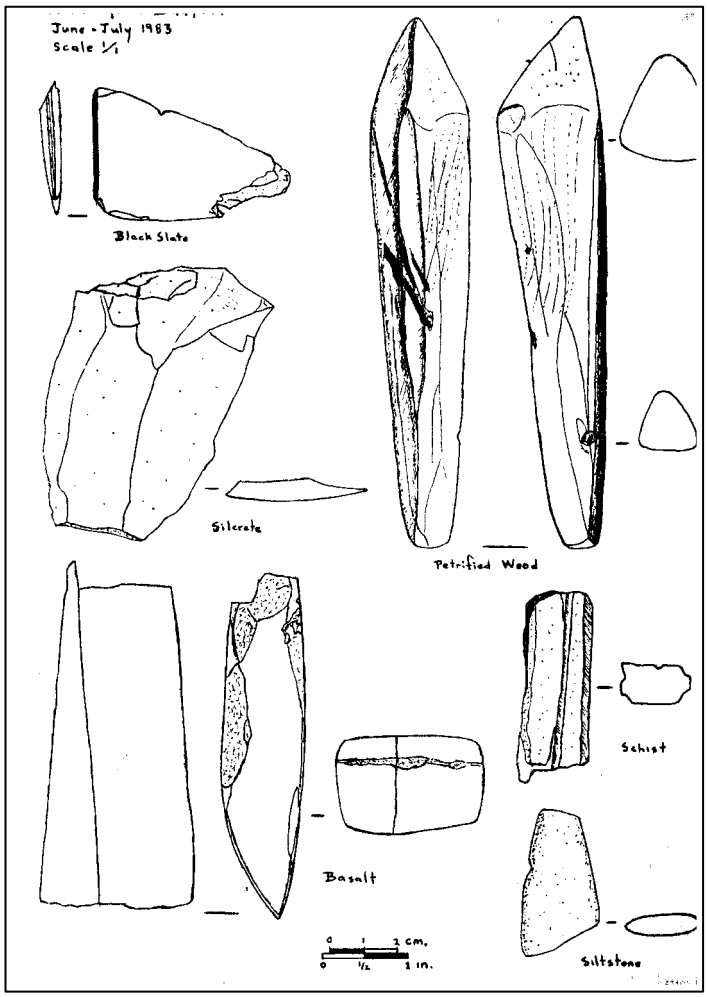

Figure 6-1. Artefacts recorded by Allingham during his 1983 site visit, included in his report (available as additional documentation for site I44/177 in the online SRF, NZAA, 2020).

The 1985 to 1986 excavations involved trenches for a 2.5m x 1.2m septic tank, 3m x 0.5m overflow drain, and 6m x 0.8m sump in Allingham's Area A (Figure 6-2). These trenches found multiple cultural layers, dating to the "Classic period", intermediate period and early Māori, based on artefact type (Allingham, 1986). Fire scoops, FCR, lithic material, worked bone and kokowai were all found in this visit. The areas of excavation monitored in this phase were to the northeast of the current project area.

The 1986-1987 report covered excavations related to the development of two holiday residences by the Roman Catholic Diocese of Dunedin (Allingham, 1987). This included testing prior to works, and excavation of trenches for field drains and fencing. Two small areas of in situ prehistoric cultural deposit were identified within the area excavated for the field drains, Excavation A and B. Excavation A found the intact base of an oven, including two quartzite flakes, with the broken butt portion of an adze in the disturbed topsoil above this; Excavation B encountered burnt oven refuse, midden and artefacts in a 20cm thick layer, under a 45cm thick layer of recent topsoil. The works in Allingham's Area C also encountered features such as post holes and pits. The area covered in these excavations was, again, to the north and northeast of the current project area. Allingham noted in his report that the original field drain plan was altered with permission from the client to minimise the effect on the archaeological site (Allingham, 1987).

Allingham's 1988-1989 works took place in site I44/177, as well as I44/194, the nearby midden site recorded further northeast from I44/177. These works took place for sewerage drainage with monitoring taking place daily for two weeks in August of 1989 (Allingham, 1989). This work was completed through a series of test pits taken at regular intervals along the path of the drainage. This work allowed for clear stratigraphy's to be recorded across the site. This phase of works indicated that the western extent of I44/177 (where it intersects with the northeast corners of the project area) has older dates closer to the surface than those in the east, due to the lack of later "Classic" period deposits. During these excavations lithics such as adzes, blades, tools and flakes made from various stone types were collected, along with a large collection of bone artefacts, generally related to fishing (Figure 6-3). Dentalium shell and moa bone were also recovered in these works. In comparison to site I44/194, I44/177 has a much greater quantity and variety of moa bone; however, Allingham believes the two sites are part of a greater, connected site complex (Allingham, 1989). Overall, Allingham concluded that the early moa-hunter phase indicated transient settlement on the western side of the site, visible in the thin lenses of occupation material, while the middle period deposits featured post holes and other evidence of structures, indicating long-term settlement (Allingham, 1989).

In 2006 a site damage assessment was undertaken by Jill Hamel on behalf of the NZHPT, following notification in the last months of 2005 that vegetation clearance and earthworks had taken place at 20 Bay Road (Part Lot 1 DP 5855). Following the site damage assessment by Hamel, Richard Walter was commissioned to further assess and clarify the nature of the site and how earthworks had, and could potentially, impact the archaeological sites in the area.

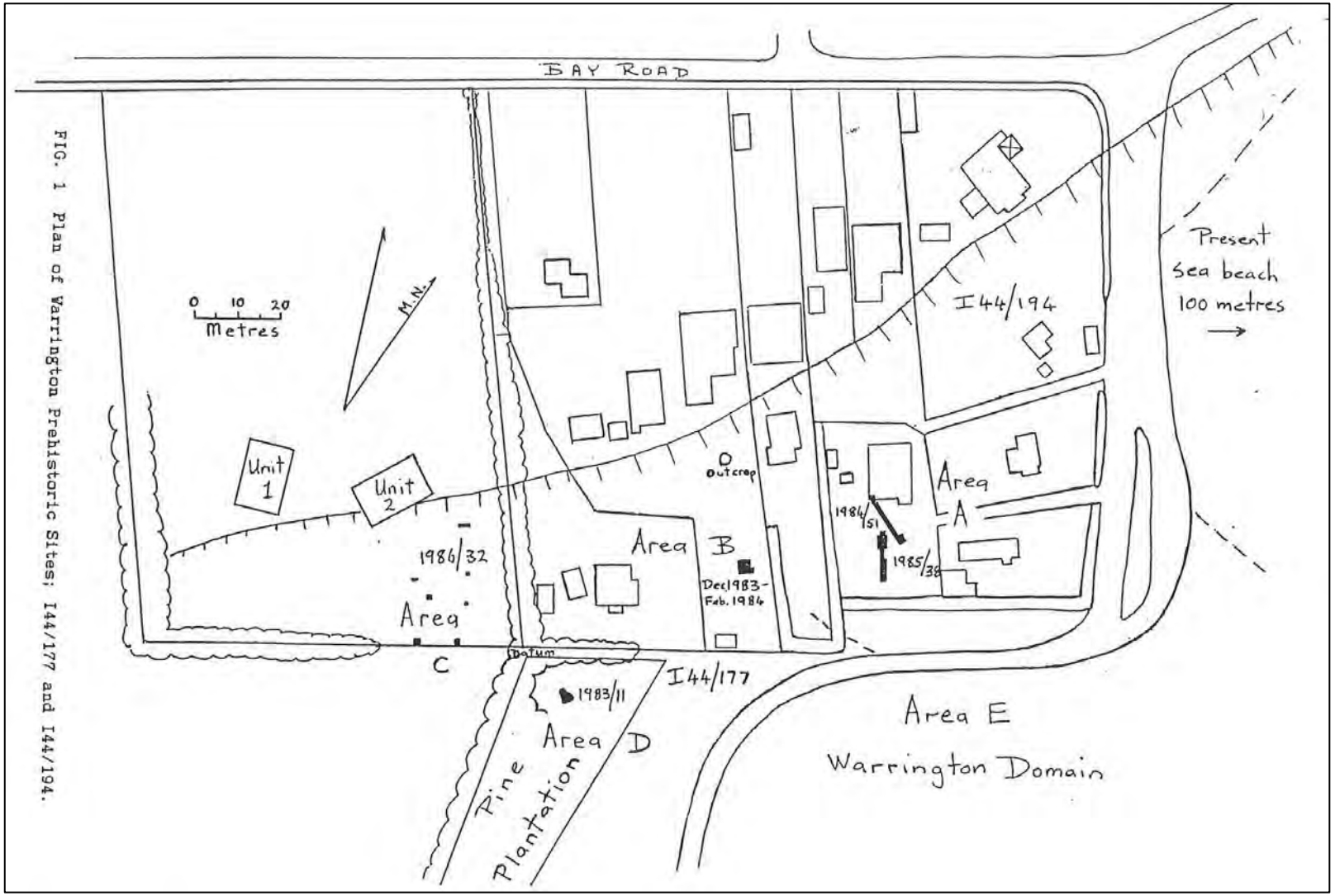

Figure 6-2. Sketch map of Allingham's various excavation areas from 1983-1987 for I44/177 (Allingham, 1987 Figure 1).

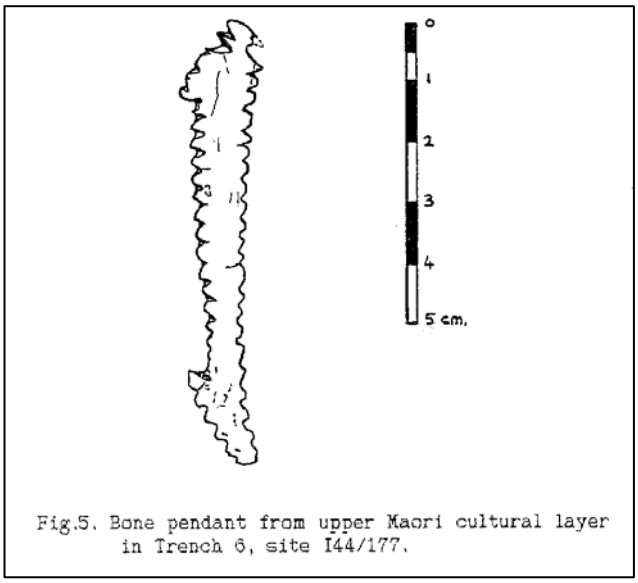

Figure 6-3. Example of worked bone artefact collected during the 1989 excavations (Allingham, 1989).

Walter notes that the damage to the site that took place first in 2001, following the subdivision of the land, and then again in 2005 included the removal of trees, slashing of scrub, contouring of the land removing the humps of the some of the higher dunes, and harrowing. As expected, the contouring proved to be the most destructive activity (Walter & Jacomb, 2008). The activity took place across much of the land parcel, although the northeast corner where site I44/177 is located appeared to have suffered the worst damage. Walter and Jacomb completed a site visit including test pitting and augering for the 2008 report, noting that the visible extent of the site covered much of the northeast corner, a larger area than recorded previously (Figure 6-4).

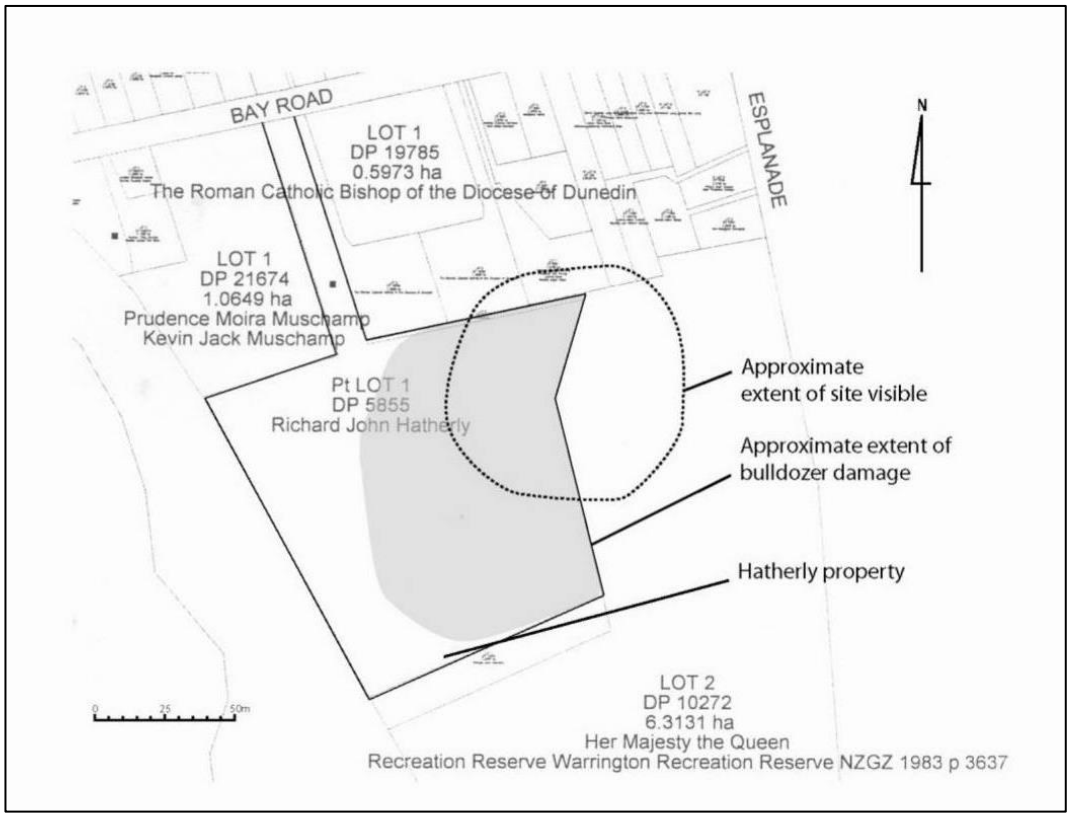

Figure 6-4. Depiction of site damage and visible site extent at 20 Bay Road (as seen in Walter & Jacomb, 2008 Figure 4).

Despite the large amount of site damage that Hamel, Walter and Jacomb recorded, the conclusion of works from this period are that there are likely still intact deposits of both Māori and European origin buried under the sand dunes and bulldozed area in the northeast of the project area, possibly under at least 1.5-2m of this freshly bulldozed material (Walter & Jacomb, 2008). Walter concludes that "any such intact deposits should be protected since there may not be much left of the site", discouraging any further development to the eastern area of the subdivided land (Walter & Jacomb, 2008).

In 2012 NZHPT was notified of further potential site damage to the land encompassed by 20 Bay Road. This was alleged to have occurred at Christmas of 2011, including vegetation clearance by a digger and works on the driveway. Upon a site visit by Matthew Schmidt in February 2012, it was noted that damage was ongoing due to the heavy vehicle traffic going over the exposed areas of I44/177 in the northeast of the project area. In March 2012 Richard Walter again submitted an archaeological assessment of 20 Bay Road to NZHPT, after completing a site visit to identify damage, site exposure and areas potentially at risk by proposed subdivision of land by owner, Richard Hatherly (Walter, 2012). Walter's conclusion was that extensive damage had been done to the site (I44/177) previously, and that which remained was of high archaeological importance. All efforts should be made to avoid high risk areas of the land, particularly that in the northeast, and infilling of hollows was recommended. Access via the current right-of-way was deemed as damaging and archaeological involvement was recommended (Walter, 2012).

6.2 Geotechnical Investigations under Authority 2020/540

As part of the proposed redevelopment of the site, an exploratory authority (2020/540) was obtained to undertake geotechnical investigations. This test pitting was completed by Stantec on 13 May 2020, monitored by NZHP archaeologist Jessie Hurford. This test pitting took place in six locations across the project area, including two in the north and one in the south accessways, two in opposite areas of the proposed parking area and one in the low ground in the western side of the project area (Figure 6-5). These test pits were approximately 300mm x 300mm and were excavated to a depth of approximately 500mm. Little cultural material was encountered during these tests, with the stratigraphy consisting of various coloured sand, clay and sandy loam. One bluestone cobble was encountered in TP6 which was tested to continue in some form for approximately 1m. This cobble is an unexpected find on the site, and likely represents a manuport; however, it is unclear which phase of site use this may be associated with (i.e., occupation by mana whenua or pākehā).

Figure 6-5. Location of geotechnical test pits completed by Stantec under authority 2020/540.

7 Results of the Site Survey

A pedestrian survey was completed on 5 February 2020 by Dawn Cropper and Victoria Ross, which identified clear areas of archaeological interest as well as modern site disturbance (Figure 7-1). The survey was conducted in 10m transects generally running in line with the property boundaries. Conditions on the day were clear and sunny; however, rain had inundated the site in the past week. At the time of the survey, the vegetation largely consisted of grass, with small bush areas in depressions and on rises. Sand dunes on the west were evident in multiple waves. The southern portion of the project area, located within Lot 1 DP 10272, was forested with an access track leading to a road. Overall, visibility was low, with grass and bush impeding identification of site extent and above ground features. However, it is thought that I44/177 extends further south than previously recorded, while I44/178 may exist only in the very southwest of the project area.

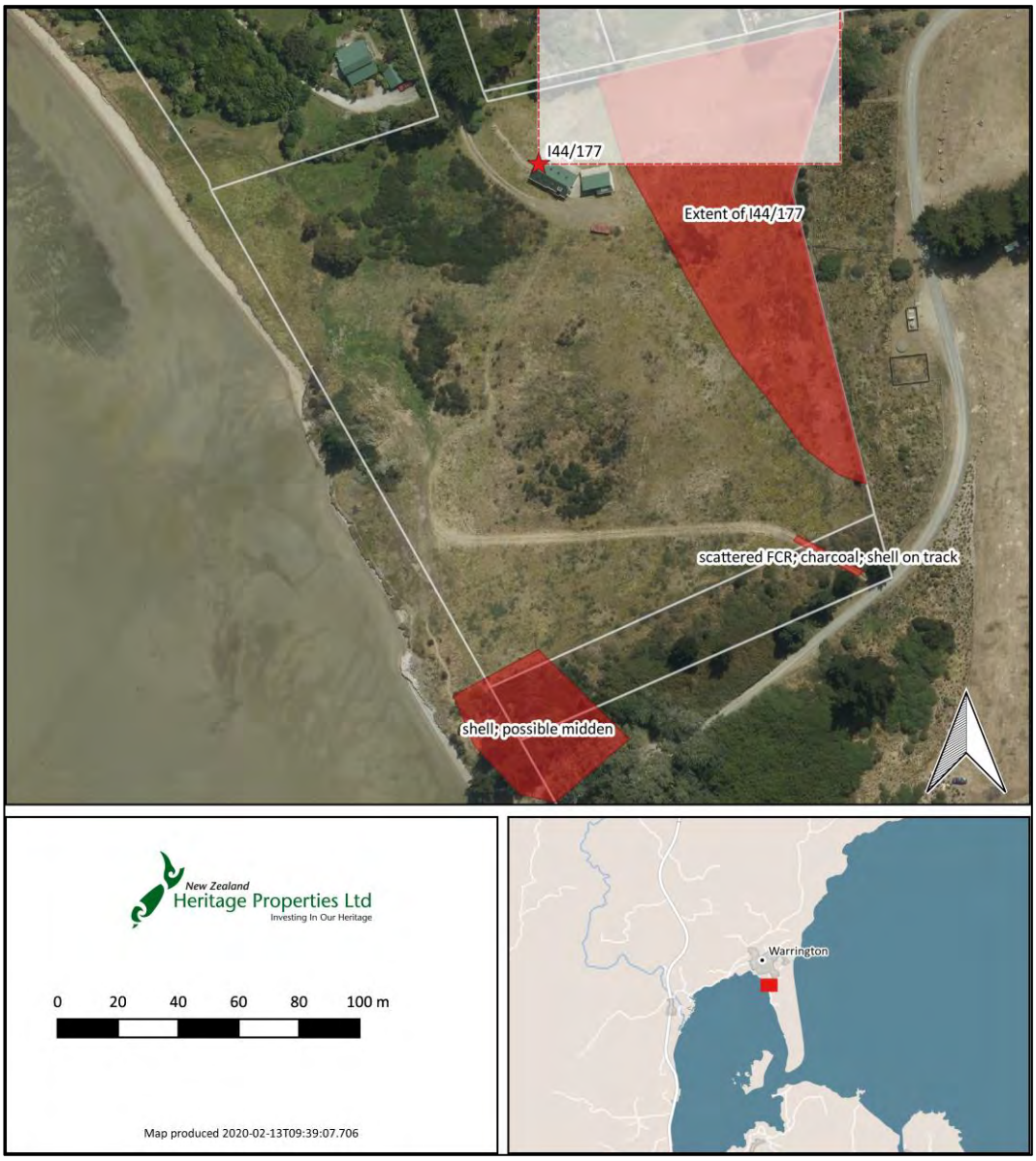

Figure 7-1. Areas of interest identified during the site survey, February 2020.

It was evident across the site that activity had taken place which involved minor earth disturbance. At least one recent small dig out for a fire was seen, with the turfed square placed to the side (Figure 7-2). Areas of vehicle movement were also visible in the crushed grass and sand. Levelling and landscaping of the northern half of the project area was also evident, as was reported on by Allingham and Walter. These works have created levelled areas with what appears to be at least one artificial hill on the west side of the property potentially for drainage.

Figure 7-2. Left: looking north across site showing the grassed and undulating nature of the area. Right: recent earth disturbance visible in the site, showing evidence of a small fire. Turf replaced by archaeologist. Looking north.

The eastern side of site had numerous sandy exposures. Where the grass cover was thinner, sand was visible with patches of cultural material. In the northeast of the site, bone (burnt and unburnt), shell, charcoal and FCR were visible on the surface (Figure 7-3). It is thought that this material belongs to archaeological site I44/177, and evidence seen on site indicates that this extends further than was previously recorded on the SRF, covering nearly the full length of the eastern side of property.

Figure 7-3. Shell and bone exposed in the sand in the northeast area of site. Looking north.

Most of the centre of the site was covered in grass, and in this area of reduced visibility no features were identified. In small areas charcoal was visible within the sand, but whether this is of archaeological origin could not be determined. In the southeast corner, where the secondary access comes into the site through Lot 1, further erosion was visible in the access track. In this area shell, bone, charcoal and charcoal staining, as well as small pieces of FCR were identified (Figure 7-4).

On the western side of the project area, where the land drops down to the shore, no evidence of any definitive cultural material was found (Figure 7-5). The shallow bank along the west side of the spit appears to be actively eroding. No evidence of archaeological materials or deposits were identified along the eroded face of the bank. Further inland and amongst the trees in the most southern corner of the project area, eroding shell was identified. This was found in small clusters around the roots of trees (Figure 7-5). This corresponds with Allington's the description of I44/178, and he suggests that this exposure may be natural due to the lack of charcoal and presence

of waterworn boulders. NZHP's visual inspection of these deposits was unable to confirm if this is archaeological or is the remains of a naturally occurring layer of shell, washed up and disturbed in one of the many tidal surges recorded for the area. In this area there was also a single piece of under glaze transfer printed ceramics. As this was in the general area of the shell deposits, it is again unclear if this is related to the artefacts recorded in the archaeological site or is a post-1900 introduction.

Figure 7-4. Eroding cultural material in the access track on the south side of site. Looking northwest and east.

Figure 7-5. Left: the natural bank face at the western boundary of the project area, looking east. Right: shell deposit found in the forested area at the south corner of the project area, looking west.

From the findings of the site survey, it is clear that sub-surface archaeology is still present across the site in varying forms with some surface archaeology occurring where erosion is taking place. As this archaeology is likely to be impacted by the proposed development, NZHP recommends that standover monitoring by an archaeologist takes place during all earthworks in the project area as there is the potential for the previously recorded archaeological sites to extend further than is currently recorded. Furthermore, NZHP recommends post-excavation analysis of any artefactual finds, as well as reporting as per standard archaeological practice.

8 Constraints and Limitations

There were a few small constraints and limitations encountered during the assessment process. Access to the large number of previous archaeological investigations and reports was not always possible, therefore some information had to be relied on from second-hand sources. Similarly, with early work having taken place in the 1890s, it was not possible to verify some resources for accuracy or to clarify information.

During the survey process it was evident that there was a large amount of ground cover in the form of grass and bush. This impeded the ability to view the topography and surface of the site for archaeological features.

9 Archaeological and Other Values

The significance of an archaeological site is determined by, but not limited to, its condition, rarity or uniqueness, contextual value, information potential, amenity value, and cultural association. A brief evaluation of site I44/177 is provided in Table 9-1, and I44/178 in Table 9-2, based on the criteria defined by HNZPT (NZHPT, 2006).

NZHP has assessed that archaeological site I44/177 has moderate to high archaeological value. It holds high amenity and contextual value as a core part of the larger site complex of the Warrington Spit. Site I44/178 has a low archaeological value as an ephemeral site. While artefacts have been recorded there in the past, only midden has been encountered since the original SRF. Outside of the larger site complex, I44/178 offers little new information to the archaeological understanding of the area as midden sites are recorded frequently around the bay.

Table 9-1. Summary of archaeological value for I44/177.

Value	Criteria	Assessment
Condition		The condition of the deposits recorded as I44/177 is **fair to poor**. It is well documented that site disturbance has been common in the past century and fresh erosion was encountered during the site survey. It is likely that subsurface archaeological deposits remain; however, it is uncertain in what condition these are.
Rarity or Uniqueness	Is the site(s) unusual, rare or unique, or notable in any other way in comparison to other sites of its kind?	**Moderate**. The site has produced notable deposits of early Māori artefacts in the past and is recorded as an important occupation site spanning many phases. Its later use as a European dump site provides an opportunity to view the history of the area from first settlement through to the post-contact era.
Contextual Value	Does the site(s) possess contextual value? Context or group value arises when the site is part of a group of sites which taken together as a whole, contribute to the wider values of the group or archaeological, historic or cultural landscape. There are potentially two aspects to the assessment of contextual values; firstly, the relationship between features within a site, and secondly, the wider context of the surroundings or setting of the site. For example, a cluster of Maori occupation sites around a river mouth, or a gold mining complex.	**High**. This site is part of a larger complex of sites recorded around the Warrington area that shows evidence of common and recurring settlement around Blueskin Bay and the east coast. Due to the size and well documented archaeological investigations that have taken place within this site, this results in a high level of contextual value to continue the building and understanding of the long Māori history of Blueskin Bay and Otago.
Information Potential	What current research questions or areas of interest could be addressed with information from the site(s)? Archaeological evaluations should take into account current national and international research interests, not just those of the author.	**Moderate.** While the proposed development does not include large scale excavation across the site, the site has the potential to tell us about the recurring, possibly seasonal, use of the site by multiple groups. As an area of early European settlement and interest as well, the site is able to show us of the relationship between the original Māori activity and that of the later Europeans.
Amenity Value	Amenity value (e.g. educational, visual, landscape). Does the site(s) have potential for public interpretation and education?	**High**. As the proposed location of a formal motorhome and caravan park, the site has the potential to educate visitors and holidaymakers on the rich history of the area, encouraging respect for the natural and cultural environment around them. While most of the archaeology is subsurface, this could be achieved through information panels on site.
Cultural Associations	Does the site(s) have any special cultural associations for any particular communities or groups, e.g. Maori, European, Chinese.	**Māori and European.** The site has been recognised as part of a highly significant cultural area for takata whenua, as well as having a low level of significance as a popular area of occupation for Europeans.

Table 9-2. Summary of archaeological value for I44/178.

Value	Criteria	Assessment
Condition		**Poor**. Majority of site is likely subsurface and only eroded material is visible. Erosion is occurring across the viewed portion of the site.
Rarity or Uniqueness	Is the site(s) unusual, rare or unique, or notable in any other way in comparison to other sites of its kind?	**Low.** Site does not appear to contain any unique features and is possibly the remains of the southern fringe of larger site complex.
Contextual Value	Does the site(s) possess contextual value? Context or group value arises when the site is part of a group of sites which taken together as a whole, contribute to the wider values of the group or archaeological, historic or cultural landscape. There are potentially two aspects to the assessment of contextual values; firstly, the relationship between features within a site, and secondly, the wider context of the surroundings or setting of the site. For example, a cluster of Maori occupation sites around a river mouth, or a gold mining complex.	**Moderate.** Site is likely part of the larger site complex that covers much of the Warrington Spit. These sites as a whole, tell the story of the early and continued occupation of the area by Māori
Information Potential	What current research questions or areas of interest could be addressed with information from the site(s)? Archaeological evaluations should take into account current national and international research interests, not just those of the author.	**Low.** As the site is largely midden with some previously recorded artefacts, there is little new information to be gained from the site outside of the larger site complex.
Amenity Value	Amenity value (e.g. educational, visual, landscape). Does the site(s) have potential for public interpretation and education?	**Moderate.** The site has low amenity value on its own but has a medium value as part of the larger site complex, particularly when discussed in relation to I44/177.
Cultural Associations	Does the site(s) have any special cultural associations for any particular communities or groups, e.g. Maori, European, Chinese.	**Māori.** Identified as of significance to takata whenua as part of the occupation history of the area.

9.1 Other Values

NZHP has identified sites of interest to takata whenua may be affected by the proposed works. As such, NZHP recommends engagement with the appropriate takata whenua through Aukaha, to ensure all cultural material encountered is treated following appropriate tikaka practices.

No historic heritage values will be affected by the proposed redevelopment.

10 Assessment of Effects

The proposed development of the property at 20 Bay Road, Warrington has the potential to impact portions of the archaeological sites recorded as I44/177 and I44/178. NZMCA proposes to create a formal motorhome and caravan park on the property, with the project including the widening and sealing of the accessways, levelling of the eastern and southern areas of the property for parking, the installation of a small kiosk, gates, and a dumping station, as well as planting across the site for screening and area definition. These works involve earth disturbance as well as the introduction of barriers and new fill material. It is likely that earthworks will encounter the south side of site I44/177, while new planting on the south border of the site may disturb the possible midden deposits recorded as I44/178.

As earthworks are intended to be minor across site, keeping with the natural ground and building up as much as possible, it is likely that less than half of the archaeological site I44/177 will be impacted. The site is known to extend outside the north and east of the property, including in the portion vested to Kings College that will not be developed. To mitigate damage to the site, Stantec is investigating methods for providing a stabilised/reinforced surface suitable for traffic ability while providing a barrier over existing ground level. This will reduce the impact on any features close to the surface of the vehicle traffic passing over, preserving the material in situ. NZHP recommends this method be utilised for all built up areas to ensure the protection of archaeological material from the weight and movement of traffic.

Where the site I44/178 is believed to extend into the project area, managed native under planting is planned as well as on the eastern end where vegetated ground cover is less dense. This will involve minor earthworks that will likely disturb portions of the site. However, as the area is already forested it is possible that the site has already been highly disturbed by the tree roots. Digging of holes for new plantings may also provide the opportunity to gain more of an understanding of the composition and stratigraphy of this site to confirm if it is a natural occurrence or an archaeological deposit. As this site only extends a small way into the property and is centred further to the south with a recorded extent of over 100m, NZHP approximates that less than 10% of the site is at risk by the proposed activity.

Stantec have proposed that minor redesigns and alternative methods will be adopted if needed to avoid impact of any areas thought to be highly sensitive. NZHP would recommend that areas on the eastern side of site, where eroded material from I44/177 was identified during the site survey, be built up where possible as any form of site scrape is likely to encounter further archaeological material. In the southern parking area and towards the west shore, modern disturbance is visible along with a decrease in visible archaeological deposits. Because of this, NZHP believes there is a lower likelihood of encountering archaeological material in earthworks.

The proposed use of the project area as a formal motorhome and caravan park increases the risk of damage to the two vulnerable archaeological sites in the area. The higher volume of heavy class vehicles is likely to cause earth movement and has the potential to increase the erosion rate. NZHP believes Stantec's proposed methods will mitigate this potential for damage across the site by creating a buffer layer above the archaeology. Erosion will be mitigated by the introduction of more plants; however, erosion on the western shore where no planting will take place has the potential to increase.

To ensure that all archaeological material is protected and recorded where necessary, NZHP recommends that standover monitoring take place during all works involving earth disturbance, including but not limited to site scrape, vegetation clearance, post hole digging, planting and access widening. NZHP further recommends a site instruction document be prepared for the client outlining the archaeological history and legislative requirements of developing the site. All contractors working on the site should be given an archaeological briefing before commencing any work to ensure contractors are aware of the possibility of finding archaeological material, the legislative requirements surrounding the site and the appropriate measures upon encountering archaeology.

11 Conclusions and Recommendations

NZHP has assessed the proposed development at 20 Bay Road, Warrington for its effects on previously recorded archaeological sites I44/177 and I44/178. This assessment has found that both sites are present within the project area, comprising Lot 1 DP10272 and Part Lot 1 DP5855, Block I, Waikouaiti District. With the proposed development of a motorhome and caravan park under the management of NZMCA, it is likely that the portions of both archaeological sites will be impacted. NZHP recommends that an archaeological authority be applied for to cover any earthworks undertaken during the intended development.

As this assessment has identified two previously recorded archaeological sites within the property to be developed, NZHP recommends that standover monitoring take place for all earthworks, with any archaeological material or features recorded following current best practice, as required by the HNZPTA 2014. Sites affected are listed in Table 11-1.

Due to the significance of the site for takata whenua, NZHP recommends that local iwi and rūnaka, as represented by Aukaha, be notified before all site works commence. Furthermore, NZHP recommends that an invitation be extended to rūnaka to attend site during all earthworks, provided this is possible following health and safety measures.

Table 11-1. Sites affected by the proposed development at 20 Bay Road, Warrington.

NZAA Site Id	Site Location	Brief Description
I44/177	E 1412783 N 4934860	Midden/cultural layers containing moa and other extinct birds, also artefacts.
I44/178	E 1412797 N 4934480	A midden/occupation layer with artefacts.

As such, NZHP makes the following recommendations:

10. As a first principle, every practical effort should be made to avoid damage to any archaeological site, whether known, or discovered during any redevelopment of the site.
11. An archaeological authority under Section 44 of the HNZPTA 2014 should be obtained from the HNZPT prior to any modification of the site.
12. A site instruction document and contractor briefing document should be prepared for NZMCA. Before the start of any on-site works, all contractors should be briefed by an archaeologist on the legislative requirements of working within archaeological sites.
13. NZMCA should undertake consultation with takata whenua to ensure all areas of cultural sensitivity are appropriately protected.
14. If re-development plans are altered from those reviewed by NZHP for this assessment (Appendix A), then HNZPT need to be alerted in the first instance.
15. All subsurface works should be monitored by an archaeologist. Any archaeological features or recovered material should be appropriately recorded and analysed.
16. Before site works commence notification should be given with at least 2 working days' notice, to HNZPT, Aukaha. An invitation should be extended for a representative from local rūnaka to attend site during all earthworks.
17. If at any stage during the redevelopment Māori material is discovered, NZHP should be called in the first instance. NZHP will assist the NZMCA to contact all relevant parties, including HNZPT, and Aukaha. If Māori material does exist in the area to be developed, damage to this should be minimised. Any Maori artefacts will be, prima facie, property of the Crown and will be submitted to the appropriate institutions.
18. A full report on any archaeological material that is found should be prepared and submitted to the HNZPT within one year of the completion of archaeological site works.

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Appendix A Development Plans

Figure A-1. Development plans provided by Stantec.

Appendix B Site Record Forms of Previously Recorded Archaeological Sites

NZHP has identified that the sites listed in Table C-1 below may be affected by the proposed works, and site record forms for each site are provided in the following pages.

Table B-1. Sites affected by the development of 20 Bay Road, Warrington.

NZAA Site Id	Site Location	Brief Description
I44/177	E 1412783 N 4934860	Midden/cultural layers containing moa and other extinct birds, also artefacts.
I44/178	E 1412797 N 4934480	A midden/occupation layer with artefacts.

Appendix D Geotechnical Input

Bay Road Development

This report has been prepared for the benefit of the New Zealand Motor Caravan Association. No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

Rev. no	Date	Description	Prepared by	Checked by	Reviewed by	Approved by
			D Crawford	L Paterson	L Paterson	D Evans

1 Introduction

1.1 Brief

The New Zealand Motor Caravan Association has asked Stantec to carry out soil testing to inform future pavement design, for the potential development of a campground on the site.

1.2 Location

The site location is 20 Bay Road Warrington, 5065177 (Situation) LOT 1 DP 10272.

Figure 1.1 Bay Road Site Map

1.3 Testing

The soil sampling was carried out by Lee Paterson and Dylan Crawford of Stantec. Prior to sampling beginning all underground services were clearly identified by Delta. The site visit was carried out under the supervision of a representative from the New Zealand Historic Places Trust.

Shallow test pits were dug out by hand, with 15kg samples removed for lab testing. Topsoil was completely removed before the samples were collected. Scala penetrometer testing was carried at each of the six sites.

2 Testing

2.1 Test Pit Locations

The figure below shows the location of the six test pits.

Figure 2.1: Test Pit Locations

	Pit 1	Pit 2	Pit 3	Pit 4	Pit 5	Pit 6
Easting	397316	397340	397399	397452	397367	397321
Northing	811391	811302	811235	811165	811167	811259
Height R/L (m)	10.1	3.92	5.78	4.58	5.76	2.32

*NZGD2000 / NZVD 2016

A photo of each test pit location is attached in appendix A.

2.2 Test Pit Scala Results

At each of the six sites topsoil depths were 250mm, with the exception of site five, where topsoil depths were 100mm.

The Scala results are shown in the following table.

Depth BGL (m)	Scala 1	Scala 2	Scala 3	Scala 4	Scala 5	Scala 6 (attempt 1)**	Scala 6 (attempt 2)**
0.1	4	5	2	3	2	2	2
0.2	5	4	2	4	3	2	2
0.3	7	5	3	4	3	Refusal	3
0.4	6	7	4	3	3		Refusal
0.5	9	7	4	3	4		
0.6	9	6	4	2	5		
0.7	10	5	4	1	4		
0.8		4		1	4		
0.9							
1.0							
1.1							

*Blow Counts Per 100mm

** Site 6 appeared to be in the middle of a manmade flood path, which had bluestone placed in it. The bluestone caused two test refusals at a depth of 0.4m.

2.3 Lab Results

Samples were tested by Central Testing Services, Alexandra.

	Pit 1	Pit 2	Pit 3	Pit 4	Pit 5	Pit 6
Topsoil Thickness (mm)	225	250	250	250	100	250
Lab CBR%	4.5%	18%	7%	16%	3.5%	19%

A full copy of the lab results is attached in appendix B.

APPENDIX A Test Pit Site Photos

Stantec

Photographic Log

Client:	**New Zealand Motor Caravan Association**	**Project:**	**Bay Road Development**
Site Name:		**Site Location:**	**20 Bay Road, Warrington**

Photograph ID: 1 **Photo Location:** Test Pit 1 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	
Photograph ID: 2 **Photo Location:** Test Pit 2 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	

Stantec

Photographic Log

Client:	**New Zealand Motor Caravan Association**	**Project:**	**Bay Road Development**
Site Name:		**Site Location:**	**20 Bay Road, Warrington**

Photograph ID: 3 **Photo Location:** Test Pit 3 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	
Photograph ID: 4 **Photo Location:** Test Pit 4 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	

Stantec

Photographic Log

Client:	**New Zealand Motor Caravan Association**	**Project:**	**Bay Road Development**
Site Name:		**Site Location:**	**20 Bay Road, Warrington**

Photograph ID: 5 **Photo Location:** Test Pit 5 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	
Photograph ID: 6 **Photo Location:** Test Pit 6 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	

APPENDIX B Lab Results

Central Testing Services
18 Ngapara St, P.O. Box 397, Alexandra 9340, Central Otago, New Zealand
P: 03 4487644, W: www.centraltesting.co.nz, E: info@centraltesting.co.nz

Reference No: 20/1109

Date: 26 May 2020

TEST REPORT - LABORATORY SOAKED CBR'S

Client Details:	**Stantec New Zealand, P.O. Box 4, Dunedin**	**Attention:**	**D. Crawford**
Job Description:	**20 Bay Road, Warrington Investigations**		
Sample Description:	**See Below**	**Client Order No:**	**N/A**
Sample Source:	**See Below**	**Sample Label No:**	**See Below**
Date & Time Sampled:	**13-May-20**	**Sampled By:**	**Unknown**
Sample Method:	**Test Pit ***	**Date Received:**	**18-May-20**
Test Method:	**NZS 4407:2015, Test 3.15**		

LABORATORY SOAKED CBR RESULTS			
Sample Source:	**Test Pit 1**	**Test Pit 2**	**Test Pit 3**
Sample Label No:	**38012**	**37918**	**38010**
Sample Depth: (mm)	**300**	**Not Stated**	**Not Stated**
Fraction Tested:	**-19.0 mm**	**Whole soil**	**-19.0 mm**
Sample Description:	**Sandy SILT with minor clay and trace of gravel (minor organic matter)**	**SAND with minor silt (trace of organic matter)**	**SAND with minor / some silt and minor gravel (trace of organic matter)**
Condition of Sample:	**Soaked**	**Soaked**	**Soaked**
Surcharge Mass: (kg)	**4.0**	**4.0**	**4.0**
Time Soaked:	**4 days**	**4 days**	**4 days**
Swell: (%)	**1.2**	**0.0**	**0.4**
Water Content as Compacted: (%)	**22.6**	**13.3**	**8.6**
Water Content From Under Plunger: (%)	**30.1**	**22.7**	**26.2**
Dry Density As Compacted: (t/m^3)	**1.37**	**1.57**	**1.44**
CBR Value @ 2.5 mm Penetration:	**4.5**	**17**	**5**
CBR Value @ 5.0 mm Penetration:	**4.5**	**18**	**7**
Reported CBR Value:	**4.5**	**18**	**7**

Notes:

- ***The material was received in a natural state.***
- ***The sample was compacted to NZ Standard Compaction at the water content as received.***
- ***The rate of penetration was 1.10 mm / min.***
- ***Information contained in this report which is Not IANZ Accredited relates to the sample descriptions based on NZ Geotechnical Society Guidelines 2005, the sample method * and sampling.***
- ***This report may not be reproduced except in full.***

Tested By: **C. Fisher** **Date:** **21 to 26-May-20**

Checked By:

Tests indicated as Not Accredited are outside the scope of the laboratory's accreditation

IANZ ACCREDITED LABORATORY Accreditation No: 434

Central Testing Services
18 Ngapara St, P.O. Box 397, Alexandra 9340, Central Otago, New Zealand
P: 03 4487644, W: www.centraltesting.co.nz, E: info@centraltesting.co.nz

Reference No: 20/1109

Date: 26 May 2020

TEST REPORT - LABORATORY SOAKED CBR'S

Client Details:	**Stantec New Zealand, P.O. Box 4, Dunedin**	**Attention:**	**D. Crawford**
Job Description:	**20 Bay Road, Warrington Investigations**		
Sample Description:	**See Below**	**Client Order No:**	**N/A**
Sample Source:	**See Below**	**Sample Label No:**	**See Below**
Date & Time Sampled:	**13-May-20**	**Sampled By:**	**Unknown**
Sample Method:	**Test Pit ***	**Date Received:**	**18-May-20**
Test Method:	**NZS 4407:2015, Test 3.15**		

LABORATORY SOAKED CBR RESULTS			
Sample Source:	**Test Pit 4**	**Test Pit 5**	**Test Pit 6**
Sample Label No:	**38002**	**38000**	**37998**
Sample Depth: (mm)	**Not Stated**	**Not Stated**	**Not Stated**
Fraction Tested:	**Whole soil**	**-19.0 mm**	**Whole soil**
Sample Description:	**SAND with minor silt (trace of organic matter)**	**SAND with some silt (trace of organic matter)**	**SAND with minor silt (trace of organic matter)**
Condition of Sample:	**Soaked**	**Soaked**	**Soaked**
Surcharge Mass: (kg)	**4.0**	**4.0**	**4.0**
Time Soaked:	**4 days**	**4 days**	**4 days**
Swell: (%)	**0.0**	**0.0**	**0.2**
Water Content as Compacted: (%)	**8.9**	**4.4**	**11.3**
Water Content From Under Plunger: (%)	**24.4**	**26.5**	**19.6**
Dry Density As Compacted: (t/m^3)	**1.49**	**1.40**	**1.58**
CBR Value @ 2.5 mm Penetration:	**14**	**2.5**	**16**
CBR Value @ 5.0 mm Penetration:	**16**	**3.5**	**19**
Reported CBR Value:	**16**	**3.5**	**19**

Notes:

- *The material was received in a natural state.*
- *The sample was compacted to NZ Standard Compaction at the water content as received.*
- *The rate of penetration was 1.10 mm / min.*
- *Information contained in this report which is Not IANZ Accredited relates to the sample descriptions based on NZ Geotechnical Society Guidelines 2005, the sample method * and sampling.*
- *This report may not be reproduced except in full.*

Tested By: **C. Fisher** **Date:** **21 to 26-May-20**

Checked By:

Approved Signatory

A.P. Julius
Laboratory Manager

Tests indicated as Not Accredited are outside the scope of the laboratory's accreditation

IANZ ACCREDITED LABORATORY Accreditation No: 434

16 June 2020

Dear [Pavement Designer]

20 Bay Road Warrington
Pavement Testing Investigation

We enclose a copy of the factual testing report for the 20 Bay Road Warrington.

Summary

The prevailing geology was confirmed as silty sands, as anticipated. The ground at the time of testing was dry, with no standing / ponding water. The soils underlying the topsoil were consistent across the site in terms of material type.

As a general description of the findings:

- Topsoil was encountered generally 250mm thick across the site, except for the southwestern corner.
- Below topsoil, the scala penetrometer blow counts were generally indicative of a CBR of 8%
- The scala penetrometer blow count results for the access in the south-eastern corner were low, and indicative of CBR < 3% should be assumed in this location.
- The laboratory tests generally correlated well with the site tests.

Discussion

A pavement designer should review the attached report and provide advice on the recommended construction for any trafficable surface.

In general, we do not recommend that pavement construction is placed directly on top of topsoil, as this material is highly variable, and may be susceptible to compression, heaving and rutting when trafficked wet.

Without prejudging what a pavement designer may propose, the underlying silty sand soils are relatively consistent in their stiffness from a pavement design perspective, and we anticipate that a relatively standard flexible pavement design will suffice in this site.

We understand that the client is seeking guidance on the potential for a “scoria” type porous flexible overlay being placed as a hard-standing that can both be driven on and get will “green-up”. Whilst this is likely a reasonably serviceable solution, it is certainly non-standard, and a pavement designer would have to advise on the suitability of such a solution.

Yours sincerely

Paterson, Lee
Geotechnical Engineer
Stantec New Zealand

Encl.: Factual Geotechnical Report

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Appendix E NZMCA Member Requirements

ENVIRONMENTAL CARE CODE

Driving towards a sustainable future

- Empty toilet and waste tanks in approved dump stations. *Holes must not be dug in the ground*
- Take care with plants and animals
- Keep your vehicle to formed tracks
- Keep your campsite tidy. Remove all rubbish and take it with you when you leave
- Leave no extra equipment around outside your vehicle, although you may use your awning and generator
- Generators may be used from 8am to 8pm only (consider your neighbours by limiting the use thereof)
- Observe fire restrictions. Use only built fireplaces and portable BBQs if you wish to cook outside
- Be aware, respect and value any spiritual, historical or scenic value in areas you visit
- You are requested to report environment abuse and/or improper use to the landowner or local DOC office.

sustainable BUSINESS NETWORK MEMBER

MEMBERSHIP CODE OF CONDUCT

- Treat others with respect and courtesy wherever you are
- Be a considerate and safe driver. Obey NZ road safety rules, and pull over to let others pass
- Avoid causing visual or noise pollution, e.g. only use generators, stereos etc at appropriate times during the day, and do not hang washing out in places that may offend others
- Park your vehicle with safety in mind, in case of fire or flooding. At least 3m from other vehicles or inhabited buildings is recommended
- Comply with local animal control bylaws. Keep your pets under control and pick up after them
- Be discreet when choosing an overnight parking spot – consider how the surrounding neighbours may react
- Respect restrictions - do not overstay your welcome. If asked to move on, do so gracefully
- Offer to pay for facilities used. Water, power, waste disposal, road and ground maintenance all cost money
- Do not demand discounts or special treatment using the Association name
- Abide by NZMCA regulations.

Appendix F Pavement Options Memo

20 Bay Road, Warrington – Pavement Options

This report has been prepared for the benefit of the NZ Motor Caravan Association. No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

Rev. no	Date	Description	Prepared by	Checked by	Reviewed by	Approved by
1	30/6/2020	First Issue	N Lister	K Bombay	L Paterson	D Evans

1 Background

The site at 20 Bay Road Warrington, has historically been used as a Kings School training facility and motor caravan park. It is proposed by the NZ Motor Caravan Association (NZMCA) to develop the site into a more formal caravan park, by completing a range of improvements over the site, semi-formalising parking arrangements with landscaping, and introduce additional amenity plantings.

It is proposed to upgrade the entry driveway to a higher standard un-sealed gravel surface than currently exists, while the remainder of the site will remain as a grass covered area.

Figure 1: Indicative Site Plan.

Located within the main site are areas of historical and archaeological significance, with near and at surface artefacts being identified. The previous use of the site, resulted in the disturbance of some of these identified areas, either as the result of ground contouring works, or due to vehicle traffic driving over the site.

This report details a range of options which could be implemented to successfully allow the historical areas to remain undisturbed while the NZMCA operate a motor caravan park on the site. Generally, this will take the form of protecting any artefacts in place, by the use of geotextile fabric and geosynthetic grids, to provide a separation and reinforcement layer, on top of the existing ground surface, followed by the placement of fill effectively burying the artefacts.

Note while the word “pavement” is used throughout this report, other than the access driveway, the nature of the proposed development is not for a standard road pavement to be constructed, rather a reinforced or unreinforced soil pavement. As such some of the normal pavement design methods are not directly applicable to this situation.

The key item to ensure a suitably durable topsoil / grass surface for the expected traffic loadings is surface drainage. Once topsoil is wet or saturated the strength of the material reduces rapidly.

2 Design Traffic

The site is expected to be trafficked by a range of vehicles varying from private cars towing caravans to medium commercial vehicles (bus, campervan, recreational vehicle). With the movement of vehicles per day expected to peak at 100 vpd during the high season.

The total expected Design Equivalent Standard Axle (DESA) for use in the pavement design is based on the vehicle profile and volumes presented in the separate Integrated Transport Assessment report. The following design parameters have been used to calculate the design traffic loadings:

- Design life = 25 years
- Heavy Commercial Vehicle (HCV) growth = 0% (assumed)
- %HCV = 3.4% (ITA report based on 50% Class 4 and 100% Class 5 vehicles)
- ESA/HCV = 1.44 (Transit 2007 NZ Supplement to Austroads, in lieu of any site specific data)
- Number of Heavy Vehicle Axles Groups (NHVAG) per HCV = 2.4 (Transit 2007 NZ Supplement to Austroads, in lieu of any site specific data)
- ESA/HVAG = 0.6 (Transit 2007 NZ Supplement to Austroads, in lieu of any site specific data)
- Annual Average Daily Traffic (AADT) = 100

A 25 year in service DESA of **4.4×10^4** ESA is calculated for the new access road and wider site, DESA calculation included in **Appendix A**. Note this is a very low expected traffic volume however, should be conservative due to the higher percentage of these vehicles being partially laden, compared to normal HCVs which typically will have higher loading factors.

3 Geotechnical Investigation

A brief geotechnical investigation has been completed over the site with six test pits being completed across the extent of the site. The Geotechnical Assessment is included in **Appendix B.**

3.1 Subsurface Ground Conditions

The test pits indicate that the site is generally underlain by:

- a layer of TOPSOIL / organic matter to approximately 250mm, varying to 100mm to the South West of the site
- underlain by a subgrade of mainly SAND with minor silt varying to a sandy SILT to the North of the site.

3.2 Subgrade CBR for Design

Based on the subgrade descriptions logged as part of the geotechnical investigation and with reference to Austroads 2012 Table 5.4, reproduced below, we would expect a subgrade CBR of approximately 10% for the SAND subgrade, and 2% for the SILT subgrade, assuming fair to poor drainage conditions.

Table 5.4: Typical presumptive subgrade design CBR values

Description of subgrade		Typical CBR values (%)	
Material	Unified Soil Classification	Excellent to good drainage	Fair to poor drainage
Highly plastic clay Silt	CH ML	5 4	2–3 2
Silty-clay Sandy-clay	CL CL	5–6	3–4
Sand	SW, SP	10–18	10–18

Based on the site scala penetrometers and lab soaked CBR testing, a range of subgrade CBR varying from 3.5% to 19% across the site has been identified. These results indicate potentially weaker areas of SAND subgrade being present in pockets across the site than the presumptive values provided by Austroads.

3.3 Design Subgrade CBR

We have adopted a subgrade **design CBR of 4%** for use in the design:

4 Design Pavement

Based on the design traffic and subgrade CBR values a design pavement depth of 290mm is calculated.

For a typical two layer road pavement (subbase, and basecourse) this would normally require a 190mm of AP65 subbase followed by 100mm of AP40 basecourse. Minimum layer depths are governed by the need to achieve 2.5 times the maximum particle size to allow full compaction.

The above design pavement is only directly applicable to the accessway construction as this is to be constructed of compacted granular materials but provides an indication of suitable treatments for the wider sider which is to remain grassed.

4.1 Accessway

This area has the highest concentration of vehicle loadings, as it funnels vehicles from Bay Road into the site proper.

The above design values are deeper than the 250mm required depth of compacted granular material contained in the DCC consent. The required 250mm pavement depth is expected to be sufficient due to the accessway remaining unsealed, therefore being able to be repaired / strengthened relatively easily by adding additional material, and the conservatism in the traffic loading calculations.

If the accessway is to be sealed with a chipseal or asphalt, then consideration should be given to increasing the depth of pavement provided.

4.2 Campervan / Caravan Parking Area

A grassed soil “pavement” is proposed for the remainder of the site. Three separate grassed “pavement” designs are described below, to account for the vehicle circulation area where concentrated traffic movements on site may cause topsoil / turf damage, the identified area of archaeologically significance requiring protection treatment, and the balance of the site.

4.2.1 Circulation Areas

The areas of higher or concentrated traffic movements, such as near the kiosk / transition from the granular accessway onto the grassed area and the turning areas at the head of each lane, are at risk of damage if driven on when wet. It is recommended that a suitable soil reinforcement is provided in these areas. An example of a suitable proprietary product, Cirtex SurePave, is provided in **Appendix C**.

There are other products available from different manufacturers, which provide the same or a similar function, which may also be suitable. This product class works by reinforcing the top 50 – 75mm of topsoil with reinforcement matt. The matt typically has a “honey comb” arrangement of open cells, which provides confinement to the topsoil layer, allowing the applied wheel loading to be spread across a wider area of the topsoil below without inducing additional compaction.

Generally the installation of this type of product requires the following steps:

- stripping of ~50mm of the topsoil / turf layer,
- levelling of the site with imported topsoil or sand to ensure drainage fall is maintained,
- placement of the proprietary soil reinforcement mats,
- filling the reinforcement mat cells with topsoil,
- sowing grass or laying turf (aka Readylawn)

4.2.2 Area of Archaelogical Significance

The areas identified as containing near or at surface artefacts, requires some form of protection from direct traffic loading to ensure any artefacts remain protected and un-damaged. **Figure 2** below shows the indicative extent of the archaeological area with minimal cover to the layer of interest.

Figure 2: Areas of Archeological Interest identified during Site Survey, Feb 2020.

To provide protection in this area it is proposed to complete an “overlay” pavement design, with limited to no excavations being completed, by placing additional imported material above the existing surface level. This area is proposed to be mainly a parking area, with circulation limited to the northern entry to the lane between parking spaces rather than in a concentrated area as such it is expected that the un reinforced surface could remain as long as it is well compacted following grass strike and has sufficient fall to ensure positive runoff of surface water.

A geotextile fabric and geogrid reinforcement layer is proposed to be laid on the existing surface prior to the overlay. This has a two fold benefit, firstly the geogrid layer helps spread any imposed traffic loading across a wider area of the existing ground minimising the chance of deformation from occurring and / or damage to near surface artefacts.

Secondly, the geofabric and geogid layer provides a physical barrier that will highlight to anyone excavating on site, that they have reached the depth of archaeological significance.

To ensure adequate drainage is achieved a drainage layer of coarse sand is proposed directly above the geofabric and geogrid layer. This layer ideally would drain to daylight or via subsoil drains to a suitable outfall.

In this area the construction of this pavement would take the following steps:

- spray existing grass with a suitable herbicide,
- mow the dead grass close to the existing surface level, and remove clippings to waste,
- place geofabric and geogrid layer,
- place 100mm coarse sand drainage blanket,
- place 200mm minimum imported topsoil across the area,
- level site to ensure positive drainage is achieved,
- sowing grass or laying turf (aka Readylawn)
- roll area once grass strike has been achieved, to ensure a suitably compact surface.
- monitor site, and retrofit soil reinforcement matt if required.

4.2.3 Balance of Site

For the remainder of the site, some relevelling / recontouring will be required to ensure positive drainage is maintained, especially given the proposed overlay to the archaeological area may fill some of the natural flow paths, and to provide a smoother surface for vehicle ride. This relevelling should be completed via the importation of additional topsoil to the site as a fill operation, rather than a combination cut and fill operation, to minimise any excavations required.

In this area the construction would take the following steps:

- spray existing grass with a suitable herbicide,
- mow the dead grass close to the existing surface level, and remove clippings to waste,
- place varying depth of imported topsoil across the area,
- level site to ensure positive drainage is achieved,
- sowing grass or laying turf (aka Readylawn)
- roll area once grass strike has been achieved, to ensure a suitably compact surface.
- monitor site, and retrofit soil reinforcement matt if required.

5 Construction Considerations

Some construction requirements are outlined below. These comments do not constitute a specification, however a technical specification will be required to allow the successful construction of the upgrade.

5.1 Imported Topsoil

The imported topsoil should be a high quality freely draining sandy LOAM or gravely LOAM material, to ensure there is sufficient strength in the topsoil to counteract the imposed loads. If there is too high a content of CLAY or SILT the topsoil is likely to pug under imposed wheel loads.

5.2 Construction Sequence

The construction sequence should be staged to minimise the over tracking of unprotected, or wet soils. Once the soil support matrix is damaged by trafficking of wet soils, the only repair possible is drying of the soil, followed by hoeing in place back to a fine particle size, followed by relaying. If this occurs then the chance of over excavating or hoeing through the existing surface is a risk.

5.3 Pavement Drainage

Protection of the pavement against damage induced by water within the pavement or ponding on the surface is a critical aspect of the pavement design.

A subsoil system may be required to allow removal of excess water from the subgrade and minimise the overlaying topsoil form becoming affected by moisture and will assist in maintaining the pavement in a good condition over its life.

Special care will be needed when installing any subsoil drains as they are likely to need to be installed below the existing surface level, to allow for positive drainage.

5.4 Ongoing Maintenance

With a trafficked grass area, some ongoing maintenance and remediation of damaged areas of the topsoil surface and grass is expected. Imposed wheel loads and concentrated traffic have the potential to over compact the surface or damage the grass covering. This damage can be minimised by rotating the use of the individual parking areas, to ensure even vehicle loading across the site.

The main accessway being unsealed will require ongoing addition of new wearing course to replenish the surface, and potentially regrading to ensure positive drainage and removal of any potholing.

Appendix A: Design Traffic Loading

20 Bay Road, Warrington

		Start	End	Length (m)
RP	-	-	-	-

Topography& Charactristics:

Flat to rolling, grassed "paddock"

AADT:	100
HCV:	3.4%
Traffic Growth:	0.00%

N_{DT} =365*AADT*DF*%HCV/100*LDF*CGF*NHVAG

AADT	100				
DF	1				
%HCV	3.4				
LDF	1				
CGF	25	Design Period	25	years	
NHVAG	2.4	Annual Growth Rate	0	%	
		CGF=Y+((Y/2)*(Y-1)*i))	.	CGF=	25
N_{DT}	74,460				

DESA=ESA/HVAG*N_{DT}

ESA/HVAG	0.6
DESA	**44,676**

Appendix B: Geotechnical Assessment

Bay Road Development

This report has been prepared for the benefit of the New Zealand Motor Caravan Association. No liability is accepted by this company or any employee or sub-consultant of this company with respect to its use by any other person.

Rev. no	Date	Description	Prepared by	Checked by	Reviewed by	Approved by
			D Crawford	L Paterson	L Paterson	D Evans

1 Introduction

1.1 Brief

The New Zealand Motor Caravan Association has asked Stantec to carry out soil testing to inform future pavement design, for the potential development of a campground on the site.

1.2 Location

The site location is 20 Bay Road Warrington, 5065177 (Situation) LOT 1 DP 10272.

Figure 1.1 Bay Road Site Map

1.3 Testing

The soil sampling was carried out by Lee Paterson and Dylan Crawford of Stantec. Prior to sampling beginning all underground services were clearly identified by Delta. The site visit was carried out under the supervision of a representative from the New Zealand Historic Places Trust.

Shallow test pits were dug out by hand, with 15kg samples removed for lab testing. Topsoil was completely removed before the samples were collected. Scala penetrometer testing was carried at each of the six sites.

2 Testing

2.1 Test Pit Locations

The figure below shows the location of the six test pits.

Figure 2.1: Test Pit Locations

	Pit 1	Pit 2	Pit 3	Pit 4	Pit 5	Pit 6
Easting	397316	397340	397399	397452	397367	397321
Northing	811391	811302	811235	811165	811167	811259
Height R/L (m)	10.1	3.92	5.78	4.58	5.76	2.32

*NZGD2000 / NZVD 2016

A photo of each test pit location is attached in appendix A.

2.2 Test Pit Scala Results

At each of the six sites topsoil depths were 250mm, with the exception of site five, where topsoil depths were 100mm.

The Scala results are shown in the following table.

Depth BGL (m)	Scala 1	Scala 2	Scala 3	Scala 4	Scala 5	Scala 6 (attempt 1)**	Scala 6 (attempt 2)**
0.1	4	5	2	3	2	2	2
0.2	5	4	2	4	3	2	2
0.3	7	5	3	4	3	Refusal	3
0.4	6	7	4	3	3		Refusal
0.5	9	7	4	3	4		
0.6	9	6	4	2	5		
0.7	10	5	4	1	4		
0.8		4		1	4		
0.9							
1.0							
1.1							

*Blow Counts Per 100mm

** Site 6 appeared to be in the middle of a manmade flood path, which had bluestone placed in it. The bluestone caused two test refusals at a depth of 0.4m.

2.3 Lab Results

Samples were tested by Central Testing Services, Alexandra.

	Pit 1	Pit 2	Pit 3	Pit 4	Pit 5	Pit 6
Topsoil Thickness (mm)	225	250	250	250	100	250
Lab CBR%	4.5%	18%	7%	16%	3.5%	19%

A full copy of the lab results is attached in appendix B.

APPENDIX A Test Pit Site Photos

Stantec

Photographic Log

Client:	**New Zealand Motor Caravan Association**	**Project:**	**Bay Road Development**
Site Name:		**Site Location:**	**20 Bay Road, Warrington**

Photograph ID: 1 **Photo Location:** Test Pit 1 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	
Photograph ID: 2 **Photo Location:** Test Pit 2 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	

Stantec

Photographic Log

Client:	**New Zealand Motor Caravan Association**	**Project:**	**Bay Road Development**
Site Name:		**Site Location:**	**20 Bay Road, Warrington**

Photograph ID: 3 **Photo Location:** Test Pit 3 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	
Photograph ID: 4 **Photo Location:** Test Pit 4 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	

Stantec

Photographic Log

Client:	**New Zealand Motor Caravan Association**	**Project:**	**Bay Road Development**
Site Name:		**Site Location:**	**20 Bay Road, Warrington**

Photograph ID: 5 **Photo Location:** Test Pit 5 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	
Photograph ID: 6 **Photo Location:** Test Pit 6 **Direction:** **Survey Date:** 13/05/2020 **Comments:**	

APPENDIX B Lab Results

Central Testing Services
18 Ngapara St, P.O. Box 397, Alexandra 9340, Central Otago, New Zealand
P: 03 4487644, W: www.centraltesting.co.nz, E: info@centraltesting.co.nz

Reference No: 20/1109

Date: 26 May 2020

TEST REPORT - LABORATORY SOAKED CBR'S

Client Details:	**Stantec New Zealand, P.O. Box 4, Dunedin**	**Attention:**	**D. Crawford**
Job Description:	**20 Bay Road, Warrington Investigations**		
Sample Description:	**See Below**	**Client Order No:**	**N/A**
Sample Source:	**See Below**	**Sample Label No:**	**See Below**
Date & Time Sampled:	**13-May-20**	**Sampled By:**	**Unknown**
Sample Method:	**Test Pit ***	**Date Received:**	**18-May-20**
Test Method:	**NZS 4407:2015, Test 3.15**		

LABORATORY SOAKED CBR RESULTS			
Sample Source:	**Test Pit 1**	**Test Pit 2**	**Test Pit 3**
Sample Label No:	**38012**	**37918**	**38010**
Sample Depth: (mm)	**300**	**Not Stated**	**Not Stated**
Fraction Tested:	**-19.0 mm**	**Whole soil**	**-19.0 mm**
Sample Description:	**Sandy SILT with minor clay and trace of gravel (minor organic matter)**	**SAND with minor silt (trace of organic matter)**	**SAND with minor / some silt and minor gravel (trace of organic matter)**
Condition of Sample:	**Soaked**	**Soaked**	**Soaked**
Surcharge Mass: (kg)	**4.0**	**4.0**	**4.0**
Time Soaked:	**4 days**	**4 days**	**4 days**
Swell: (%)	**1.2**	**0.0**	**0.4**
Water Content as Compacted: (%)	**22.6**	**13.3**	**8.6**
Water Content From Under Plunger: (%)	**30.1**	**22.7**	**26.2**
Dry Density As Compacted: (t/m^3)	**1.37**	**1.57**	**1.44**
CBR Value @ 2.5 mm Penetration:	**4.5**	**17**	**5**
CBR Value @ 5.0 mm Penetration:	**4.5**	**18**	**7**
Reported CBR Value:	**4.5**	**18**	**7**

Notes:

- ***The material was received in a natural state.***
- ***The sample was compacted to NZ Standard Compaction at the water content as received.***
- ***The rate of penetration was 1.10 mm / min.***
- ***Information contained in this report which is Not IANZ Accredited relates to the sample descriptions based on NZ Geotechnical Society Guidelines 2005, the sample method * and sampling.***
- ***This report may not be reproduced except in full.***

Tested By: **C. Fisher** **Date:** **21 to 26-May-20**

Checked By:

Tests indicated as Not Accredited are outside the scope of the laboratory's accreditation

IANZ ACCREDITED LABORATORY Accreditation No: 434

Central Testing Services
18 Ngapara St, P.O. Box 397, Alexandra 9340, Central Otago, New Zealand
P: 03 4487644, W: www.centraltesting.co.nz, E: info@centraltesting.co.nz

Reference No: 20/1109

Date: 26 May 2020

TEST REPORT - LABORATORY SOAKED CBR'S

Client Details:	**Stantec New Zealand, P.O. Box 4, Dunedin**	**Attention:**	**D. Crawford**
Job Description:	**20 Bay Road, Warrington Investigations**		
Sample Description:	**See Below**	**Client Order No:**	**N/A**
Sample Source:	**See Below**	**Sample Label No:**	**See Below**
Date & Time Sampled:	**13-May-20**	**Sampled By:**	**Unknown**
Sample Method:	**Test Pit ***	**Date Received:**	**18-May-20**
Test Method:	**NZS 4407:2015, Test 3.15**		

LABORATORY SOAKED CBR RESULTS			
Sample Source:	**Test Pit 4**	**Test Pit 5**	**Test Pit 6**
Sample Label No:	**38002**	**38000**	**37998**
Sample Depth: (mm)	**Not Stated**	**Not Stated**	**Not Stated**
Fraction Tested:	**Whole soil**	**-19.0 mm**	**Whole soil**
Sample Description:	**SAND with minor silt (trace of organic matter)**	**SAND with some silt (trace of organic matter)**	**SAND with minor silt (trace of organic matter)**
Condition of Sample:	**Soaked**	**Soaked**	**Soaked**
Surcharge Mass: (kg)	**4.0**	**4.0**	**4.0**
Time Soaked:	**4 days**	**4 days**	**4 days**
Swell: (%)	**0.0**	**0.0**	**0.2**
Water Content as Compacted: (%)	**8.9**	**4.4**	**11.3**
Water Content From Under Plunger: (%)	**24.4**	**26.5**	**19.6**
Dry Density As Compacted: (t/m^3)	**1.49**	**1.40**	**1.58**
CBR Value @ 2.5 mm Penetration:	**14**	**2.5**	**16**
CBR Value @ 5.0 mm Penetration:	**16**	**3.5**	**19**
Reported CBR Value:	**16**	**3.5**	**19**

Notes:

- *The material was received in a natural state.*
- *The sample was compacted to NZ Standard Compaction at the water content as received.*
- *The rate of penetration was 1.10 mm / min.*
- *Information contained in this report which is Not IANZ Accredited relates to the sample descriptions based on NZ Geotechnical Society Guidelines 2005, the sample method * and sampling.*
- *This report may not be reproduced except in full.*

Tested By: **C. Fisher** **Date:** **21 to 26-May-20**

Checked By:

Approved Signatory

A.P. Julius
Laboratory Manager

Tests indicated as Not Accredited are outside the scope of the laboratory's accreditation

IANZ ACCREDITED LABORATORY Accreditation No: 434

Appendix C: Reinforced Soil Product Brochures

SurePave® Permeable Paving

Stabilise your Grass, Gravel & Decorative Stone.

CIRTEX
GAIN MORE GROUND

Enhance your outdoor living spaces with Permeable Paving.

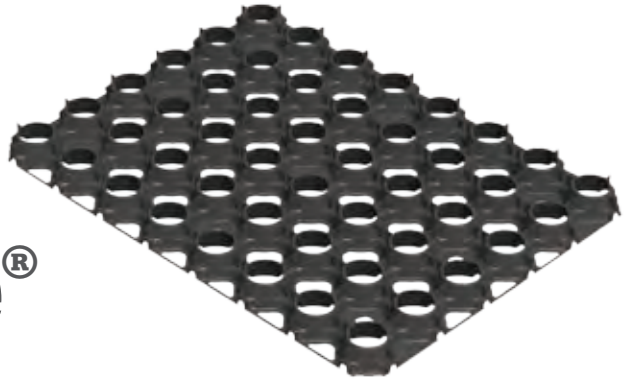
A unique, environmentally friendly alternative to traditional concrete or asphalt pavements.

Cirtex has the permeable paving solution for any project. Our range includes paving panels to stablise grass, gravel and decorative stone.

Create a contemporary look and feel to enhance entrance ways, courtyards, paths and driveways which are functional, cost effective and low maintenance.

Compliment your existing landscaping with permeable paving.

Stylish, sophisticated, stunning!



SurePave®

The Heavyweight in Permeable Paving

SurePave® permeable paving panels are the ideal solution for reinforcing grass, gravel and decorative stone in highly stressed areas, vehicle parking, driveways, golf courses, parks or hard stand areas for boats, trailers or caravans.

The robust cellular design of SurePave® offers a perfect paving alternative to concrete while still maintaining all the benefits of a hard pavement.

Porous and free draining, SurePave® allows water to be absorbed easily creating a safe and functional surface that is natural and attractive.

Significant features of SurePave® paving panels include a unique positive interlocking system to ensure panels are held in place, a small panel size for ease in transportation/installation, and the ability to withstand loads of over 700 tonnes per square metre when filled.

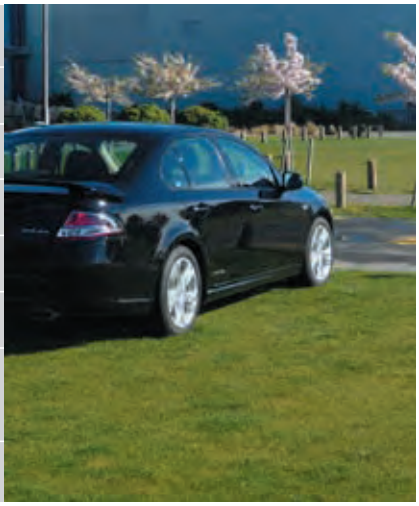
If you are wanting a paving solution that encompasses style and functionality, that can withstand heavy duty usage for years to come, look no further than the SurePave® Paving System.

SUREPAVE® PANELS

Code 76148
Product SurePave Black 0.5m² Panel
Size 816mm x 612mm

SUREPAVE® SPECIFICATIONS

STRUCTURE	Interlocking Open Structure Hollow Pavers
LOCKING SYSTEM	Positive Lock Clipping System
PANEL DIMENSIONS	816mm x 612mm x 40mm
MATERIAL	Polypropylene Recycled
UNIT WEIGHT	2kg
CRUSH STRENGTH UNFILLED	>133 tonnes/m²
CRUSH STRENGTH FILLED WITH STONE	>740 tonnes/m²
TEST METHODS	Compression, NZS 3116 : 1991, App A & B



SurePave® for Grass

SurePave® Permeable Paving panels are designed to stabilise and support grass. Create a free draining, strong surface that is environmentally friendly and functional.

Interlocking panels are positioned beneath the grass surface, evenly distributing the load to the base below. This minimises compaction and eliminates pot holes, ponding or damage to the ground below.

Features & Benefits

- **Quick and easy to install**
- **Free draining permeable surface**
- **Protects tree roots**
- **Solid, stable surface**
- **Naturally appealing**
- **Cost effective**
- **Easily uplifted to access amenities**
- **Environmentally friendly**
- **Rated for residential, commercial and industrial use**

CIRTEX
GAIN MORE GROUND

For more information on our products contact us 0800 CIRTEX (247 839) I INFO@CIRTEX.CO.NZ

✓ Quick

✓ Easy

✓ Smart

CIRTEX
GAIN MORE GROUND

SurePave® Installation for grassed surfaces

1 Measure the area to be covered and calculate how many panels are required. (2 panels per m^2).

2 Skim off existing vegetation.

3 Establish a consistent level or gradient.

4 Use good screened topsoil or sand and spread a thin layer over prepared base to create an even bed.

5 Lay panels ensuring they are interlocked correctly. Trim to shape with a circular saw, or similar, where required.

6 Fill with good screened topsoil up to 10mm above the top of the panels and sow grass or lay turf.

***Note: A base course may be required depending on the existing soil conditions and/or projected traffic volumes. If in doubt either email info@cirtex.co.nz or visit www.cirtex.co.nz to view the installation video.**

SurePave® for Gravel

Permeable Paving offers an attractive alternative to concrete and asphalt pavements. SurePave® surfaces are free draining, structurally strong, aesthetically appealing and cost effective.

SurePave® interlocking paving panels are designed to stabilise decorative stones and gravel, giving these areas the feel of a hard pavement while still maintaining an attractive natural look.

SurePave® paving panels are inherently strong and have the ability to withstand heavy traffic in areas with constant pedestrian or vehicle use.

Interlocking panels are positioned beneath the aggregate surface, evenly distributing the load to the base below. This minimises compaction and eliminates pot holes, ponding or damage to the ground below.

Features & Benefits

- **Quick and easy to install**
- **Free draining permeable surface**
- **Pedestrian, car and truck use**
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- **Enhances the natural beauty of grass, gravel and decorative stone**

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SurePave® Installation for gravelled surfaces

1 Excavate ground shape and levels to achieve sufficient grading and load bearing base.

2 Depending on the soil type and loading, a geotextile is recommended to be laid on the sub-grade surface.

3 Compact a suitable base course material to sufficient depth, ensuring that the area is shaped to prevent ponding.

4 A geotextile can be laid on top of the base course as a separation layer between this and the sandy topsoil bedding layer to prevent migration of the particles.

5 Install edging restraints. AluExcel Paver restraint system is recommended.

6 Place a 25mm bedding layer of clean, sharp sand over the base course layer and screed to level.

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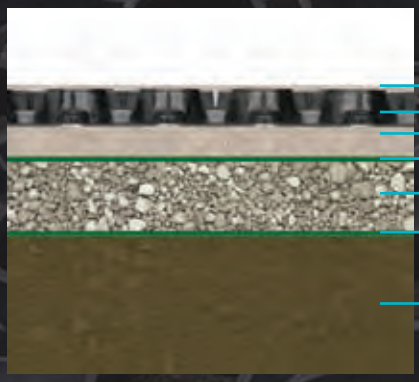
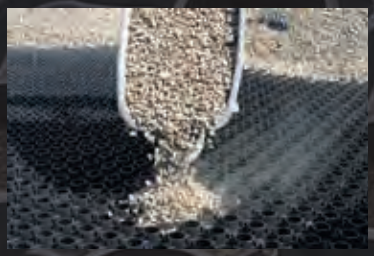


For more information email info@cirtex.co.nz or visit www.cirtex.co.nz to view the installation video.

7 Lay panels ensuring they are interlocked correctly. Trim to shape with a circular saw, or similar, where required. On steep slopes or heavy turning areas use steel anchors.



8 Fill the panels with specified angular roading aggregate or decorative gravel to finished levels (7mm - 19mm aggregate size is recommended).

9 Use a plate compactor to consolidate the filling material into the panels. Fill any voids that show with more aggregate. Filling material should just cover paver's.

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Appendix G Integrated Transport Assessment

INTEGRATED TRANSPORT ASSESSMENT

20 BAY ROAD, WARRINGTON

PREPARED FOR NEW ZEALAND MOTOR CARAVAN ASSOCIATION

30 June 2020

Stantec

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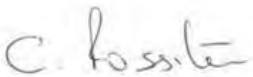
Chris Rossiter		30 / 06 / 2020
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REVISION SCHEDULE

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1	11/02/2020	Draft for Review	CM	CR	KB	
2	20/02/2020	Revision 1	CR		KB	
3	29/06/2020	Revision 2	CM	CR	KB	DE

New Zealand Motor Caravan Association

20 Bay Road, Warrington

CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

Appendix A Photographs

1. Introduction

The New Zealand Motor Caravan Association (NZMCA) propose to develop a new site for overnight motor caravan stays at 20 Bay Road, Warrington, approximately 20 km northeast of Dunedin. The location of the site is shown in Figure 1-1.

Figure 1-1: Site location

The site is zoned as 'Township and Settlement' and 'Coastal Rural' under the Dunedin City Council 2nd Generation District Plan (2GP) (Figure 1-2). A campground[1] is not a permitted activity in either of these zones:

- It is a **restricted discretionary activity** (requiring resource consent) as per Rule 15.3.3.22 of the 2GP for the section of the property zoned 'Township and Settlement'
- It is a **discretionary activity** (requiring resource consent) as per Rule 16.3.3.38 of the 2GP for the section of the property zoned 'Rural Coastal'

At the time of writing this report, a small area of the site is used as King's High School's 'Classroom by the Sea.' King's High School use this area as a residential/ educational/ recreational facility, located in the north-east corner of the site. It is proposed to subdivide the property into two blocks to separate the King's High School buildings from the rest of the site (Figure 1-3). There are two access points to the site: a right of way off Bay Road, and an unofficial access off the unsealed access road to the treatment ponds.

The purpose of this Integrated Transport Assessment is to identify, from a transport perspective, the expected traffic effects of the proposal. The following information is presented within this report:

- Details of the existing local road network;
- An overview of the proposed activities;
- An assessment of the expected transport effects; and
- An evaluation of the proposal against the transportation and signage rules in the 2GP.

[1] Described in the 2GP as "the use of land and buildings for the purpose of providing visitor accommodation primarily in the form of tent, caravan, or campervan sites…"

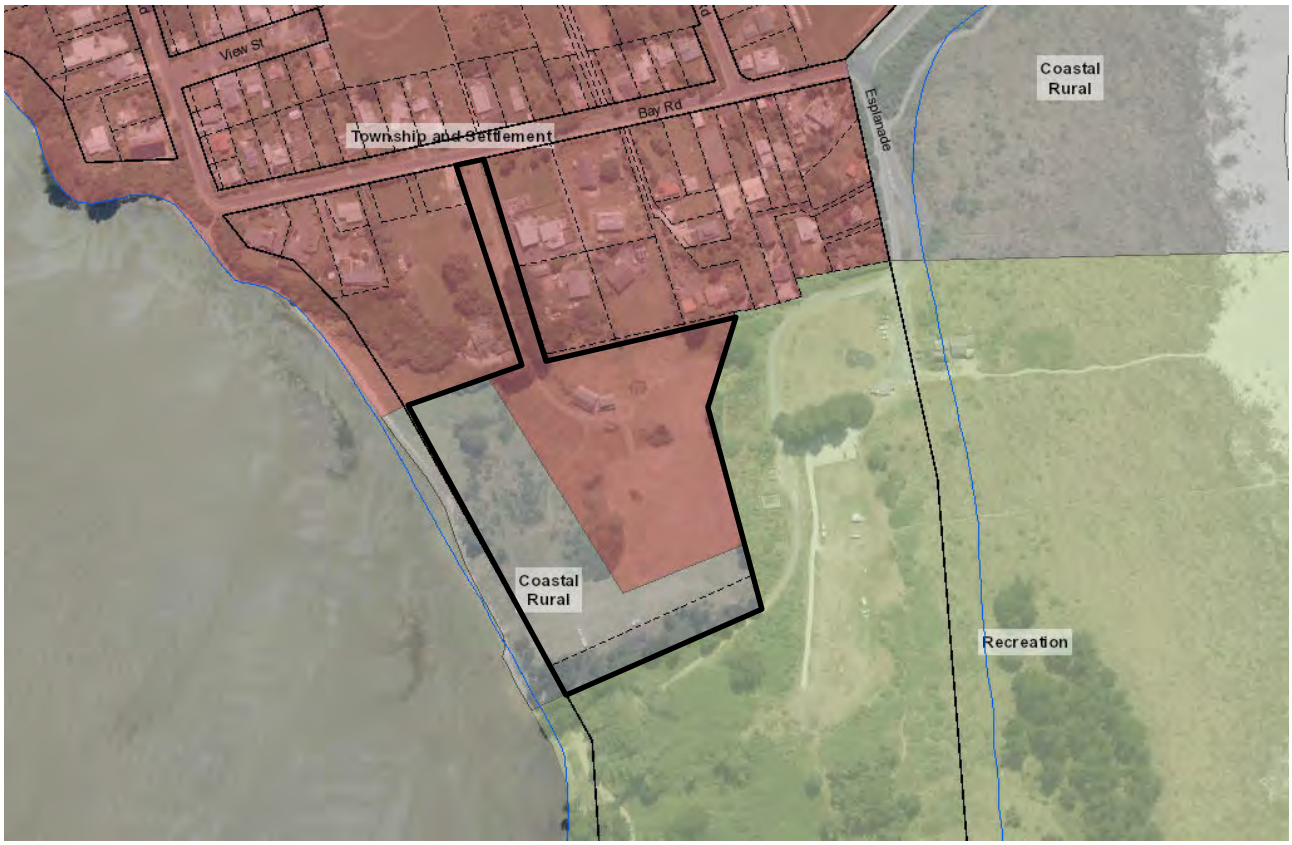

Figure 1-2: Site zoning split

Figure 1-3: Indicative Site Plan showing site access locations (stars)

2. Existing Transport Infrastructure

The 2GP classifies the Coast Road as a Collector Road, with a role of carrying through traffic and also providing direct property access. All other roads within Warrington are Local Roads, with a primary role of providing direct property access. The average seal width of Warrington roads nearby the site are shown in Table 2-1. The minimum required width to meet current standards is 5.0 m.

Generally, there is little to no shoulder on any of the roads that can be used to access the site. Carriageway shoulders are normally provided to reduce the potential for edge of seal to break up if it traversed by wider vehicles.

Table 2-1: Seal widths of roads nearby the site

Road	Seal Width
Park Road (between Coast Road and Bank Road)	5.1 m
Park Road (between Bank Road and Hill Road)	7.8 m
Hill Road	6.2 m
Bank Road	4.5 m
Bay Road	4.8 m
Esplanade	8.1 m
Unsealed access road to the treatment ponds	3.0 m

The majority of roads in Warrington have a metaled footpath on one side of the road. There is generally little to no separation between the edge of seal of the road and the metaled footpath. Because of this, people may use the footpath as the road shoulder, or for parking.

3. Existing Travel Patterns

3.1 Traffic Volumes

The site is currently used as King's High School's 'Classroom by the Sea.' The facilities are used by the school every year for their Year 9 camps in February and may be booked by other schools or community groups for activities throughout the rest of the year.

There is also a freedom camping site at the neighbouring Warrington Domain which has been heavily utilised over the summer months in recent years. This has been mitigated to some extent by the creation of a new freedom camping site within Dunedin.

The preferred access route for the Warrington Domain camping site is clearly signed at all turning points from the Coast Road/ Park Road intersection (Figure 3-1).

Figure 3-1: Location of signed route to campground at the Warrington Domain

An overview of the estimated traffic volumes for Warrington is shown in Figure 3-2. This information is based on information from the MobileRoads web site.

Figure 3-2: Estimated average daily traffic for roads in Warrington

A vehicle counter was installed on Bay Road, between Hill Road and the Esplanade, for two weeks between 20 December 2019 and 2 January 2020 to determine daily traffic over the holiday period. A summary of the average daily traffic (ADT) is given in Table 3-1.

Table 3-1: ADT on Bay Road between Hill Road and the Esplanade over the holiday period

Direction	Week 1 (20 – 26 Dec)		Week 2 (27 Dec – 2 Jan)		Average	
	5 Day ADT	7 Day ADT	5 Day ADT	7 Day ADT	5 Day ADT	7 Day ADT
Westbound	186	202	219	227	203	215
Eastbound	204	218	251	256	228	237
Both	390	420	470	483	430	452

A vehicle classification count was also completed. It determined that while the large majority of vehicles were cars or small campervans, at least 7% were vehicles towing caravans. See Table 3-2 for more detail.

Table 3-2: Vehicle classifcation count over the holiday period

Axle Class	Axel Type	NZTA Class	Vehicle Type	Count	Percentage
1	Very Short 2 axel vehicle	Private Car	Motorbike	107	1.7%
2	Short 2 axel vehicle	Private Car or Light Commercial Vehicle	Car or small campervan	5,757	91.0%
3	Car towing trailer or car	Private Car or Light Commercial Vehicle	Car towing Caravan	54	0.9%
4	Truck, bus or truck towing trailer	Bus or Medium Commercial Vehicle	Larger vehicles or vehicles towing caravans	392	6.2%
5 +	Truck, bus, coach or heavier	Bus or Heavy Commercial Vehicle	Recreational Vehicles and larger	19	0.3%

The average hourly profile over the two weeks is shown in Figure 3-3. It shows that the peak arrival (southbound) time is between 12 pm and 1 pm, but that the peak departure time (northbound) is anytime between 11 am and 4 pm.

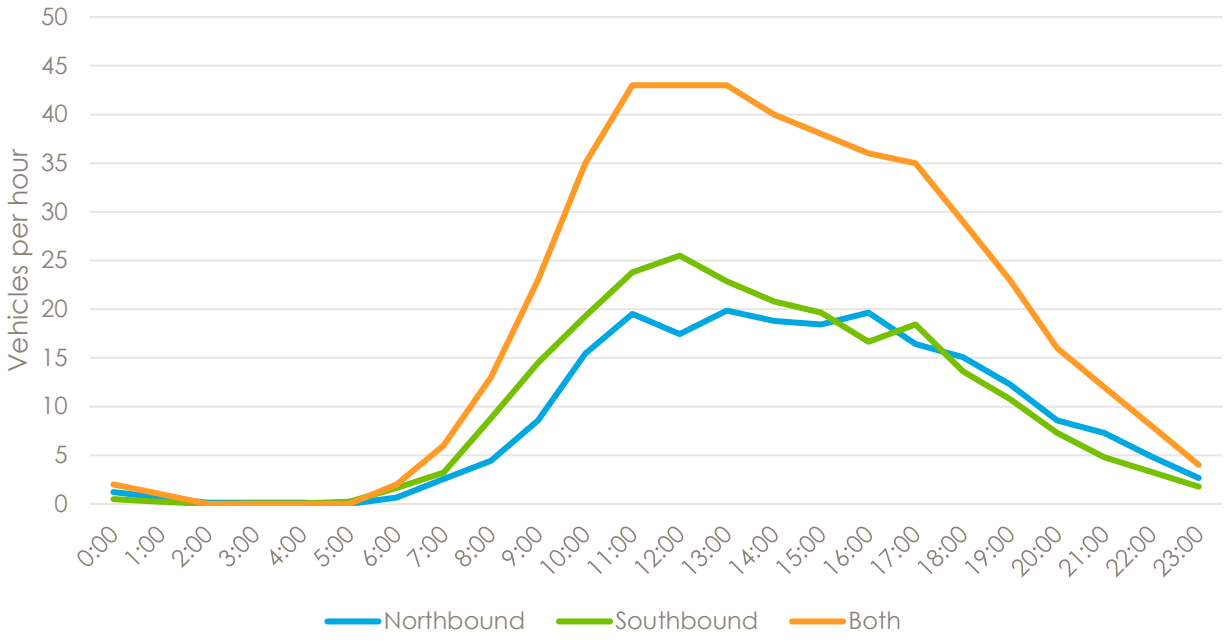

Figure 3-3: Average hourly traffic flow profile for Bay Road over the holiday period

3.2 Road Safety

Figure 3-4 shows the locations of crashes that have been recorded in the NZTA Crash Analysis System database within the Warrington area and along the access route to SH1. The latest ten-year crash data (2009 to 2018, and available crash records for 2019) includes 13 crashes in the Warrington area, with eight crashes occurring on the signed campervan route from SH1 to the Warrington Domain. Of the nine crashes

along the route, four resulted in minor injury (marked as M) and the remaining five were non-injury crashes (marked as N).

The first six crashes along the Coast Road were all loss of control crashes, which were due to black ice or travelling too fast for the corner. The minor injury crash at the intersection of Coast Road and Park Road was due to a vehicle failing to give way. The non-injury crash at the intersection of Park Road and Bank Street was due to a vehicle turning left out of Bank Street and rear ending a car and trailer pulled over to the side of the road. The final crash occurred just before the Freedom Camping zone of the Warrington Domaine. It was a loss of control crash due to travelling too fast along the gravel road.

It is considered that the number of crashes reported is no more than would be expected considering the volume of traffic. Overall, there is no indication of serious safety concerns in the area. Further, no crashes reported in the past five years are considered to have been associated with the existing driveways on the site.

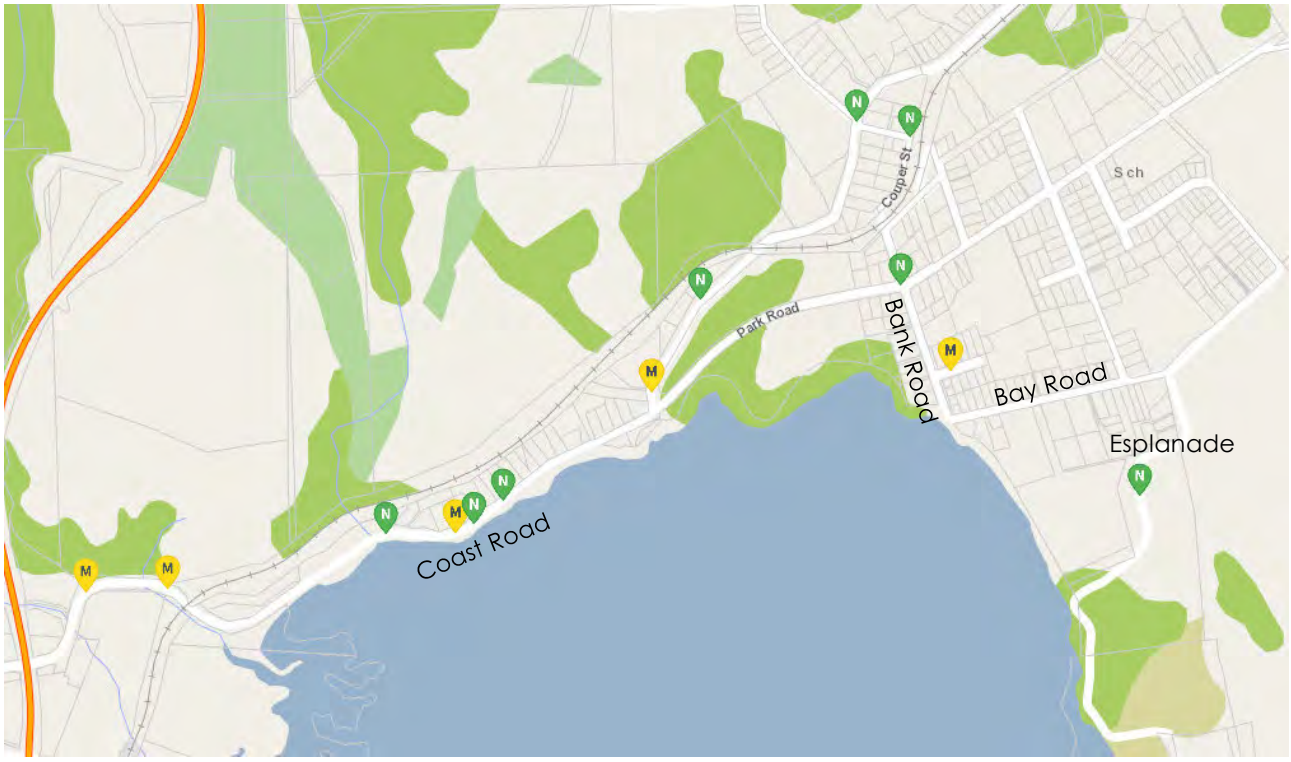

Figure 3-4: Map of crashes in Warrington between 2009 and 2019

4. Development Proposal

The NZMCA propose to develop a new site for overnight motor caravan stays at 20 Bay Road, Warrington, approximately 20 km northeast of Dunedin. Stage One, shaded blue in Figure 4-1, provides for 46 parking bays. 20 of the 46 parking bays (north to south) are shorter in depth and accommodate conventional motorhomes up to 7 m long. The remaining 26 parking bays have a depth of 13 m and can accommodate motorhomes and caravans, with additional space for the towing vehicle to park. Stage Two (shaded red in Figure 4-1) provides for 10 parking bays.

The sizes of NZMCA member's vehicles vary from relatively small campervans through to large multi-axle vehicles. This means a strict and delineated site layout is not always appropriate for efficient use of NZMCA sites. Figure 4-1 indicates the general layout of parking bays by delineating aisles allowing for more 'oversized' parking bays than necessarily required. The large bays proposed on the concept plan provide for additional space for ease of parking vehicles i.e. those towing caravans, to park perpendicular to the caravan. Therefore, while the concept plan indicates 56 parking bays, **this application seeks consent for a capacity of up to 60 certified self contained vehicles.**

The primary access to the site will be provided via the driveway off Bay Road. Figure 4-1 shows that the accesses would be gravelled to prevent degradation during winter. Some regrading of the driveway may be necessary to remove any rapid changes of grade and make the driveway better suited for towing vehicles. With these changes, the layout of the site is such that there are no reasons why the driveway could not operate safely and enable efficient movement of vehicles into, within, and out of the site.

The main area will remain grassed with individual sites marked. The smaller sites will have dimensions of 6 m by 7 m, and a central aisle 10 m which will provide sufficient manoeuvring space for smaller vehicles. The normal sites will have dimensions of 6m by 13m which is sufficient to provide parking for a campervan or car and caravan. The central aisles have a width of 20 m which provides sufficient manoeuvring space for all vehicle types anticipated on the site.

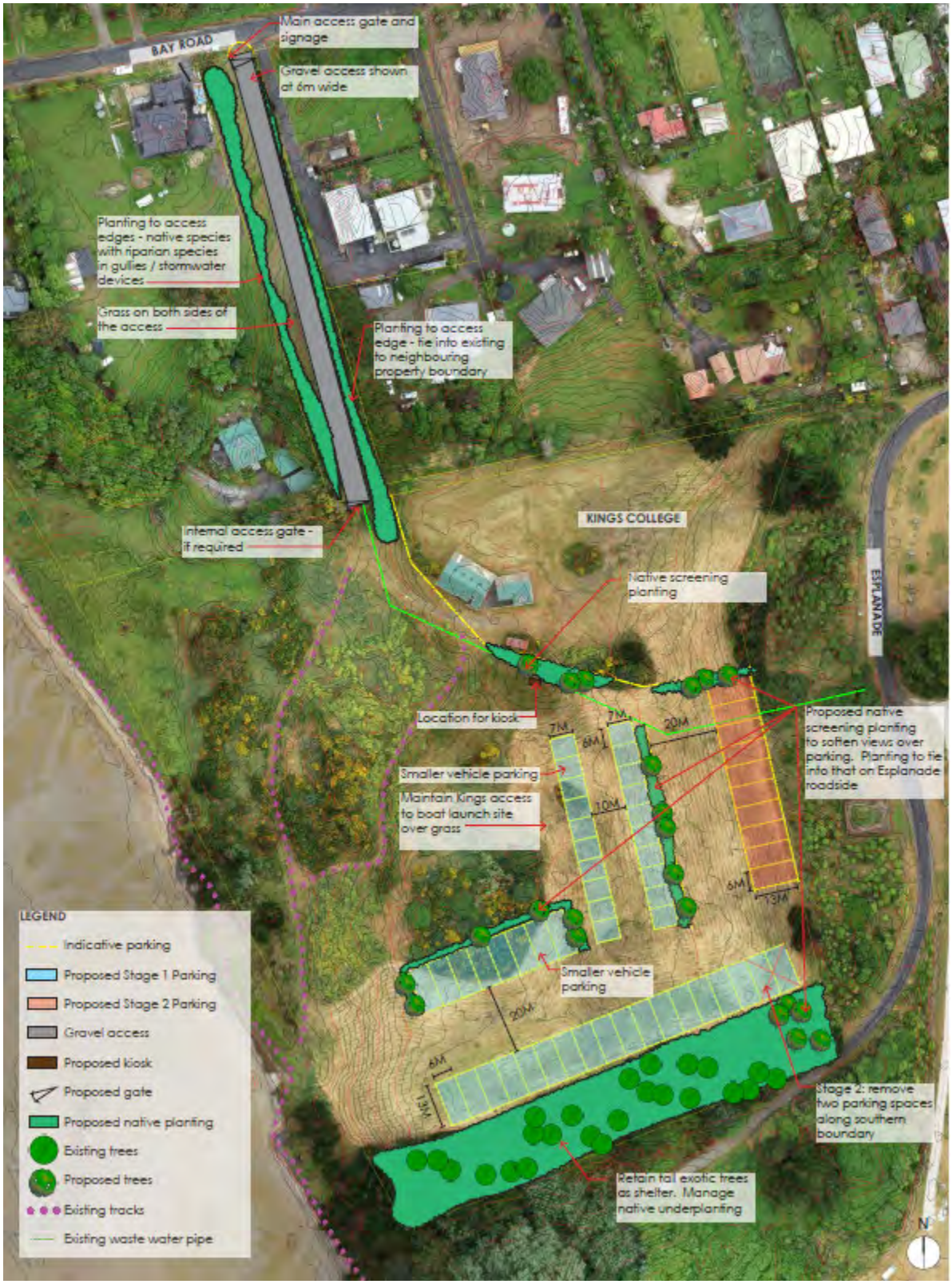

Figure 4-1: Landscape plan

5. Expected Traffic Generation

5.1 Traffic Generation Rates

In 2016 Opus completed a report on *Vehicle Movement Surveys* for the NZMCA. This report provides data that can be used to calculate vehicle demands at future NZMCA sites. The data is based on traffic data surveys completed at four NZMCA sites over the busiest time of year (approximately 15% of the year for NZMCA). Off peak surveys were also carried out to determine the typical lower limit for traffic generation at the sites, which represents the majority of the year.

The survey results were compiled to create traffic generation estimates for peak season and off-season trips based on the available site size and per registered vehicle. The number of sites provided is considered to be a more robust basis for calculating the traffic because of the variability in land around each site within the camping ground. Since the Opus report does not document the site occupancy rates at the time of the surveys, an average occupancy rate of 90 percent has been adopted for this assessment. This is consistent with the recommendations of the NZTA Research Report No 453 "Trips and Parking related to Land Use" to use a 90th percentile traffic generation for design and assessment purposes.

Table 5-1 and Table 5-2 show the expected volumes of traffic movement at different times based on 46 sites at Stage 1, 10 sites within Stage 2 and occupancy rates of 90 and 30 percent respectively to represent peak and off-peak periods. The calculation is based on one registered vehicle per site.

Table 5-1: Peak season traffic generation (90% Occupancy)

Scenario	Rate per site	Traffic Generation		
		Stage 1	Stage 2	Total
AM Commuter Peak	0.10	4	1	**5**
PM Commuter Peak	0.13	5	1	**7**
Peak Hour (weekday)	0.35	14	3	**18**
Peak Hour (weekend)	0.33	14	3	**17**
Daily (weekday)	2.03	84	18	**102**
Daily (weekend)	1.94	80	17	**98**
Weekly	14.03	581	126	**707**

Table 5-2: Off season traffic generation (30% Occupancy)

Heading	Rate per site	Traffic Generation		
		Stage 1	Stage 2	Total
AM Commuter Peak	0.10	1	0	**2**
PM Commuter Peak	0.13	2	0	**2**
Peak Hour (weekday)	0.35	5	1	**6**
Peak Hour (weekend)	0.33	5	1	**6**
Daily (weekday)	2.03	28	6	**34**
Daily (weekend)	1.94	27	6	**33**
Weekly	14.03	194	42	**236**

During the peak summer period, the average daily number of movements at the campground with the Stage 1 development is expected to be about 80 vpd with a peak hourly volume of less than 15 vph. With the second stage of development, the average daily traffic volume could increase to about 100 vpd and the peak hour volumes could increase to about 20 vph. As NZMCA are seeking approval for up to 60 certified self-contained vehicles on site, the maximum expected daily traffic volume is 122 vpd, with peak hour volumes of 20 vph.

5.2 Travel Routes

An *Access Options Report* was completed for the site by Carriageway Consulting in September 2019. The report states there are two viable access routes for the site (Figure 5-1):

- Option 1: Via Park Road, Hill Road and Esplanade, and then via the reserve/ unsealed access road to the treatment ponds; or

- Option 2: Via Park Road, Hill Road and Bay Road, with a widening of the seal and removal of mature landscaping at the Hill Road/ Bay Road intersection.

Figure 5-1: Access route options

Figure 5-2: On Hill Road looking south towards curve[2]

Figure 5-3: Sight distance looking north for drivers exiting Bay Road[3]

The *Access Options Report* identifies Option 1, via the Esplanade and the reserve/ unsealed access road to the treatment ponds, as the preferred option because the required sightlines at the Bay Road / Hill Road intersection are partially obstructed by the adjacent hedge. However, Option 1 is not in line with the proposed site plan (Figure 4-1), and is not along an official road and would require permission from Council to:

1. Create a legal access at the existing unofficial access point that does not achieve minimum sight distances; and,
2. Use the first 300 m of the treatment pond access road to get to the access point.

As Option 1 accesses the site via an unofficial road and an illegal access, Option 2 currently represents the preferred route.

[2] Image from *Access Options Report* by Carriageway Consulting
[3] As above

6. Expected Traffic Effects

All NZMCA park related vehicle movements are expected to be along the existing signed campervan route and Bay Road. Because of this, the amenity of the area for residents on this route is not expected to change significantly. While the site is expected to mainly generate new trips, some of the trips may be from NZMCA members who already visit Warrington, but currently park at the Warrington Domain.

Table 6-1 shows the percentage increase in daily traffic volumes along roads used to access the site for the Stage 1 development scenario.

Table 6-1: Increase in estimated average daily traffic for Stage 1 scenarios

Road	Average Daily Traffic		Off Season		Peak Season	
			Total	% Change	Total	% Change
Park Road	(estimate)	700	728	4%	782	12%
Bay Road	(estimate)	190	218	15%	-	-
Bay Road (summer)	(count)	452	-	-	534	18%

At a daily level, the proposed camping ground could increase the traffic volumes by up to 20%. While this appears to be a large percentage change, in practice, it reflects the low volumes of traffic on the roads presently. Figure 6-1 provides a comparison of the observed daily traffic volumes on Bay Road during the peak period with a scenario that includes 82 additional movements per day. The change in volumes over the peak summer volumes is not expected to be noticeable because of the wide variation in traffic volumes that occurs on a day to day basis.

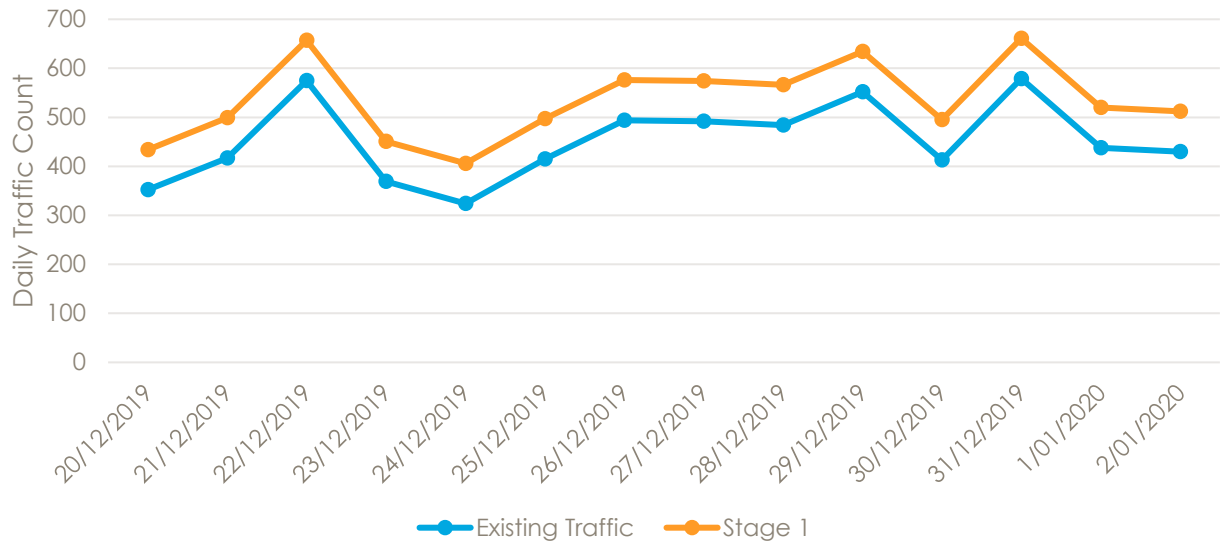

Figure 6-1: Daily Traffic Volumes during the peak summer period on Bay Road

The peak hourly traffic generation from the campground for the Stage 1 development is expected to be less than 15 vph or one vehicle movement every four minutes on average. This is not expected to be noticeable against the existing background movement volume with one movement every one to two minutes.

A second stage of development to create a further 10 sites would be expected to increase the peak hourly traffic in the summer to about 18 vph or one vehicle every three minutes. This level of increase is more likely to be noticeable to residents because of the existing low volumes of the road network but is unlikely to be noticeable to visiting drivers.

With the low volumes of traffic using the access roads to Warrington already, there is ample capacity to accommodate the additional traffic movements without generating any adverse effects on the network. The increased volumes would not be expected to contribute to any noticeable delays at intersections.

The sightline to the north from the Bay Road western approach to the Bay Road / Hill Road intersection is partially obstructed by the adjacent hedge. This restricts the available sight distance to about 40 m which is less than the minimum requirement for a road with a 50 km/h speed limit. In practice, drivers would be expected to move forward to increase their sight distance. This manoeuvre can be undertaken safely because drivers have clear visibility of vehicles approaches from the east and because vehicle speeds within

Warrington are expected to be less than 40 km/h. The average vehicle speed observed on Bay Road was 30 km/h. Although this is an existing situation, it is recommended that Council is consulted to determine potential options for improving the sight distance because there will be an increased number of vehicles making this turn when the campground is operational if the Bay Road access option is adopted.

7. Dunedin District Plan

The relevant rules from the 2GP and the projects compliance to them is listed in Table 7-1. No formal assessment of the site layout against the parking and access rule requirements has been undertaken because the no formal parking bays will be marked on the site and because the dimensions of each proposed site within the camping ground far exceed the minimum requirements of the District Plan.

Table 7-1: District Plan compliance assessment

Rules	Comments	Compliance
Rule 6.6.3.1: Maximum number of vehicle crossings		
a. The maximum number of vehicle crossings permitted on each road frontage of any site is: • 1 for local roads with a frontage of less than 18 m • 3 for local roads with a frontage greater than 60 m	Frontage > 30m Two vehicle crossings on site (one is unofficial)	Permitted
b. No new vehicle crossings are permitted onto a commercial centre street except for fire stations.	Area not zoned as commercial	Not Applicable
c. For fire stations, the maximum number of vehicle crossings on each road frontage is two for all sites, except where three vehicle crossings are otherwise permitted.		Not Applicable
Rule 6.6.3.2: Minimum sight distance from a vehicle access		
a. The minimum sight distance from a new vehicle access onto any state highway in a 50 km/h zone is 113 m.		Not Applicable
b. The minimum sight distance from a new vehicle access onto any road other than a state highway in a 50 km/h zone is 69 m.	Provided the Bay Road access is used – this sight distance cannot be achieved with the unofficial access	Permitted
c. Except, where a site is unable to conform with the minimum site distances in rules 6.6.3.2.a and 6.6.3.2.b, one vehicle crossing per site is allowed in the position which most nearly complies with rules 6.6.3.4.a or 6.6.3.4.b (minimum distances of new vehicle crossing from intersections)	Access meets rule 6.6.3.2b	Not Applicable
Rule 6.6.3.3: Maximum width for a vehicle access		
a. The maximum width for a vehicle access in a non "residential activities" zone is 9 m	Draft landscape plan shows a sealed width of 6m	Permitted
Rule 6.6.3.4: Minimum distances of new vehicle crossing from intersections and level crossings		
a. The minimum distance of a new vehicle crossing from the intersection of two local roads where the speed limit is less than 70 km/h is 10 m		Permitted
b. The minimum distance of a new vehicle crossing from the intersection of two local roads where the speed limit is 70 – 90 km/h is 10 m		Not Applicable
c. Except, one vehicle crossing only may be constructed to provide access to the site, in the position that most nearly complies with rules 6.6.3.4.a or 6.6.3.4.b.	Already complies with 6.6.3.4a	Not Applicable
d. The minimum distance of a new vehicle crossing from the intersection of two local roads where the speed limit is greater than 90 km/h is 60 m.		Not Applicable
e. The minimum distance of a new vehicle crossing from intersections on state highways is as follows		Not Applicable

Rules	Comments	Compliance
g. The minimum distance between a new vehicle crossing and a level crossing on the same road is 30 m.		Not Applicable
Rule 6.6.3.6: Surfacing of driveways a. Driveways that adjoin a legal road that is hard surfaced, must be constructed with a hard surface for a minimum distance of 5 m from the edge of the road (See Appendix 6B, Figure 6B.19). b. In all zones other than the rural and rural residential zones, the full length of any driveway that serves 2 or more residential properties must be hard surfaced.	Draft landscape plan shows access sealed at least 5m from the edge of seal	Permitted Not Applicable
Rule 6.6.3.7: Gradient of driveways a. The maximum change in gradient without transition for driveways is 1 in 8 for summit grade changes or 1 in 6.7 for sag grade changes. b. The gradient of the first 5m measured from the road boundary into the site must be no greater than 1 in 8.	No reasons for non-compliance with these requirements	Permitted Permitted
Rule 6.6.3.9: Width of driveways a. The minimum widths of driveways in non-residential zones are: a. Minimum legal width: 6 m b. Minimum formed width: 5 m	Draft landscape plan shows a sealed width of 6 m	Permitted

8. Conclusions

NZMCA proposes to develop a new site for overnight motor caravan stays at 20 Bay Road, Warrington, approximately 20 km northeast of Dunedin. The investigation of the expected traffic generation for the first stage of development indicates that the proposal could generate the following additional vehicle movements per day:

- Off peak season: 28 vehicle movements per day
- Peak season: 80-84 vehicle movements per day

While these increases appear relatively large, this reflects the low existing volumes on the road network in Warrington. In practice, the increase represents less than one additional movement every four minutes which is unlikely to be noticeable because of the wide variation in hourly and daily volumes on the Warrington roads.

A second stage of development to create a further 10 sites would be expected to increase the peak hourly traffic in the summer to about 18 vph or one vehicle every three minutes compared with the existing environment. This level of increase is likely to be noticeable to residents because of the existing low volumes of the road network but is unlikely to be noticeable to visiting drivers.

The Bay Road access is the legal access for the site, but it is recommended that minor intersection works are completed at the Bay Road/ Hill Road intersection to improve site distances.

With the low volumes of traffic using the access roads to Warrington already, there is ample capacity to accommodate the additional traffic movements without generating any adverse effects on the network. The increased volumes would not be expected to contribute to any noticeable delays at intersections.

The assessment of compliance against the District Plan transport rules has concluded that the Bay Road site access will achieve a high level of compliance. Overall, it has been concluded that the proposal can be supported from a transportation perspective.

Appendices

Appendix A Photographs

Photograph 1: Site Entrance

Photograph 2: Bay Road - View East

Photograph 3: Bay Road – View West

Photograph 4: Bay Road approach to Hill Road

Photograph 5: Bay Road / Hill Road Intersection

Photograph 6: BAy Road / Hill Road Intersection

Photograph 7: Bay Road / Hill Road intersecton

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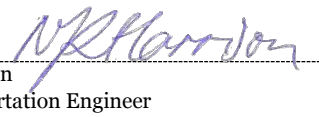

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Use of This Document

This document is designed to provide vehicle movement information for use in the preparation and evaluation of traffic assessments and resource consent applications regarding New Zealand Motor Caravan Association (NZMCA) sites.

To quantify the traffic impacts arising from these sites, vehicle movement data was collected at the entrance four typical sites. The number of movements generated at a given site depends on the number of vehicles on site and the number of trips those vehicles make, which is influenced by the site's facilities, size and proximity to other destinations.

Where existing traffic counts are unavailable, such as at a new site, vehicle movements are usually estimated from generic published figures (discussed in Section 1.3). This study provides data in a New Zealand context, specifically for NZMCA sites, that can be used to calculate vehicle demands at future and existing sites.

This document assists in calculating vehicle movements based on:

- The number of vehicles registered on site
    - Vehicle movements calculated by this method are generally more accurate as they account for daily variation in campsite occupancy. Care should be taken when using this method as using site capacity rather than actual site occupancy will lead to overestimation of vehicle movements.

- Site size
    - Where vehicle occupancy data is unavailable, such as at a new site, estimates can be made for average vehicle movements based on the size of the site. These figures are based on average figures recorded over the duration of the survey and therefore do not reflect daily variations in campsite occupancy.

Traffic data was collected at four existing NZMCA sites (details are provided in Appendix A). The sites surveyed were selected to represent a range of sizes, facilities and locations, in order to reflect the variability across NZMCA sites. Surveys were carried out at the known busiest time of year to understand the upper bound of traffic generation, though it should be noted that this reflects roughly 15% of the year. Off-peak surveys were also carried out to determine the lower bound of traffic generation at the sites, which represents the majority of the year.

The accuracy of the data collected was determined through the industry standard A/B ratio, which compares the number of detections between the pair of sensors at the site. There were four occurrences in the off peak surveys where the required accuracy measure was not satisfied and the surveys had to be repeated. The ratios are provided in Section 3 along with site results.

As campsites are a recreational land use, their peak hours do not coincide with typical commuter peak hours. As such, impact assessments should be based on the largest combination of site and background traffic flows. Traffic generated by the sites during commuter peak hours is generally smaller, but is more likely to have adverse effects on an already-congested commuter network. More traffic is generated by the site during the site's peak hour, but this generally coincides with commuter inter-peak hours and is therefore less critical to assessing traffic impact.

The following flow chart indicates how this document should be used to calculate vehicle movement data such as site peak hour flow, commuter peak hour flows, daily volumes, weekly volumes and heavy vehicle proportions. The outputs can be used to assess the impact of traffic generated by the site in question. Tables accompanying the flow chart are also provided below.

Using site capacity instead of actual site occupancy will produce inflated values that represent ultimate peak trip generation; at the sites surveyed, peak occupancy lasted for 1-2 days only. Results provided by this document assume similar site occupancy rates to those surveyed (discussed in Section 4), which equates to an average of 0.25veh/100m².

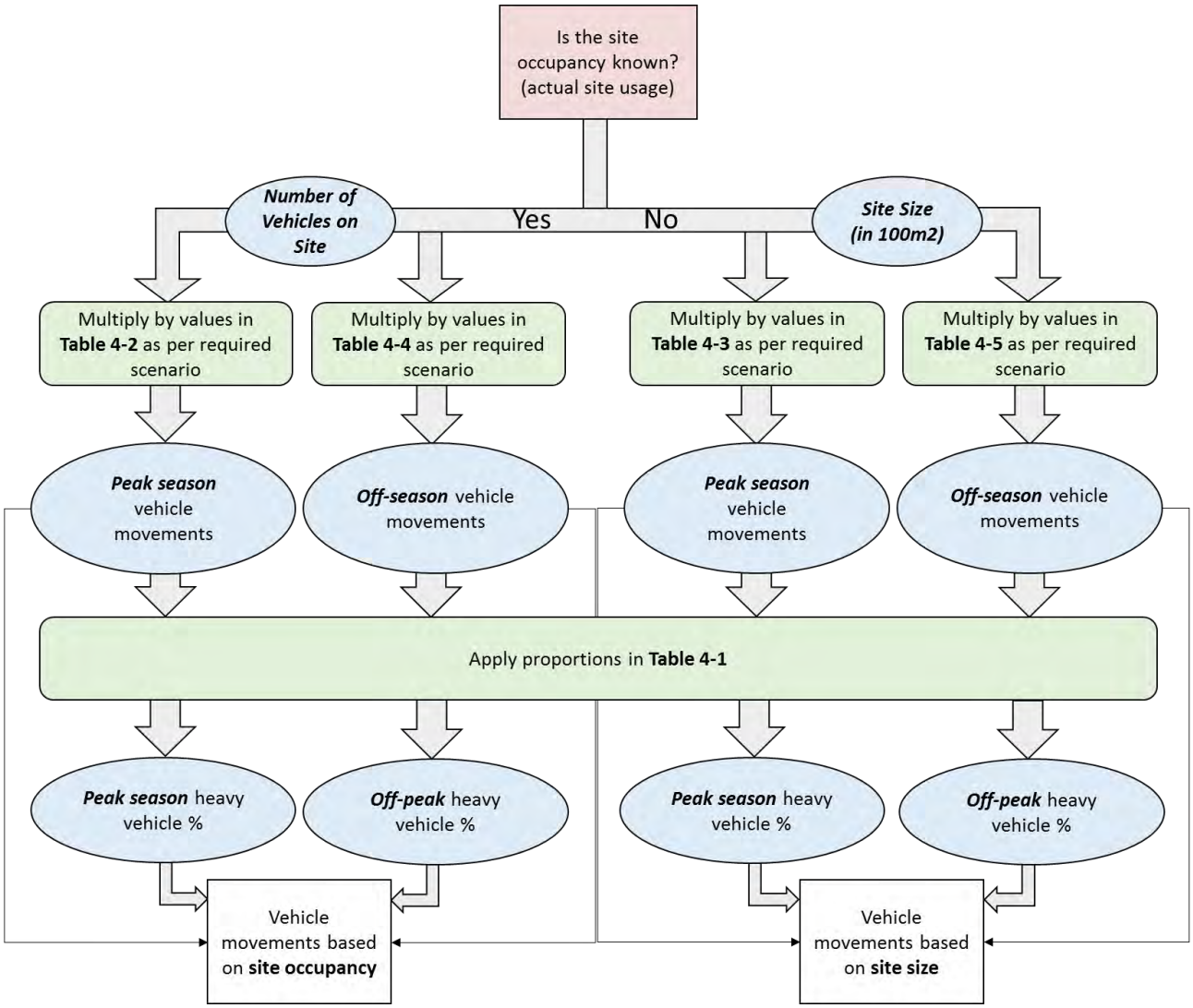


Table 4-1 Summary of Heavy and Light Vehicles at NZMCA Sites

	Peak Season	Off Peak Season
Heavy Vehicles	27%	19%
Light Vehicles	73%	81%

Table 4-2 Peak Season Trip Rates per Registered Vehicle on Site

Scenario	Trips per Registered Vehicle on Site (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.10** (0.06)	30/70
PM Commuter Peak	**0.13** (0.07)	66/34
Site Peak Hour (Weekday)	**0.35** (0.10)	50/50
Site Peak Hour (Weekend)	**0.33** (0.11)	50/50
Daily (Weekday)	**2.03** (0.62)	50/50
Daily (Weekend)	**1.94** (0.55)	50/50
Weekly	**14.03***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

Table 4-3 Peak Season Trip Rates per Site Size

Scenario	Trips per 100m^2 (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.02** (0.02)	30/70
PM Commuter Peak	**0.03** (0.03)	66/34
Site Peak Hour (Weekday)	**0.08** (0.02)	50/50
Site Peak Hour (Weekend)	**0.08** (0.03)	50/50
Daily (Weekday)	**0.44** (0.14)	50/50
Daily (Weekend)	**0.44** (0.12)	50/50
Weekly	**3.08***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

Table 4-4 Off Season Trip Rates per Registered Vehicle on Site

Scenario	Trips per Registered Vehicle on Site (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.08** (0.14)	22/78
PM Commuter Peak	**0.11** (0.07)	60/40
Site Peak Hour (Weekday)	**0.50** (0.37)	50/50
Site Peak Hour (Weekend)	**0.51** (0.43)	50/50
Daily (Weekday)	**2.02** (1.42)	50/50
Daily (Weekend)	**1.94** (0.55)	50/50
Weekly	**13.98***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

Table 4-5 Off Season Trip Rates per Site Size

Scenario	Trips per Registered Vehicle on Site (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.01** (0.01)	22/78
PM Commuter Peak	**0.01** (0.01)	60/40
Site Peak Hour (Weekday)	**0.01** (0.01)	50/50
Site Peak Hour (Weekend)	**0.02** (0.01)	50/50
Daily (Weekday)	**0.16** (0.06)	50/50
Daily (Weekend)	**0.16** (0.09)	50/50
Weekly	**1.12***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

Contents

1 Background

1.1 Introduction

Opus was approached by the New Zealand Motor Caravan Association (NZMCA) to assess traffic movements at typical sites across New Zealand.

The four sites selected for analysis were identified as representative of a range of typical sites with different sizes, facilities and locations to assess whether results could be applied to all NZMCA sites. Two of the sites surveyed were smaller and in rural areas (Manganese Point and Te Anau) and the other two were larger and closer to urban centres (Taupo Airport and Rolleston). Full site descriptions are provided in Appendix A.

This report combines the data collected during peak and off-peak surveys to provide an understanding of year-round vehicle movements. The data provides insight into peak-hourly and daily traffic flows, as well as traffic composition and temporal patterns at NZMCA sites.

From the measured traffic flows, trip generation rates have been calculated and are presented in Section 4. These rates enable traffic flow forecasts at future sites based on relevant and accurate data. Previously vehicle movements were estimated from generic published figures with no New Zealand context.

1.2 Purpose

The purpose of this study is to provide easily accessible and accurate vehicle movement data that is representative of all NZMCA sites for use in traffic assessments and resource consent applications. Additionally, the information will enable the NZMCA to make informed strategic decisions based on their members' use of sites.

1.3 Trip Generation

In transportation planning, trip generation is used to estimate the number of vehicles produced by a specific land use. Typically, trip generation rates are calculated from empirical data based on floor area of the activity or number of dwellings. Land uses can produce substantially different trip generations depending on the intensity and location of the activity, and the local infrastructure.

Variability between camping grounds and their facilities makes it difficult to apply a common trip generation rate. This study removes the assumptions of previous trip generation studies and provides data specifically for NZMCA sites.

Table 1-1 shows historical records of trip generation from campgrounds in the New Zealand Trips and Parking Database and the Institute of Transport Engineers handbook. There is large variability in the data currently available, which prevents accurate projections for traffic volumes generated by new sites.

Table 1-1 Typical Campground Trip Generation

	Trip Rate			
Study	**AM Peak**	**PM Peak**	**Daily**	**Peak Hour of Site**
New Zealand Trips and Parking Database				
Baird Camping Ground (40,000 m^2)	0.11 vph per 100m^2 Site Peak	0.05 vph per 100m^2 Site Peak	0.58 per 100m^2	N/A
Meadow Holiday Park (15,000 m^2)	0.25 vph per 100m^2 Site Peak	0.56 vph per 100m^2 Site Peak	4.14 per 100m^2	N/A
Institute of Transport Engineers				
'Camping or Campervan Site'	0.20 vph per occupied lot	0.37 vph per occupied lot	N/A	0.41

*vph: vehicles per hour

2 Methodology

2.1 Site Descriptions

Site visits were carried out to record available facilities, access arrangements and site layout. Full site descriptions are provided in Appendix A.

2.2 Tube Counts

Pneumatic tubes were laid across the entrance of each of the four sites between Friday 15th January 2016 and Monday 1st February 2016 for the Peak Season wave and between Friday 29th July 2016 and Monday 15th August 2016 for the Off-Peak Season wave.

The tube count at Weedons Park failed in the first week and was repeated over the following 2 weeks. Counts at Manganese Point were unsuccessful twice due to equipment failure caused by the gravel surface and once due to a relocated count capturing external traffic. The survey was successfully carried out between 17th November and 5th December 2016 when equipment was checked for faults regularly during the survey.

The recounted surveys did not capture the absolute off-peak period and as a result, larger traffic volumes were likely captured. However, this results in a conservative lower bound for the data as traffic assessments will primarily use peak flow data.

Where possible, the tubes were laid over sealed roads at locations where vehicles would not be turning to ensure they were detected. The location was selected to avoid collecting traffic external to the sites. The logger collected data regarding the number and type of vehicles accessing the site, based on axle spacing and headway (time between vehicle detections).

2.3 Analysis

The data was collated into hourly intervals with 14 vehicle classifications as defined by the NZTA 2011 Vehicle Classification Scheme (a summarised version is shown in Table 2-1). Different vehicle types are identified by the tube counters by logging the space between and grouping of vehicle axles passing over the tubes.

Table 2-1 NZTA 2011 Vehicle Classification Scheme

Axle Class	Axle Type	NZTA Class	Vehicle Type
1	Very short 2 axle vehicle	Private Car	Motorcycles
2	Short 2 axle vehicle	Private Car or Light Commercial Vehicle	Cars or small campervans
3	Car towing trailer or car	Private Car or Light Commercial Vehicle	Cars towing caravans
4	Truck, bus or truck towing trailer	Bus or Medium Commercial Vehicle	Larger vehicles or vehicles towing caravans
5 and Above	Truck, bus, coach or heavier	Bus or Heavy Commercial Vehicle	Recreational Vehicles and larger

Peak hourly, daily, weekly and weekend volumes were averaged across the full survey period. Peak hourly flows refer to the average of the maximum hourly flows on each day during the survey.

To help further describe traffic at the sites, heavy vehicle proportions over the survey period and charts plotting vehicle movements throughout the day are provided for each site.

3 Results

This section provides results of measured traffic movements at the four surveyed sites. Data presented includes vehicle classification (proportion of heavy and light vehicles), time of movements and peak-hourly, daily and weekly average flows for each site.

Peak hour volumes refer to the average of all survey days' maximum peak hour flow. This does not reflect a particular time of day, as the observed peak hour varied throughout the survey period between 10am and 4pm (as shown in Figure 3-2).

3.1 General Trends

Figure 3-1 below shows the proportion of each vehicle classification recorded at the four sites in January and August. Similar proportions of vehicle classification were recorded at each site, with cars or small campervans making up between 64% and 82% of total vehicles counted. A larger proportion of heavy vehicles, such as larger recreational vehicles, were recorded in the January survey. This could be a result of a larger proportion of families travelling in larger vehicles during the peak season. Vehicles of classification 3 and 5+ were only observed at the larger sites, Taupo and Weedons Park.

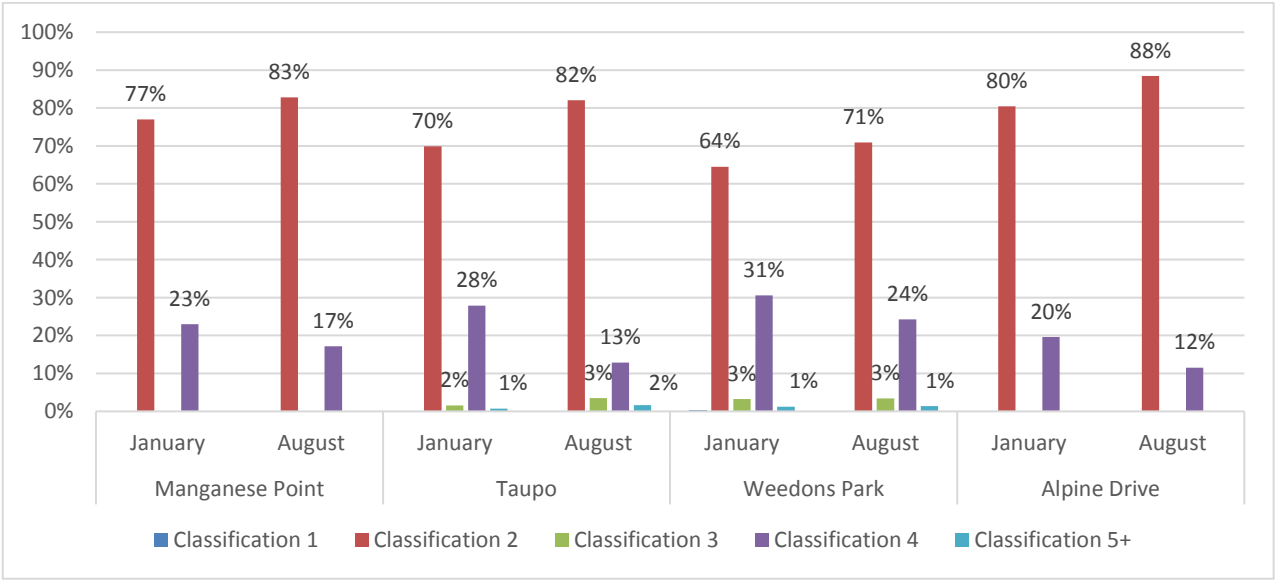


Figure 3-1 Proportion of Vehicle Types Recorded at each Site

Figure 3-2 shows the pattern of vehicle movements across all survey sites. The chart shows that movements are relatively evenly spread between 10:00 and 16:00, with a quiet period around midday. It can be concluded that vehicle movements associated with NZMCA sites are primarily outside of commuter peaks.

The accompanying charts in Figure 3-3 and Figure 3-4 indicate that the majority of morning vehicle movements are inbound while the majority of afternoon movements are outbound during both peak and off peak seasons.

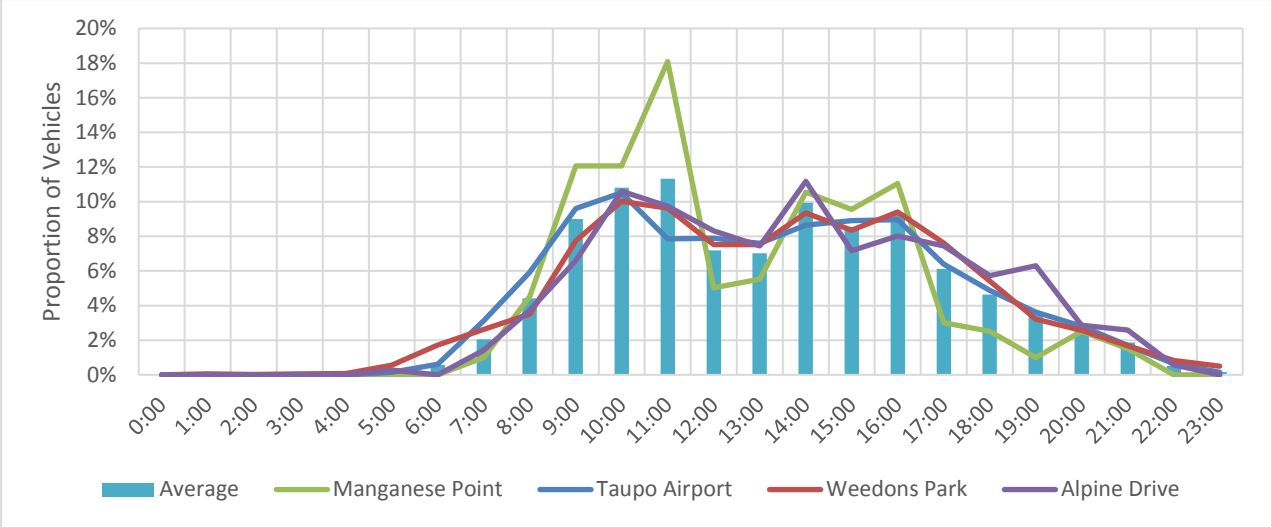


Figure 3-2 Vehicle Movement Time Proportions

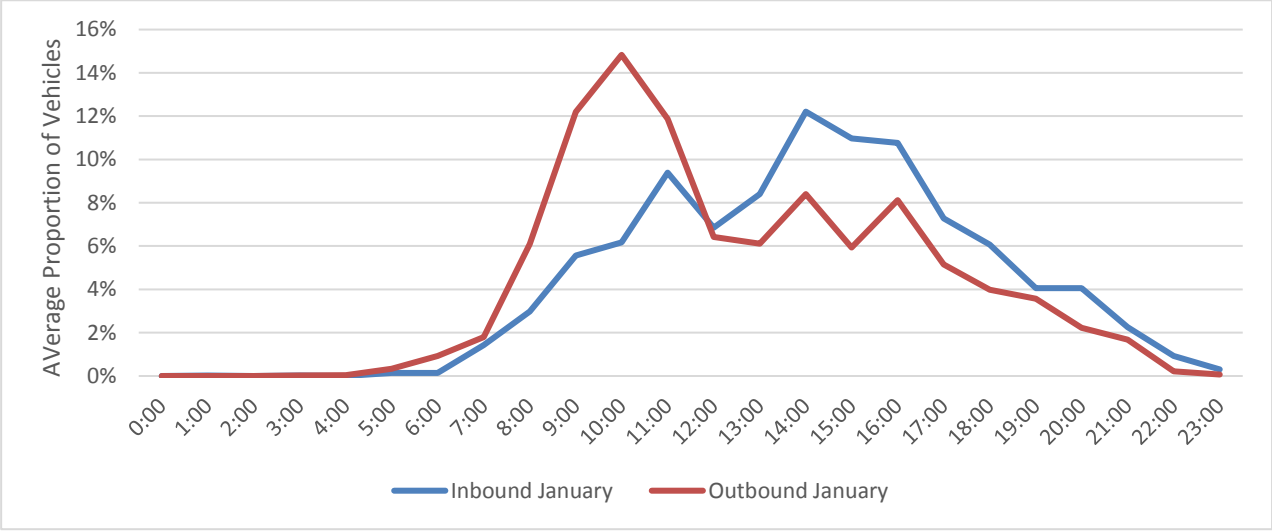


Figure 3-3 Directional Vehicle Movement Time Proportions (January Count)

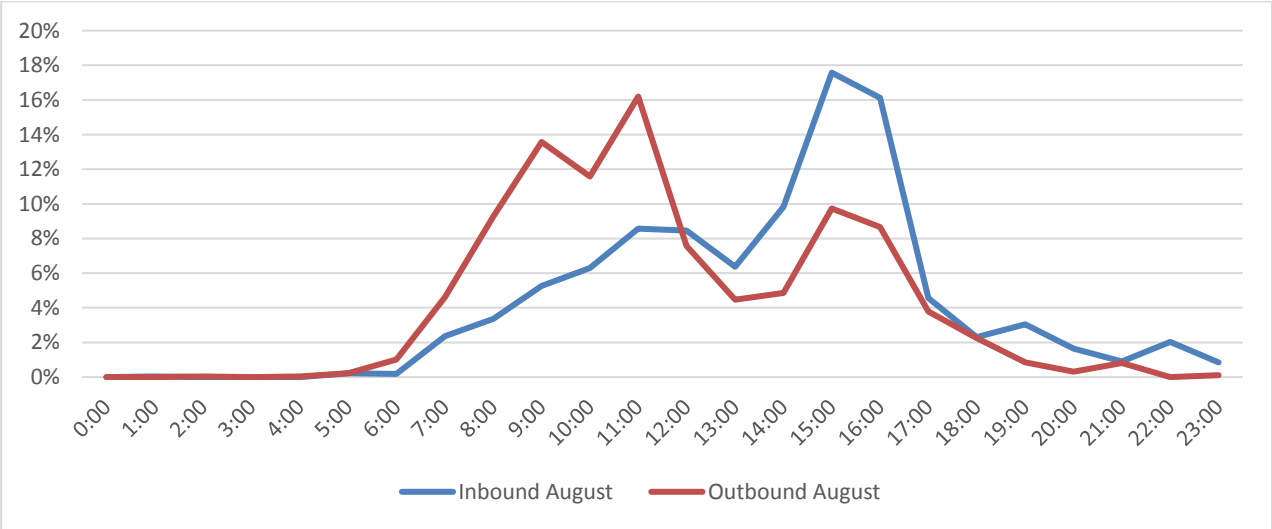


Figure 3-4 Directional Vehicle Movement Time Proportions (August Count)

3.2 Site 639 - Manganese Point, Whangarei

The A/B ratios shown below provide a measure of accuracy for each survey. They refer to the number of signals received by the logger from each tube. Typically accepted A/B ratios are within 5% of 100%; larger or smaller values are considered failure. Note that the total sensor hits include vehicles counted outside of the survey period, where tubes were laid out early or picked up late.

Due to failure in the tube counting equipment on three occasions, the final survey at this site was completed between Friday 18th November and Saturday 3rd December. On two of the failed surveys, the data logger received only 2 days' worth of data and the third failed survey was a result of the tube counting traffic external to the site.

Peak Season Survey
Total Sensor Hits = 676
A Hits = 338 (50%)
B Hits = 337 (50%)
A/B Ratio = 100%

Off-Peak Season Survey
Total Sensor Hits = 574
A Hits = 294 (51.2%)
B Hits = 280 (48.8%)
A/B Ratio = 105%

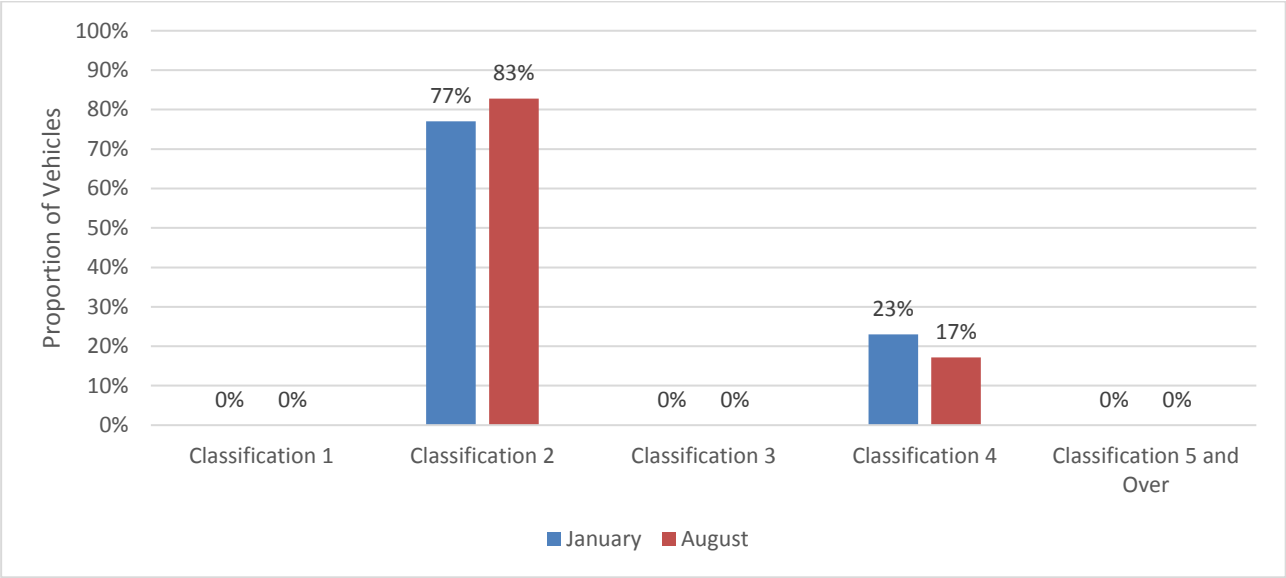
3.2.1 Weekday Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekly (5 days)	Peak-Hourly	Daily	Weekly (5 days)
Average Volume	3	8	32	1.5	4	20
Variability	45%	70%	4%	51%	52%	11%

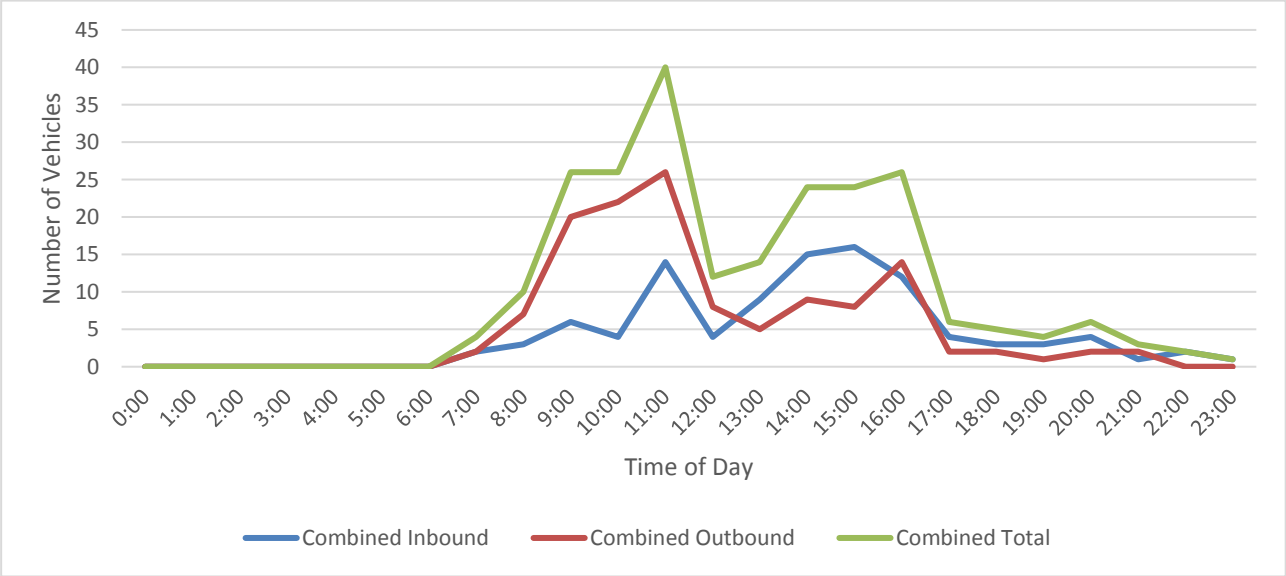
3.2.2 Weekend Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekend	Peak-Hourly	Daily	Weekend
Average Volume	3	12	23	2	5	11
Variability	31%	30%	4%	41%	48%	34%

3.2.3 Vehicle Classification (Survey Period Combined)



3.2.4 Time of Movements (Peak and Off-Peak Survey Periods Combined)



3.3 Site 3365 – Taupo Airport, Taupo

The A/B ratios shown below provide a measure of accuracy for each survey. They refer to the number of signals received by the logger from each tube. Typically accepted A/B ratios are within 5% of 100%; larger or smaller values are considered failure. Note that the total sensor hits include vehicles counted outside of the survey period, where tubes were laid out early or picked up late.

Peak Season Survey
Total Sensor Hits = 23146
A Hits = 11656 (50.4%)
B Hits = 11490 (49.6%)
A/B Ratio = 101%

Off-Peak Season Survey
Total Sensor Hits = 2509
A Hits = 1274 (50.8%)
B Hits = 1235 (49.2%)
A/B Ratio = 103%

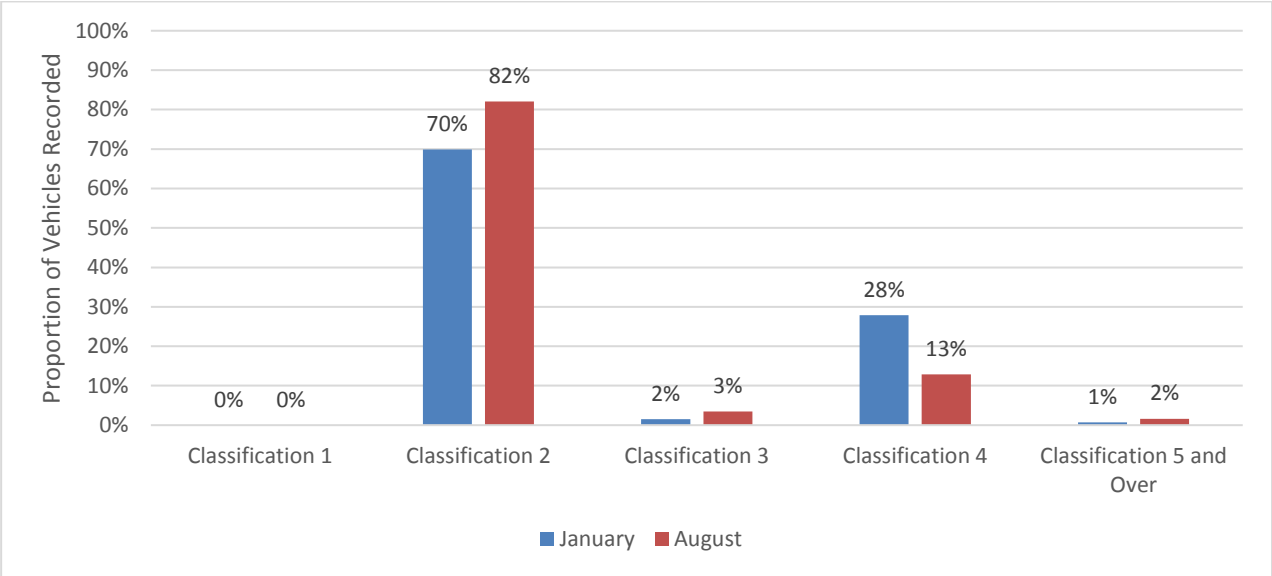
3.3.1 Weekday Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekly (5 days)	Peak-Hourly	Daily	Weekly (5 days)
Average Volume	13	89	456	5	23	120
Variability	11%	21%	20%	47%	39%	29%

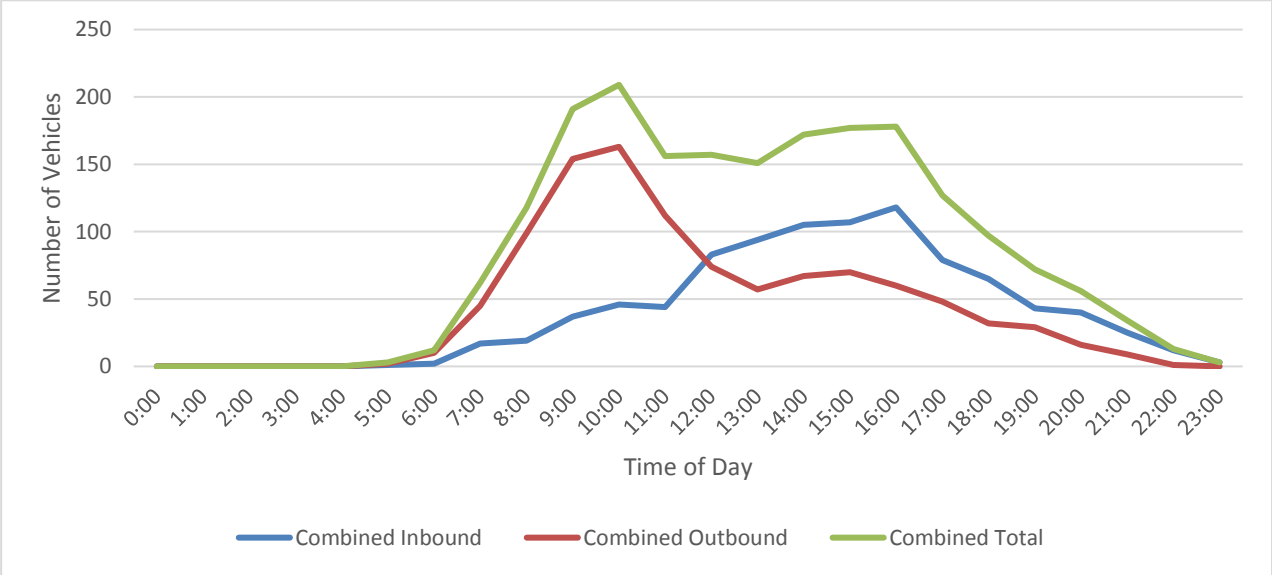
3.3.2 Weekend Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekend	Peak-Hourly	Daily	Weekend
Average Volume	13	91	182	4	17	34
Variability	28%	21%	17%	33%	54%	57%

3.3.3 Vehicle Classification (Survey Period Combined)



3.3.4 Time of Movements (Peak and Off-Peak Survey Periods Combined)



3.4 Site 7561 – Weedons Park, Rolleston

The A/B ratios shown below provide a measure of accuracy for each survey. They refer to the number of signals received by the logger from each tube. Typically accepted A/B ratios are within 5% of 100%; larger or smaller values are considered failure. Note that the total sensor hits include vehicles counted outside of the survey period, where tubes were laid out early or picked up late.

Peak Season Survey
Total Sensor Hits = 11776
A Hits = 5887 (50%)
B Hits = 5889 (50%)
A/B Ratio = 100%

Off-Peak Season Survey
Total Sensor Hits = 6338
A Hits = 3170 (50%)
B Hits = 3168 (50%)
A/B Ratio = 100%

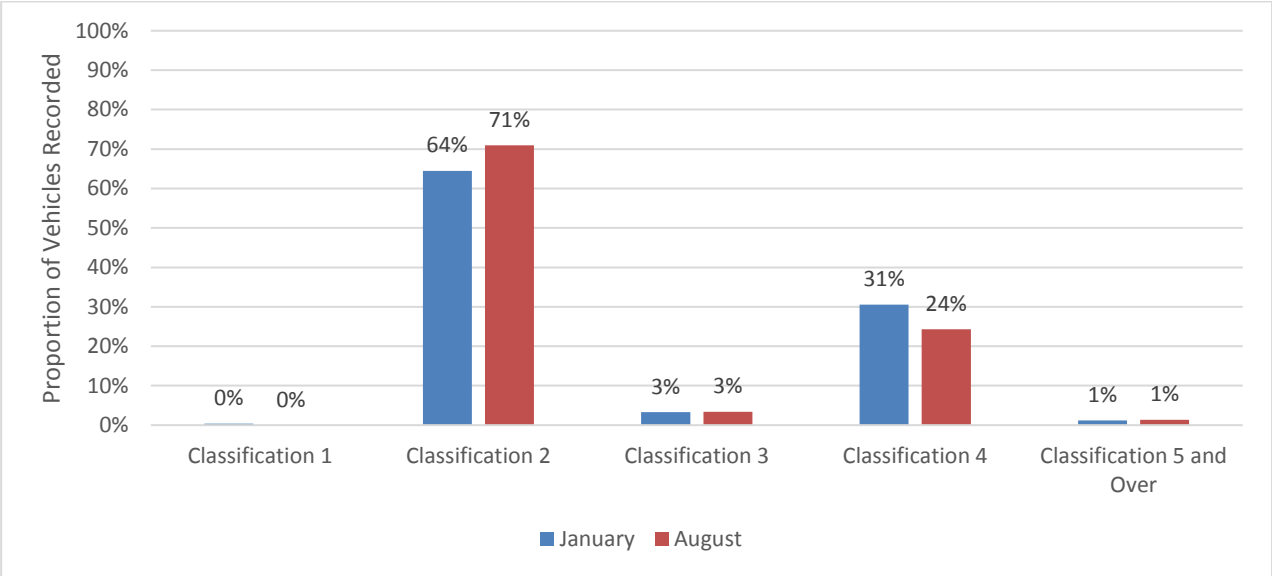
3.4.1 Weekday Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekly (5 days)	Peak-Hourly	Daily	Weekly (5 days)
Average Volume	17	136	674	11	73	350
Variability	23%	16%	20%	12%	20%	14%

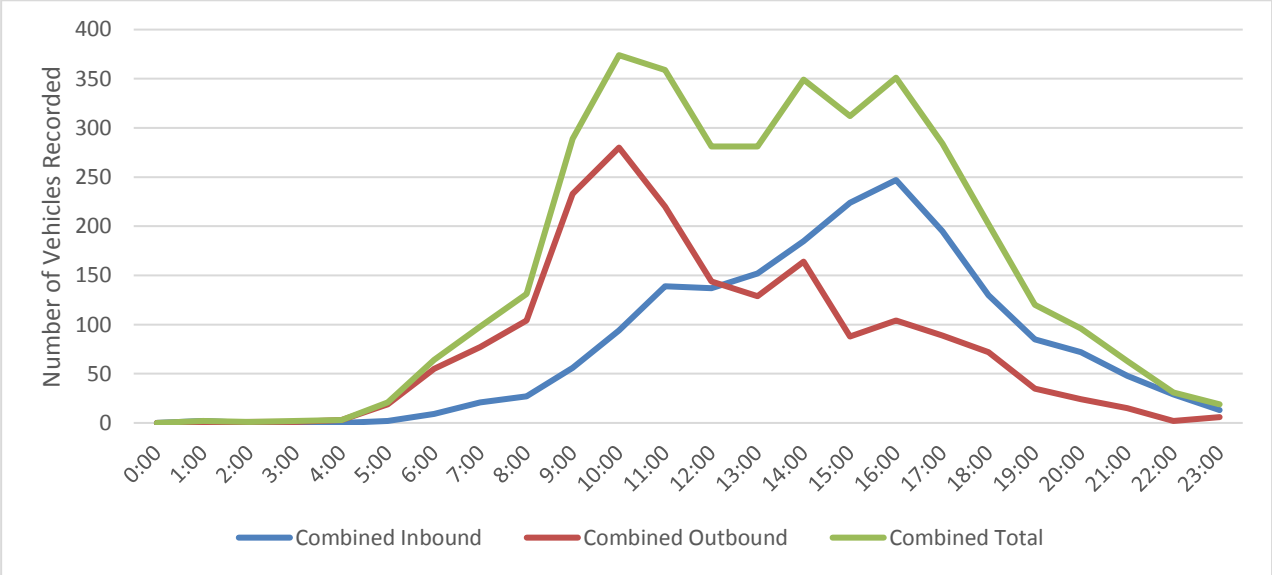
3.4.2 Weekend Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekend	Peak-Hourly	Daily	Weekend
Average Volume	17	134	268	12	71	141
Variability	20%	22%	19%	40%	35%	37%

3.4.3 Vehicle Classification (Survey Period Combined)



3.4.4 Time of Movements (Peak and Off-Peak Survey Periods Combined)



3.5 Site 9101 – Alpine Park, Te Anau

The Alpine Park site was quiet during the off-peak survey, with no vehicle movements recorded on some days. This resulted in large variability in the number of vehicles recorded across the 2 week period and an average peak hour flow below 1.

The A/B ratios shown below provide a measure of accuracy for each survey. They refer to the number of signals received by the logger from each tube. Typically accepted A/B ratios are within 5% of 100%; larger or smaller values are considered failure. Note that the total sensor hits include vehicles counted outside of the survey period, where tubes were laid out early or picked up late.

Peak Season Survey
Total Sensor Hits = 4211
A Hits = 2135 (50.7%)
B Hits = 2076 (49.3%)
A/B Ratio = 103%

Off-Peak Season Survey
Total Sensor Hits = 542
A Hits = 275 (50.7%)
B Hits = 267 (49.3%)
A/B Ratio = 103%

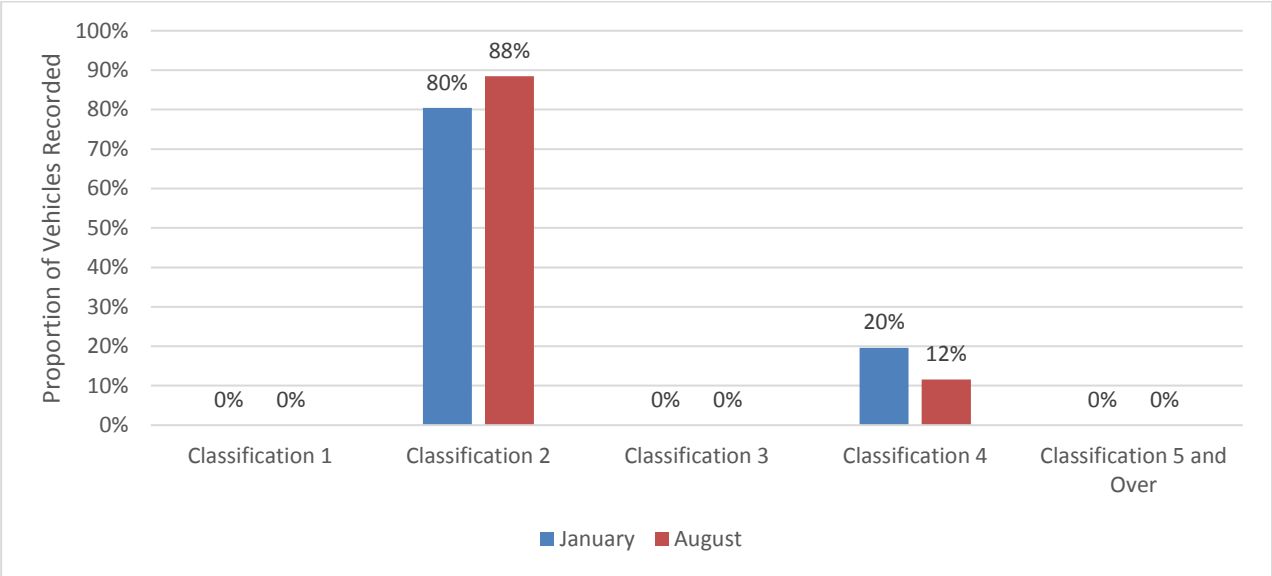
3.5.1 Weekday Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekly (5 days)	Peak-Hourly	Daily	Weekly (5 days)
Average Volume	5	21	101	0.6	1.3	2.5
Variability	25%	32%	25%	148%	158%	28%

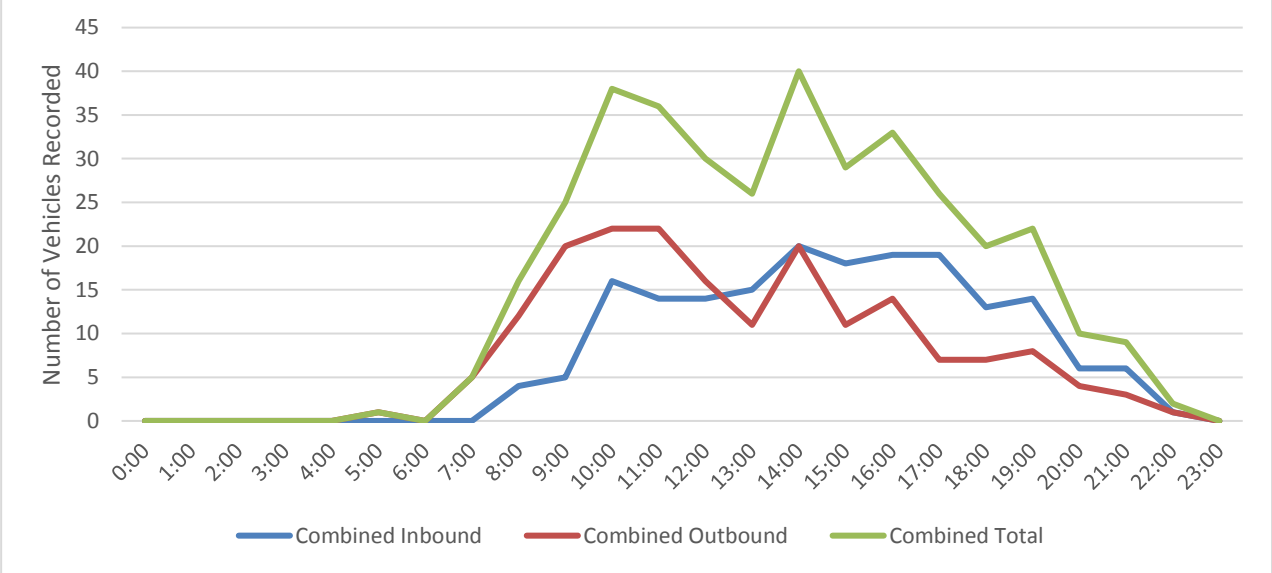
3.5.2 Weekend Traffic Count

	Peak			Off-Peak		
	Peak-Hourly	Daily	Weekend	Peak-Hourly	Daily	Weekend
Average Volume	4	15	29	1	1.7	3.3
Variability	43%	50%	51%	110%	112%	92%

3.5.3 Vehicle Classification (Survey Period Combined)



3.5.4 Time of Movements (Peak and Off-Peak Survey Periods Combined)



4 Trip Generation

This section of the report should be used to produce estimates for vehicle movements at new or existing NZMCA sites. Where the number of registered vehicles or site size is known, the tables in this section enable the following estimates:

- Proportion of heavy vehicles;
- Number of vehicle movements during the site peak hour (varies between 10am and 4pm);
- Number of vehicle movements during commuter peak hours (8-9am and 5-6pm);
- Number of daily vehicle movements; and
- Number of weekly vehicle movements.

Trip generation rates given here have been developed based on the method used by the Institute of Transport Engineers, giving the number of trips per registered vehicle on the site and per 100m^2 site area. Measured vehicle movements from each surveyed site were compared with respective site sizes and site logbooks to produce the rates.

Hourly trip rates were calculated as the average of vehicle movements recorded during peak hours (commuter AM and PM, and site) each day of the survey, divided by site size and number of vehicles registered at the sites. Figures from all sites were averaged without weightings for site size to capture variation in trip rates for the range of sites. As the peak hour varies from day to day, so too does the proportion of inbound and outbound movements during the peak hour. Therefore a 50% split between inbound and outbound vehicles should be assumed during the site peak hour.

Rates for the peak and off-peak periods have been provided to give upper and lower limits on the average vehicle movements expected. Trip rates derived from site size are lower in the off-peak as a result of lower demand at the campsites outside of summer holidays. Trip rates per registered vehicle were observed to increase in the off-peak, indicating a higher turnover of vehicles. This may be explained by vehicles staying longer at individual sites during warmer summer months. It should be noted that while the trip rate may be higher during the off-peak, the overall number of vehicles on site, and therefore number of vehicle movements, is lower.

The effect of campsite traffic on the road network depends on the characteristics of local traffic. Peak hours for campsite vehicle movements generally fall outside typical commuter peak periods and as a result, cause minor traffic effects during ‘rush hour’. In these circumstances, which generally occur when the site is in an urban area, AM and PM peak hours should be used to assess the traffic effects of the site. These rates are for vehicle movements from the site during typical commuter peak hours.

In areas where there are no clear commuter peaks, such as rural areas and holiday towns, the largest traffic volumes are typically observed through the middle of the day. The road network is therefore likely to experience the biggest effects during the site’s peak hour, for which site peak hours should be used. These tend to be different on weekdays and weekends.

Trip rates shown here are based on the assumption that the site being assessed has a similar occupancy rate to the sites surveyed. Figure 4-1 shows that the relationship between the average number of vehicles registered on site during the survey and site size was relatively constant across the locations. Using the 'site size' method for calculating trip generation will underestimate vehicle movements at sites with higher intensity than the survey sites but the 'registered vehicles' method will produce similar results.

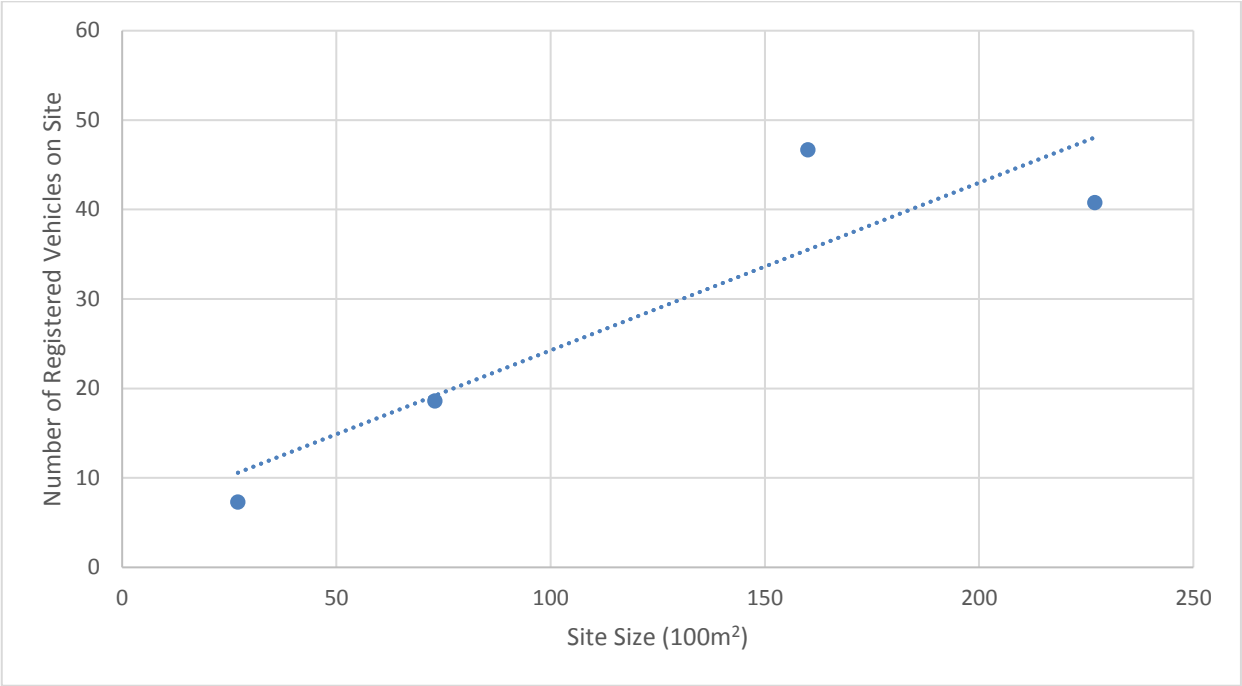


Figure 4-1 Registered Vehicles on Site vs Site Size

Table 4-1 provides a summary of the size of vehicles recorded across all surveyed sites in the peak and off-peak surveys. These values can be used to provide estimates for heavy vehicle proportions at other NZMCA sites.

Table 4-1 Summary of Heavy and Light Vehicles at NZMCA Sites

	Peak Season	Off Peak Season
Heavy Vehicles	27%	19%
Light Vehicles	73%	81%

4.1 Peak Season Trip Rates

Table 4-2 provides peak season trip rates for a range of scenarios based on the number of vehicles on site during the scenario in question.

Table 4-2 Peak Season Trip Rates per Registered Vehicle on Site

Scenario	Trips per Registered Vehicle on Site (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.10** (0.06)	30/70
PM Commuter Peak	**0.13** (0.07)	66/34
Site Peak Hour (Weekday)	**0.35** (0.10)	50/50
Site Peak Hour (Weekend)	**0.33** (0.11)	50/50
Daily (Weekday)	**2.03** (0.62)	50/50
Daily (Weekend)	**1.94** (0.55)	50/50
Weekly	**14.03***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

Table 4-3 provides peak season trip rates for a range of scenarios based on the size of the site in question.

Table 4-3 Peak Season Trip Rates per Site Size

Scenario	Trips per 100m^2 (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.02** (0.02)	30/70
PM Commuter Peak	**0.03** (0.03)	66/34
Site Peak Hour (Weekday)	**0.08** (0.02)	50/50
Site Peak Hour (Weekend)	**0.08** (0.03)	50/50
Daily (Weekday)	**0.44** (0.14)	50/50
Daily (Weekend)	**0.44** (0.12)	50/50
Weekly	**3.08***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

4.2 Off Peak Trip Rates

Off peak trip rates are provided to quantify the drop in demand at NZMCA sites outside of peak holiday season. These figures reflect trip generation for around 80% of the year.

The sample size of vehicles at the Alpine Park site (26) was substantially smaller than the other sites. Some days produced no vehicle movements and some had no registered vehicles, which resulted in peak-hourly trip rates of zero for some days. The site is likely to have been quieter than others due to its relatively remote location but is included to account for variability between NZMCA sites.

Table 4-4 provides off-peak trip rates for a range of scenarios based on the number of vehicles on site during the scenario in question.

Table 4-4 Off Season Trip Rates per Registered Vehicle on Site

Scenario	Trips per Registered Vehicle on Site (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.08** (0.14)	22/78
PM Commuter Peak	**0.11** (0.07)	60/40
Site Peak Hour (Weekday)	**0.50** (0.37)	50/50
Site Peak Hour (Weekend)	**0.51** (0.43)	50/50
Daily (Weekday)	**2.02** (1.42)	50/50
Daily (Weekend)	**1.94** (0.55)	50/50
Weekly	**13.98***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

Table 4-5 provides off-peak trip rates for a range of scenarios based on the size of the site in question.

Table 4-5 Off Season Trip Rates per Site Size

Scenario	Trips per Registered Vehicle on Site (standard deviation)	Inbound/Outbound %
AM Commuter Peak	**0.01** (0.01)	22/78
PM Commuter Peak	**0.01** (0.01)	60/40
Site Peak Hour (Weekday)	**0.01** (0.01)	50/50
Site Peak Hour (Weekend)	**0.02** (0.01)	50/50
Daily (Weekday)	**0.16** (0.06)	50/50
Daily (Weekend)	**0.16** (0.09)	50/50
Weekly	**1.12***	50/50

* Calculated as sum of 5 x weekday and 2 x weekend daily trip rates

4.3 Trip Rate Correlation

Figure 4-2 visually represents the relationship and variability between the number of registered vehicles and the peak hour flow for all days of the survey at the four surveyed NZMCA sites (peak and off peak data combined).

A statistical correlation exists between the number of registered vehicles and the average peak hour traffic produced. Typically an r^2 value (shown on the chart) of 0.7 is sufficient to confidently indicate a statistical relationship exists. This correlation shows that trip rates based on registered vehicles can be used to estimate the number of vehicle movements in the peak hour regardless of time of year and site size.

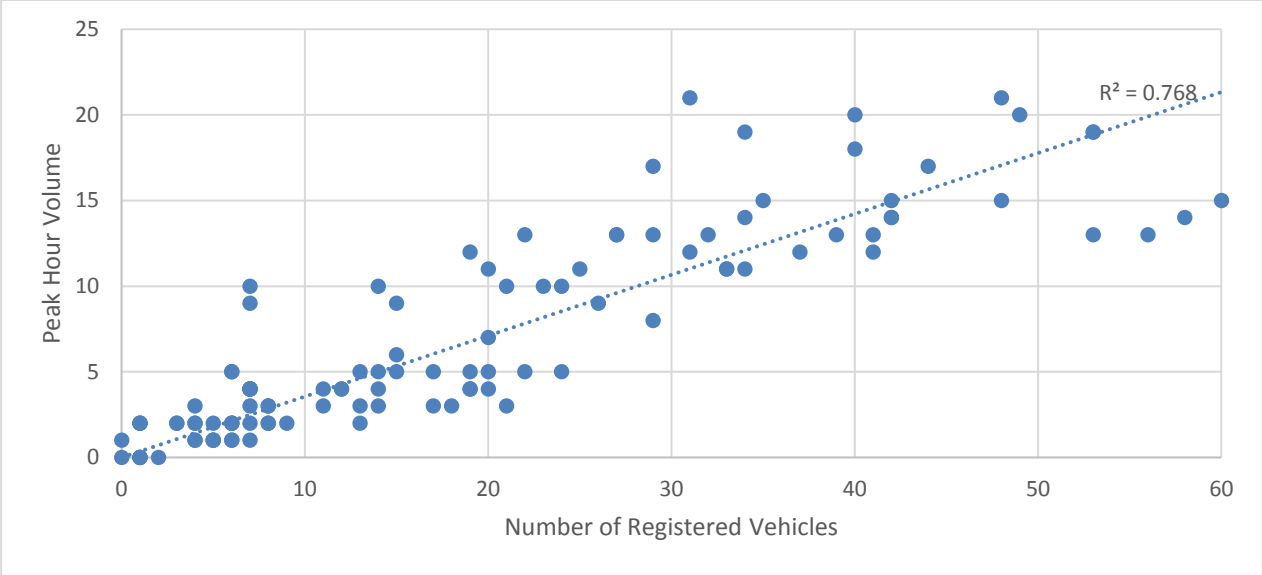


Figure 4-2 Hourly Trips Generated by Registered Vehicles (Site Peak Hour)

Figure 4-3 shows the relationship between site size and the average peak hour flow over the duration of the survey at the four surveyed sites. The chart clearly shows the lower demand present during the off-season at all sites.

A statistical correlation exists between site size and the average peak hour traffic produced. Typically an r^2 value (shown on the chart) of 0.7 is sufficient to confidently indicate a statistical relationship exists. This correlation shows that trip rates based on site size can be used to estimate vehicle movements, though different rates should be used for peak and off peak seasons.

Trip rates for the Alpine Park site were below the trendline for both peak and off-peak surveys, though not by a significant amount. This is likely to be a result of the site's relatively remote location.

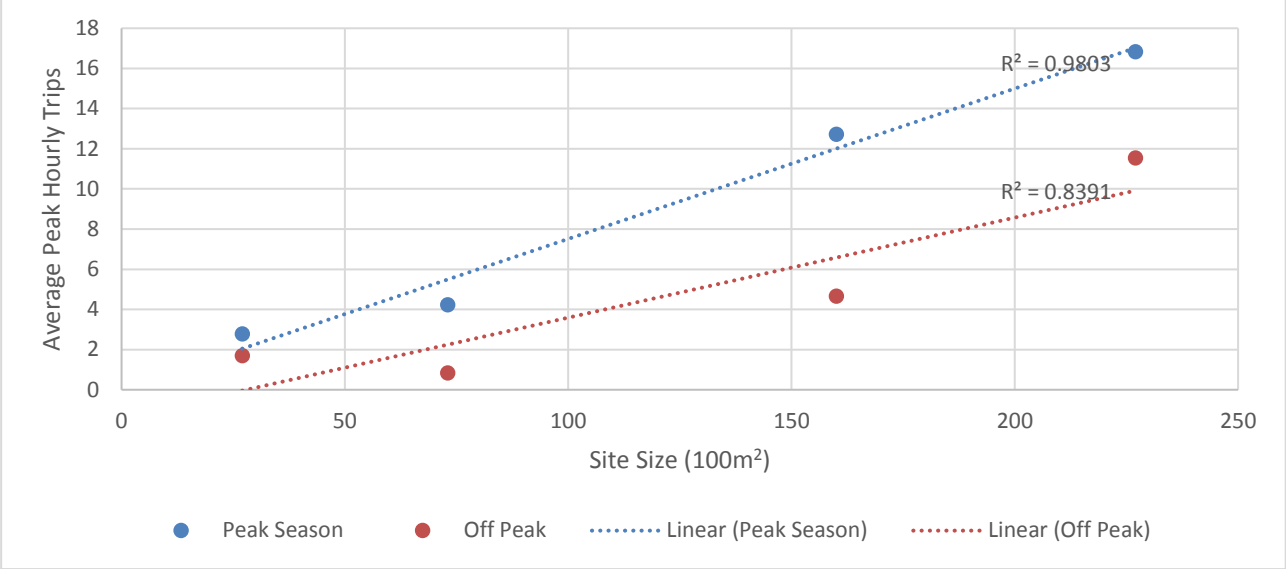


Figure 4-3 Hourly Trips Generated by Site Size (Site Peak Hour)

Figure 4-5 shows the correlation between registered vehicles and daily trips produced at the four surveyed NZMCA sites (peak and off-peak data combined).

A statistical correlation between the number of registered vehicles and the number of daily trips produced exists. Typically an r^2 value of 0.7 is sufficient to confidently indicate a statistical relationship exists. This correlation shows that trip rates based on the number of registered vehicles can be used to estimate daily vehicle movements regardless of time of year and site size.

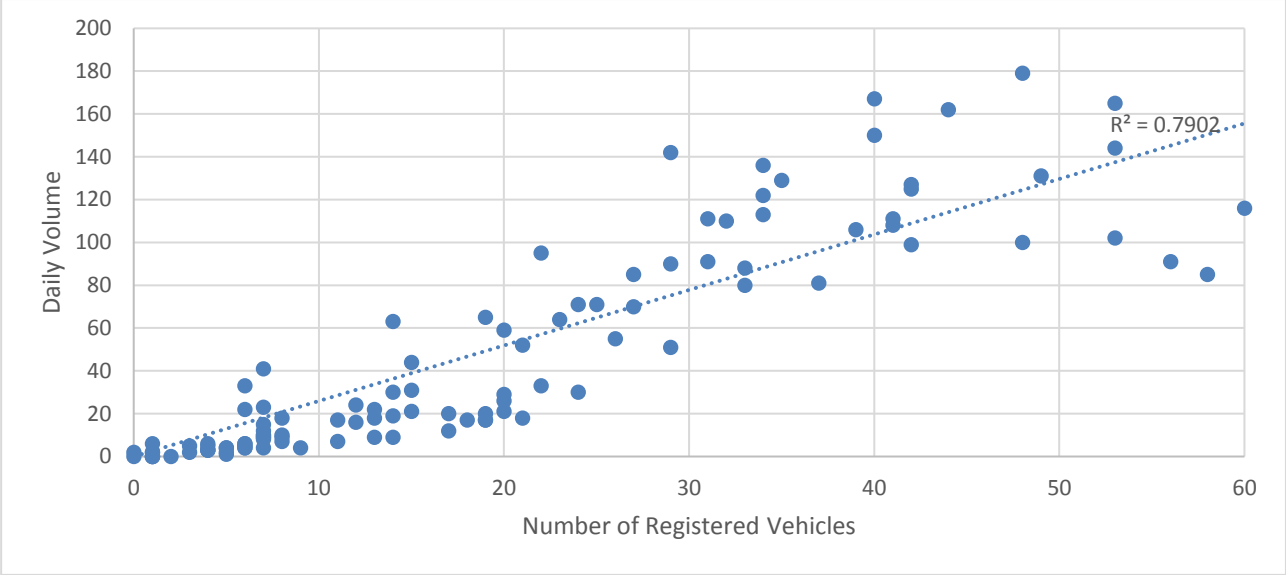


Figure 4-4 Daily Trips Generated by Registered Vehicles

Figure 4-5 shows the relationship between site size and the average daily flow over the duration of the survey at the four surveyed sites. The chart clearly shows the lower demand present during the off-season at all sites.

A statistical correlation exists between site size and the average daily traffic produced. Typically an r^2 value (shown on the chart) of 0.7 is sufficient to confidently indicate a statistical relationship exists. This correlation shows that trip rates based on site size can be used to estimate vehicle movements, though different rates should be used for peak and off peak seasons.

Trip rates for the Alpine Park site were significantly below the trendline for both peak and off-peak surveys, which is expected to be a result of the site's relatively remote location. The site was selected for the study to reflect the range of site locations and the effect on average trip rates.

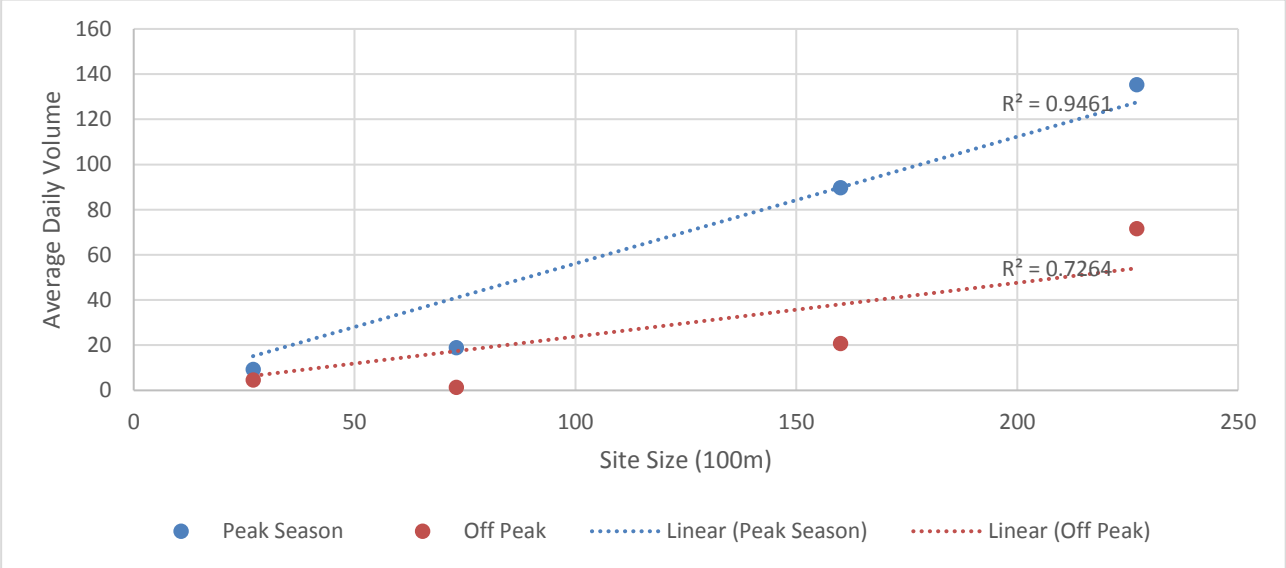


Figure 4-5 Daily Trips Generated by Site Size

Appendix A – Site Descriptions

Taupo Airport

Address	Site ID
Anzac Memorial Drive, Taupo	3365

Site Description

The site is roughly 7,000 m² in size with an advertised capacity of 130 vehicles. The site consists of a metalled central strip with lots for vehicles on either side. Roughly 8km from Taupo CBD, access is provided via a 100m paved road from Anzac Memorial Drive, which is in good condition with no sign of deterioration.
The site is likely to have comparatively large vehicle demands due to its location, size and accessibility.
Existing Restrictions: Max 21 days in 60 day period.

Facilities

- ☐ Dump Station
- ☐ Septic Tank
- ☐ Residents Only
- ☐ Internet
- ☐ Bar
- ☐ Laundry
- ☐ Restaurant
- ☑ Certified Self Contained Vehicles Only
- ☐ Off-Season Discount Deal
- ☑ Dog Friendly
- ☐ Member Discount
- ☑ Large Vehicle Access
- ☐ Wheel Chair Access
- ☑ Water
- ☐ Toilets
- ☐ Showers
- ☐ Power

Location

Manganese Point

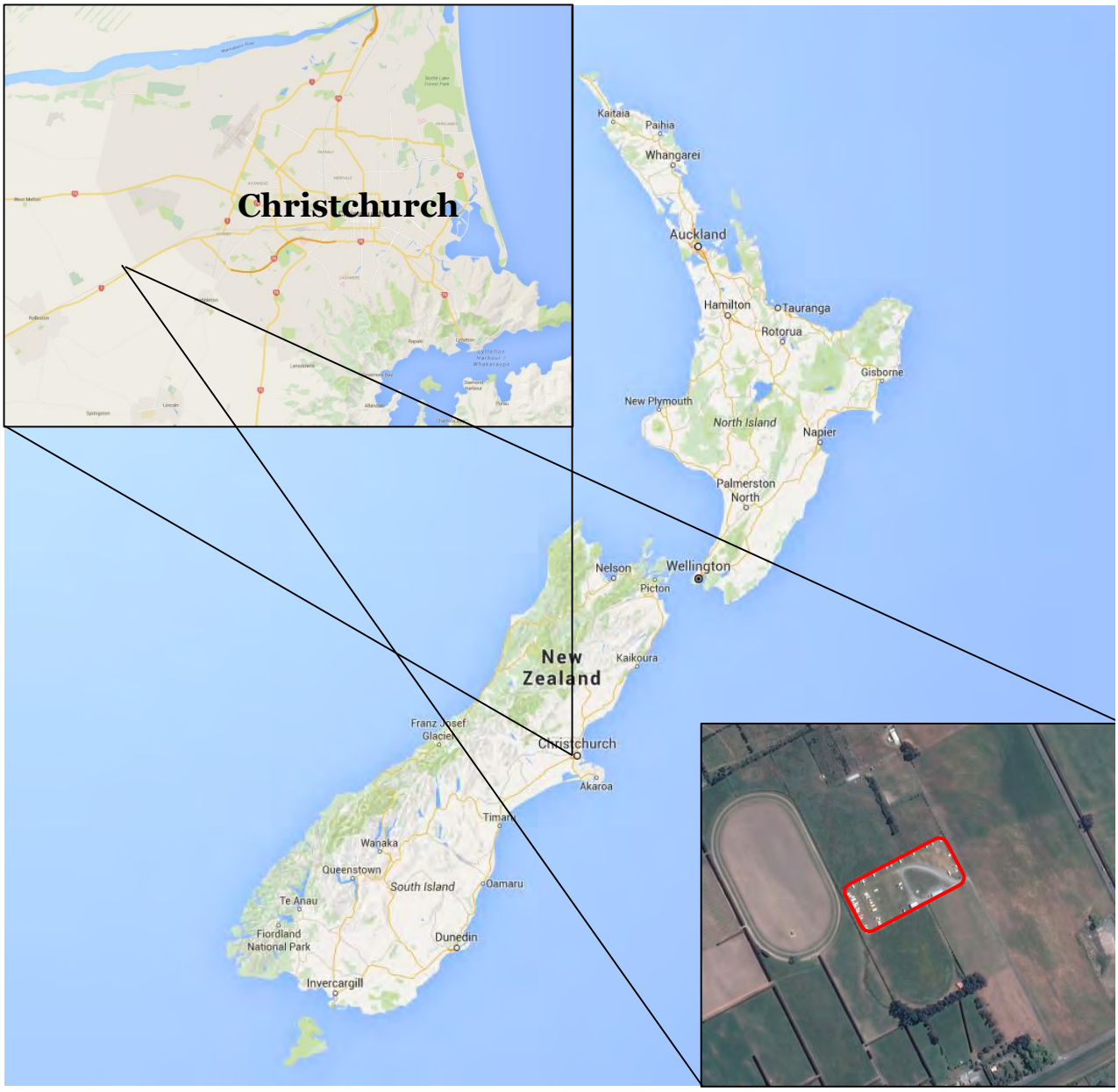
Address	Site ID
232 Manganese Point Road, Whangarei	639
Site Description	**Facilities**
The site available for camping is roughly 3,500 m² in size. The site consists of a steep gravel road and gravelled area, with some grassed camping spots. Access to the site is at the end of Manganese Point Road, a narrow road (roughly 5m wide) with steep sections and sharp bends. The site is likely to experience low volumes in comparison to other NZMCA sites due to its size, stay restriction and difficulty for larger vehicles to access. **Existing Restrictions**: Max 3 consecutive days in 30 day period.	☐ Dump Station ☐ Septic Tank ☐ Residents Only ☐ Internet ☐ Bar ☐ Laundry ☐ Restaurant ☑ Certified Self Contained Vehicles Only ☐ Off-Season Discount Deal ☑ Dog Friendly ☐ Member Discount ☑ Large Vehicle Access ☐ Wheel Chair Access ☐ Water ☐ Toilets ☐ Showers ☐ Power

Location

Weedons Park

Address	Site ID
286 Jones Road, Rolleston	7561
Site Description	**Facilities**
The site is roughly 25,000 m² in size (20% storage). The site consists of a metalled central loop with grassed lots for vehicles on the outside. Access is provided via a 400m paved road from Jones Road. Some evidence of potholes and edge deterioration were observed, though the road is easily drivable. Sewerage, toilet and laundry facilities were scheduled for upgrades over the course of 2016. The site is likely to have comparatively large vehicle demands due to its location, size and accessibility. **Existing Restrictions**: Max 21 days in 60 day period.	☐ Dump Station ☐ Septic Tank ☐ Residents Only ☐ Internet ☐ Bar ☑ Laundry ☐ Restaurant ☑ Certified Self Contained Vehicles Only ☐ Off-Season Discount Deal ☑ Dog Friendly ☐ Member Discount ☑ Large Vehicle Access ☐ Wheel Chair Access ☑ Water ☐ Toilets ☐ Showers ☐ Power

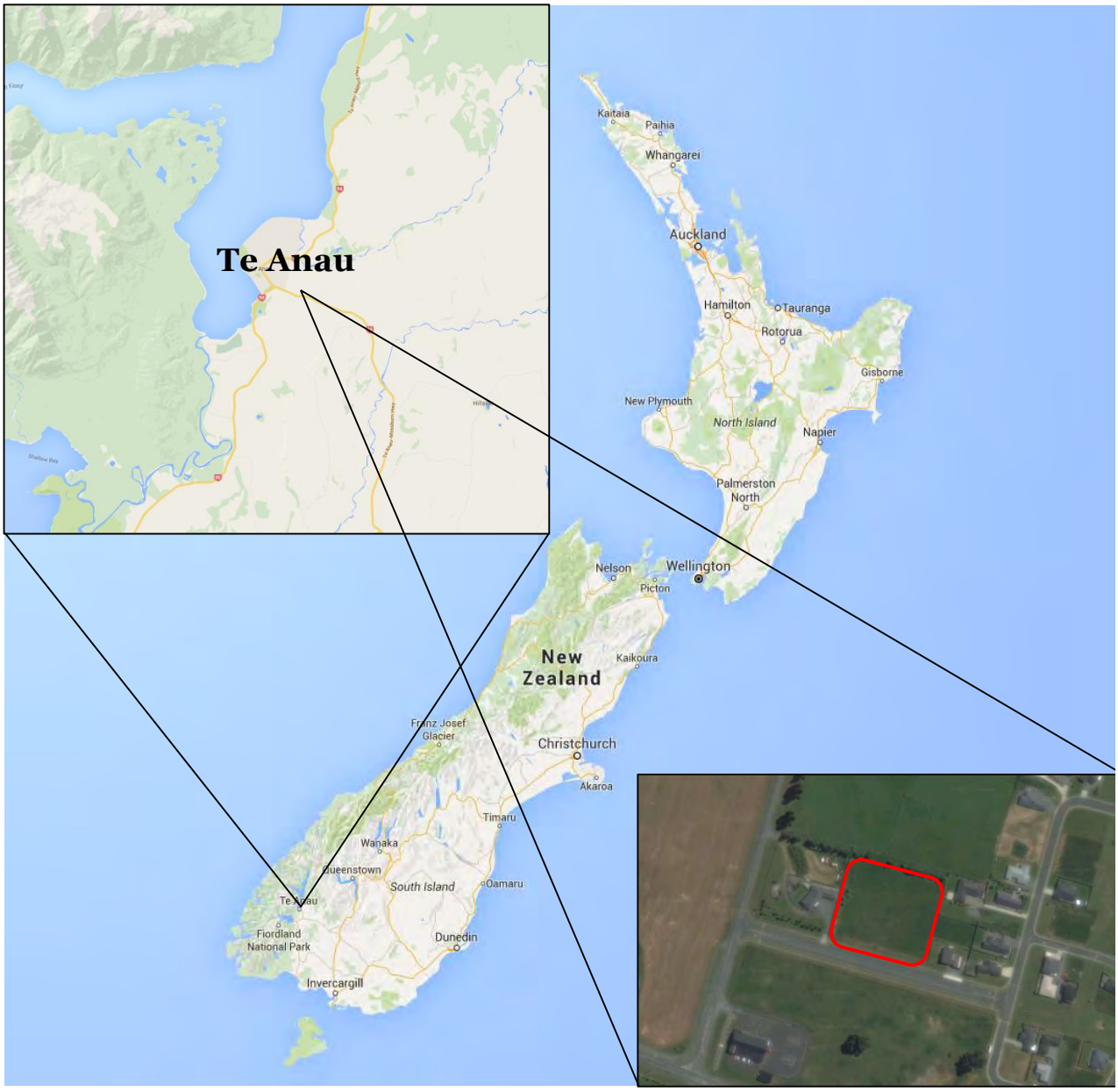
Location



Alpine Park

Address	Site ID
15 Alpine Drive, Te Anau	9101
Site Description	**Facilities**
The site available for camping is roughly 7,300 m² in size. This site consists of a metalled area surrounded by grass lots for parking. Access is provided directly off Alpine Drive, roughly 1.5km south east of Te Anau. The site is likely to have moderate vehicle demand due to its accessibility and facilities. Its relative rurality means the site will have lower demands than sites closer to cities. **Existing Restrictions:** 21 days in 60 day period.	☐ Dump Station ☐ Septic Tank ☐ Residents Only ☐ Internet ☐ Bar ☐ Laundry ☐ Restaurant ☑ Certified Self Contained Vehicles Only ☐ Off-Season Discount Deal ☑ Dog Friendly ☐ Member Discount ☑ Large Vehicle Access ☐ Wheel Chair Access ☑ Water ☐ Toilets ☐ Showers ☐ Power

Location



Appendix H Noise Emissions Memo

Memorandum

To	James Imlach
From	Richard Jackett
Office	Petone
Date	30/10/2019
File	3-C1629.00 00007 02
Subject	NZMCA Weedons Park Noise Emissions

Introduction

The New Zealand Motor Caravan Association Inc. (NZMCA) operates a member-only vehicle-based campground at 286 Jones Road, Rolleston (Figure 1) named Weedons Park. The site is consented to accommodate up to 130 motorhomes at any one time.

I was engaged by NZMCA to undertake 24-hour noise monitoring of the ambient noise level at Weedons Park in September 2019 to inform expert noise evidence in support of the NZMCA's submission on the nearby Roydon Quarry application. Whilst on site I also conducted additional noise measurements of campground activities with the intention of informing future noise assessments of NZMCA parks. This memo summarises my observations of campground activities and provides measurements of their noise emissions.

Methodology

All noise measurements were made between 10:30am on 10 September and 10:30am on 11 September 2019. The 24-hour sound level meter (SLM) was positioned in the northern-most corner of the NZMCA site (Figure 1). Other measurements were undertaken at various locations within the site.

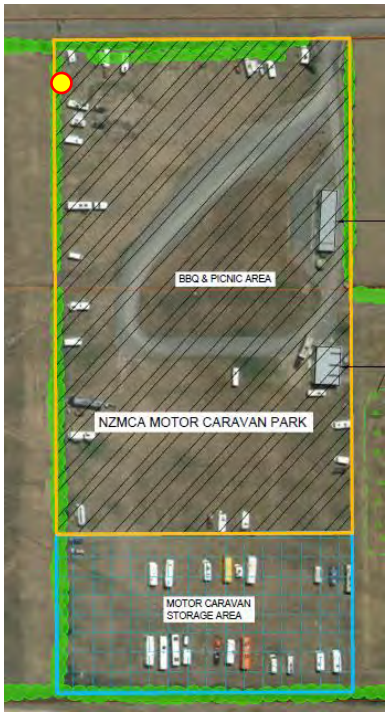


Figure 1: Location of the Weedons NZMCA Park (left) and the site plan (right) showing the 24-hour noise monitoring location as a yellow dot.

The instrumentation used was:

- Rion NL-32 Sound Level Meter, S/N: 00851394 (calibrated 11/7/19) [24-hour]
- Bruel & Kjaer 2250 Sound Level Meter, S/N: 3027649 (calibrated 10/1/19)
- Norsonic Nor1256 Sound Calibrator, S/N: 125626168 (calibrated 11/7/19)
- Davis Instruments TurboMeter wind speed indicator

The weather remained cold and fine throughout, and windspeeds were between 1 m/s to 4 m/s during my noise measurements of campground activities.

Observations

The noise environment at NZMCA Weedons Park was dominated by noise generated off-site, and could be summarized as "working-rural, with distant highway traffic, occasionally punctuated by passing trains and aircraft".

When on site, members spent most of their time inside their vehicles (the weather was fine, but cold). Quiet conversations took place between members walking around the park during the day time, but these were limited to 2 or 3 people at a time. Members mentioned that on nice days they might enjoy 'happy hour' on the benches outside the shed, but this did not happen when I was on site.

There were some dogs present but no barking was heard over the entire time I attended the site.

Vehicle traffic in and out of the site occasionally generated low levels of noise. This was a mix of cars and utes (going out for the day or for supplies) and towed or self-powered motorhomes arriving or leaving the park.

I observed a total of 28 motorhomes and caravans staying overnight on the site during the survey. Two generators were in operation between 5pm and 8pm on 10 September. Members appeared to prefer to operate their generators in the morning from about 9am onwards. A maximum of 3 generators were operating at any one time in the morning. Members noted that generator usage was sometimes necessary in winter, but they preferred to charge caravan batteries at powered sites, from solar panels (viable in summer), or from driving/idling their vehicles. Generator usage appeared to generally follow the NZMCA policy of 'a maximum of two 2-hour stints between 8am to 8pm'.

I observed no noise-generating activity on site after 8pm (I departed after 10pm), except for a few vehicles quietly arriving or leaving.

The 6 or 7 members I spoke with indicated that the peacefulness of the park was a key factor in their decision to visit the site. All members that were operating generators appeared to be knowledgeable about how loud their generator was compared with other generators on the market. The "Honda" was mentioned as being the quietest by two non-Honda owners.

Results

24-hour noise survey

The ambient noise level at NZMCA Weedons Park is not especially relevant to the noise emission of the park, because it is dominated by activities occurring off-site, particularly road traffic noise from SH1 and aircraft overflights to and from Christchurch airport. However, the results are included for completeness in Table 1 below. The L_{Aeq} noise level represents an 'energy average' of noise over the given time period, which is strongly influenced by the loudest noise events (e.g. aircraft), whereas the $L_{90(15min)}$ parameter represents the 'background' noise level (e.g. the hum of road traffic).

Table 1: Noise levels at NZMCA Weedons over different periods of a 24-hour survey

Time	Period	Duration, t (hours)	Noise Level (dB $L_{Aeq(t)}$)	Background (dB $L_{90(15min)}$)
6am – 7am	Early Morning	1	53.3	49.9
7am – 6pm	Day	11	51.2	46.6
6pm - 8pm	Early Evening	2	49.3	45.4
8pm – 10pm	Late Evening	2	49.6	41.5
10pm - 6am	Night	8	47.4	38.0

Generator noise

Noise measurements of three generators operating under load were obtained and are presented below for the standard separation distance of 7-metres:

Generator Make/Model	***Noise Level*** $dB\ L_{Aeq(1\ min)}$ *@ 7m*
Newman 1000W	61
Ryobi 1600W (full load)	63
Honda (on ute, model not available)	59

Each generator had a different tone. The Honda was noticeably deeper than the others, and was subjectively less obtrusive. It was mounted within the flatbed of a ute instead of on the grass like the other generators, so the actual emission level may be slightly lower (in the absence of reflections from the ute tray).

Vehicle drive-by noise

The typical vehicle drive-by sound level on gravel was 75 dB L_{Amax} at 7 metres from the nearside wheel path. Engine noise contributed at low frequencies, but the crunch of the gravel was the dominant source in determining the maximum drive-by level.

Conclusions

- There is some variation between noise emission levels of gas-powered generators. The noise emission of a single generator at full load may be conservatively estimated as 63 dB $L_{Aeq(15min)}$ at 7-metres.
- Members reported that they use powered sites and solar panels in preference to gas-powered generators, but that sometimes generator usage was necessary, particularly in winter. My observations from a 24-hour period in winter was that out of 28 over-nighting motorhomes and caravans:
  - Four members operated generators.
  - A maximum of three generators operated at one time (spread across the site).
  - No single generator operated for more than 2.5 hours at a time.
  - No generators operated outside of the allowed hours of 8am to 8pm.
- A conservative value for vehicle drive-by noise may be taken as 75 dB L_{Amax} at 7-metres from the nearside wheel path.
- While I was in attendance I observed some conversations occurring between members, but this was at a low level and would not have been audible from outside of the site. I did not hear any shouting or barking at any time over the 24-hour survey.

Appendix I Consultation

Client Ref: 20 Bay Road, Warrington

21 May 2020

Aukaha
Level 1, 258 Stuart Street
PO Box 446
DUNEDIN 9054
NEW ZEALAND

Attention: Tania Richardson

Tēnā koe Tania

Proposed campground activity at 20 Bay Road, Warrington by NZMCA

The New Zealand Motor Caravan Association (NZMCA) operate 45 member's only camp sites across New Zealand. These provide a safe and secure place for members to spend a few nights in their caravans and motorhomes as they travel around the country. Stantec has been engaged by the NZMCA to prepare a resource consent application for their members to use the site at 20 Bay Road, Warrington for camping with initial provision for up to 50 certified self-contained[1] motorhomes or caravans per night.

The Bay Road site has several features of cultural and natural significance which are identified by overlays in the Dunedin City Council's (DCC) operative and proposed district plan planning maps. Perhaps of most significance is the site's historic use and place as a moa hunting site and its recognition as a Warrington Moa Hunting site (NZAA Site No. I44/177) by the Heritage New Zealand Pouhere Taonga (HNZPT).

When we spoke earlier this year regarding the proposal, you discussed the concept with Rūnanga who raised several initial concerns in relation to the proposed activity. We understand these included the following:

- Concerns regarding the capacity and quality of the reticulated wastewater system in this area. It was noted that there were some concerns with disposal to land nearby and associated effects on the ocean;
- Interest in understating how self-sufficient the vehicles/caravans are, what the plans for wastewater disposal are, policies regarding rubbish being taken away from site given concerns that land will be left in untidy manner with rubbish and other waste being left as a result of the camping activity/use;
- The site is culturally significant and therefore concerns regarding proposed use and potential for disturbance of artefacts due to frequent traversing of vehicles. The site also holds significance in relation to an old pa and also a traditional pathway; and
- General opposition to having another campground established so close to the existing freedom camping area at Warrington.

On behalf of the NZMCA we are happy to provide further information about the proposal and to engage with rūnanga as the NZMCA investigates how the activity could proceed while protecting the cultural heritage value it holds. We note that a resource consent application has not yet been lodged with the DCC and we are continuing to work through the details of design.

[1] Certified to NZ Standard 5465:2001 – Self Containment for Motor Caravans and Caravans

Background

By way of background, the NZMCA does not currently own the site. The landowner (Mr. Richard Hatherley) has recently obtained resource consent from the DCC to subdivide the property creating three freehold lots (SUB-2018-148) subject to conditions. The resulting Lot 1 incorporates the existing Kings High School facility which will be gifted to Kings High School by Mr Hatherley. Lot 3 is a reserve to be vested with the DCC and the balance lot (Lot 2) is currently vacant. It is Lot 2 which NZMCA are investigating for use. Land Use consent was also obtained by Mr Hatherley (LUC-2018-555) authorising the use of the existing Kings High School facility subject to conditions.

A condition of both the subdivision and land use consents state that:

No earthworks or development other than the removal of vegetation using hand tools shall occur on the site until:

(a) an archaeological assessment has been prepared by an appropriately qualified and experienced person; and
(b) that any necessary approvals from Heritage New Zealand Pouhere Taonga have been obtained.

In the event that an unidentified archaeological site is located during any works on the site, the Heritage New Zealand Pouhere Taonga Archaeological Discovery Protocol in Attachment 1 applies.

Therefore, as part of the NZMCAs due diligence they have engaged New Zealand Heritage Properties (NZHP) to undertake an archaeological assessment and to obtain any necessary approvals from NZHPT. NZMCA received an exploratory authority (NZHPT ref: 2020/540) to excavate six geotechnical test pits at the site to inform the planning of future development of the property. The test pits were undertaken on the 13th of May 2020 and results will be reported to NZMCA in due course.

Reasons for resource consent

Consent is required under the operative Dunedin City District Plan 2006 as a non-complying activity as the use of the site by vehicles as accommodation is not specifically provided for as a permitted activity, and does not fit comfortably within any of the definitions or other rules of the operative district plan.

Consent is required under the proposed Second Generation District Plan (2GP) as a discretionary activity. Under the proposed plan the activity fits within the definition of a 'Campground' as a 'Visitor Accommodation' activity. The discretionary status is due to the campground activity being undertaken on Rural Coastal zoned land (which a portion of the site is zoned). The remainder of the site is zoned Township and Settlement and the campground and minor infringements to parking standards (namely not hard-sealing surfaces) are restricted discretionary activities.

Project Overview

It is proposed to establish the site at 20 Bay Road for camping by NZMCA members only, with initial provision for up to 50 self-contained motorhomes or caravans on the site. The site will be accessed via the existing access strip off Bay Road.

The key components of the proposal are:

- The existing access strip off Bay Road will be formed to standards for common accessways which will involve minor excavations;
- Provision of a potable water supply;
- Provision of refuse and recycling facilities, e.g. bins emptied on a regular basis by a commercial contractor;
- Construction of a small shed on the site for members' use when registering their stay;
- Provision of a dump station facility; and
- Minor earthworks (at this stage primarily involving placement of fill) in order to provide an even surface for vehicles.

The proposal does not include the following:

- Ablution facilities;
- Hard stand areas that would require stormwater management (except the driveway); or
- Earthworks in the northwest corner of the site.

The proposed site layout and landscaping treatment is shown on the plan included as **Attachment 1** of this letter.

Campground activity

The proposed activity is defined under the 2GP as a 'campground' however, it is important to acknowledge that NZMCA sites do not provide the level of facilities that are typically found at commercial campgrounds accessible to the general public. The area will effectively be a safe and secure place for members to park their own self-contained vehicles and as such the proposal does not seek to provide additional camping facilities on the site. Physical site works will be limited and only as necessary to enable safe access and use of the site as described in further detail below.

In its present state, the northwest corner of the site is not practical to use for parking due to the topography of land which is undulating and falls towards the coast. Bulk earthworks would be required to modify this area to make suitable and would require further consents however are not proposed in this proposal. It is therefore proposed to accommodate members' caravans and motorhomes over the predominantly flat area of the site as indicated on the site plan. The site is expected to operate at full capacity during long-weekends and the peak summer and holiday period, with occupancy of less than half full during the quieter periods of the year.

Members would access the site via the existing access off Bay Road. This accessway is shared by Kings High School and is required by condition 8 of the land use consent to be maintained to a minimum width of 3.5 m and have a minimum depth of compacted aggregate of 250 mm. Parking will be provided over the existing grassed area (refer discussion below regarding physical works).

A registration kiosk will be provided in the form of a small shed, as identified on the site layout plan, for members to use when registering their contact details. The shed will be no bigger than 10 m².

Site Use and Management

The site will be for the exclusive use of NZMCA members in certified self-contained (CSC) motorhomes and caravans. CSC vehicles are designed to meet the ablutionary and sanitary needs of the occupants for a minimum of three days, without requiring any external services or discharging any waste. This is in compliance with NZS5465:2001 'New Zealand Standard for Self-Containment of Motor Caravans and Caravans'.

Site management will be through local members who are appointed as park custodians and the NZMCA National Office. This site management regime works well for NZMCA parks and is similar to the approach adopted by the Department of Conservation, who manage over 200 public campsites nationwide.

During busier times of the year, i.e. in the summer months, NZMCA may appoint a temporary site caretaker who would be stationed on site to provide additional site management. The site's design and operation will prevent the general public from using the site and the local site custodians and other members will enforce this.

As with other NZMCA parks, all members are required to register their membership and vehicle details in a self-registration book contained in the registration kiosk. Members must abide by the NZMCA Environmental Care Code and Membership Code of Conduct, or risk suspension from membership privileges. These site rules are required to be followed and are set out on site within the registration kiosk.

Physical works

The NZMCA would like to maintain the site as near to its current state as possible. Therefore, it is proposed to utilise the majority of the site which is currently at a flat grade but with some minor ground reprofiling, site preparation and landscaping described further below.

With regard to ground disturbance and paving, the intention is to not pave or seal wherever possible. The accessway which is shared with Lot 1 (Kings High School) is required by the recent subdivision and land use consent to be maintained to a minimum width of 3.5 m and have a minimum depth of compacted aggregate of 250mm. It is proposed to form the driveway which will involve the removal of topsoil to form the base surface. Our geotechnical investigation will provide clarity as to the depth of top soil required.

Within the site proper, maintaining a more natural treatment of the ground is preferred for several reasons. Developing parking and access areas using hard surfaces and marking these out would not be in keeping with the sites existing natural character within the coastal setting and is one of the primary reasons why this site is appealing to the NZMCA. This would likely result in adverse effects on the natural and coastal character of the area as well as adverse effects on nearby properties with visibility of the activity.

Most critically the NZMCA does not want to disturb the ground wherever possible due to risk of disturbing or uncovering heritage artefacts. However, maintaining the grassed areas as they are also present some risk of uncovering artefacts as a result of vehicles traversing the ground.

By way of minimising the potential to uncover or disturb heritage artefacts the NZMCA is considering providing a capping solution/barrier over the surface areas where vehicles will traverse most frequently. The barrier will be either or a combination of geotextile matting, sand or gravel. The final treatment will be further investigated and confirmed after consent has been granted and the NZMCA may propose a consent condition in this regard.

The type of treatment and effectiveness is dependent on the thickness of the top soil layer, type and duration of trafficking and the nature of the underlying ground hence a variety of solutions/treatment across the site may be required or appropriate. I attach an image of one of NZMCA's sites in Kerikeri where the land is prone to prolonged periods of high rainfall. To improve all-weather heavy vehicle access, NZMCA are laying and rolling scoria across the surface in sections. Over time, vehicle movements compress the material into the top soil for the grass to take hold. This may be a viable solution for some areas of the site and could be visually sympathetic in this environment.

The majority of the area intended for camping is fairly flat although with lumps and a few mounds. Some minor fill or scraping would be preferred to level the surface so there may be areas where particular care must be taken (if these are able to be identified). Additionally, there may be measures that can be employed when undertaking any minor ground disturbance that can minimise the potential for uncovering any artefacts such as methods of ground disturbance and protocols to follow upon disturbance of an items.

The NZMCA appreciates the cultural significance of the site and is open to working with the rūnanga to protect the values of the site, while operating a members' only camping ground. The NZMCA is also open to educating its members about the cultural significance of the area, for example by way of on-site signage and information through its communication channels.

Next Steps

We would appreciate if you could please pass this information on to the rūnanga after which we would be happy to discuss what is the most appropriate process to follow, whether this be a formal process or perhaps a more informal hui being organised (depending on what level of COVID-19 Alert Level we will be in at that time).

Nāku noa, nā

Kelly Bombay
Senior Planner
Stantec New Zealand

NZMCA - 20 BAY ROAD WARRINGTON

LANDSCAPE PLAN

SHEET 1 OF 1

1:1000 @ A3

0M 10M 20M 30M 40M 50M

DRAWN	KT	CHECKED	KB	REVIEWED		APPROVED	

DRAFT FOR COMMENT | 24 FEBRUARY 2019

Stantec

From: Tania Richardson
To: Bombay, Kelly
Subject: RE: NZMCA proposed campground activity at 20 Bay Road
Date: Wednesday, 10 June 2020 2:31:48 PM
Attachments: image004.png
image005.png

Kia ora Kelly
Trust all is well with you for a Wednesday

Aroha mai for the delay in replying to you – just had to gain Rūnanga feedback.

I've actually just heard from Kāti Huirapa Runaka ki Puketeraki, and at this stage do not support the proposed campground at 20 Bay Road, and would like a site visit to discuss this further. Are there any dates that you would not be available?

From there I will see if I can match up a date where everyone is available!

Thanks for your help

Ngā manaakitanga

Tania Richardson
Consents Officer – Mana Taiao Team

Kia pai tō rā
(have a good day)

Telephone: (03) 477 0071
Mobile: 021 333 595
Email: tania@aukaha.co.nz
Website: www.aukaha.co.nz

Aukaha Level 1, 258 Stuart Street, P O Box 446, Dunedin 9054

From: Bombay, Kelly
Sent: Tuesday, 9 June 2020 2:21 p.m.
To: Tania Richardson <tania@aukaha.co.nz>
Subject: FW: NZMCA proposed campground activity at 20 Bay Road

Kia ora Tania,

I hope you are well? If you're like me you'll possibly be returning to the office soon. I'm looking forward to it in some ways and not in others (at home is just so convenient!). Anyways, just thought I'd check in and see if you received this letter ok and whether you have had any further discussions with Rūnanga? Perhaps once you're back at the office and with better reception we could talk more?

Thanks,
Ngā mihi

Kelly Bombay
BPlan
Senior Planner

Direct: +64-3-341-4719
Mobile: +64-27-200-7367

From: Bombay, Kelly
Sent: Thursday, 21 May 2020 3:39 p.m.
To: Tania Richardson <tania@aukaha.co.nz>
Cc: James Imlach <James@nzmca.org.nz>
Subject: NZMCA proposed campground activity at 20 Bay Road

Kia ora Tania,

I'm happy to provide you with some further detail regarding the proposed campground activity at 20 Bay Road, Warrington and clarification around some of the concerns raised by Rūnanga in your earlier discussions.

As we have discussed, if you would kindly pass this information on to the rūnanga after which we would be happy to discuss what is the most appropriate process to follow, whether this be a formal process or perhaps a more informal hui being organised (depending on what level of COVID-19 Alert Level we will be in at that time).

Noho ora mai rā

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Stantec New Zealand
Level 3, 6 Hazeldean Road, Addington
PO Box 13052, Armagh
Christchurch 8024

From:	Tania Richardson
To:	Bombay, Kelly
Subject:	RE: NZMCA: Exploratory investigations at 20 Bay Road, Warrington
Date:	Friday, 20 March 2020 4:59:29 PM
Attachments:	image003.png image004.png

Kia ora

Thanks Kelly – appears you have outlined all that we discussed in regards to Runaka concerns, and the process for ongoing updates and discussions. I am unsure if I forgot any other Runaka concerns!

So, I shall await the summary then forward out to Runaka for their consideration.

Thanks
☺

Kā mihi

Tania Richardson
Consents Officer – Mana Taiao Team

Kia pai tō rā
(have a good day)

Telephone: (03) 477 0071
Mobile: 021 333 595
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Aukaha Level 1, 258 Stuart Street, P O Box 446, Dunedin 9054

From: Bombay, Kelly [mailto:Kelly.Bombay@stantec.com]
Sent: Friday, 20 March 2020 4:34 p.m.
To: Tania Richardson
Cc: James Imlach
Subject: NZMCA: Exploratory investigations at 20 Bay Road, Warrington

Kia ora Tania,

Nice to talk to you again this morning. As discussed, in light of Covid-19 our previous intention for a hui in relation to the proposal we agree will not be appropriate at this time. Therefore we discussed an alternative solution to engage with Rūnanga for now. Instead of a short summary which we proposed to provide as a guide for discussion, we will prepare a more comprehensive description of the activity and discussion around the concerns raised thus far. I have summarised our understanding of these concerns below so if you can please let me know if I have misinterpreted or left anything out.

We have also received the exploratory authority dated 11 March 2020. An appeal period from receipt of decision by all parties applies. Therefore the authority may not be exercised during the appeal period of 15 working days, or until any appeal that has been lodged is resolved. If no appeals are lodged then we are ready to commence on the 6th April. Please find attached a copy of the authority as well as the indicated test pit locations. As we are still within the appeal period, I will let you know closer to the time, within 5 working days, of when our Geotech and archaeologist will be on site. It is also a requirement of the authority to inform Aukaha 48 hours before the start and finish of work.

We understanding the following are concerns or questions in relation to the proposed 'campground activity' at 20 Bay Road:

- Concern regarding the capacity and quality of the reticulated wastewater system in this area. It was noted that there were some concerns with disposal to land nearby and associated effects on the ocean;
- Would like to know more about how self-sufficient the vehicles/caravans are, what are the plans for wastewater disposal, policies regarding rubbish being taken away from site as concern that land will be left in untidy manner with rubbish and other waste being left as a result of the camping activity/use;
- Generally oppose having another campground established so close to the existing freedom camping area at Warrington;
- The site is culturally significant and therefore concern regarding proposed use and potential for disturbance of artefacts due to frequent traversing of vehicles. The site also holds significance in relation to an old pa and also traditional pathway.

If there is anything else for now please don't hesitate to get in touch.

Ngā mihi

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Appendix J Rules Assessment

20 Bay Road – Rules Assessment

- Rule under appeal

Table 1-1: Rules assessment – Dunedin Second Generation Plan (2GP)

Rule	Reason	Status	Performance Standards	Comment on compliance
Residential Zone				
Land Use Activity Rule 15.3.3.1 – Performance standards that apply to all land use activities	**Complies with all performance standards**	Permitted	15.5.1 Acoustic insulation (noise sensitive activities only)	While visitor accommodation is a noise sensitive activity, the activity is not located in any of the areas identified in the rule. ***Not applicable***
			15.5.3 Electrical interference	Activities must be designed and located to ensure that there are no effects from electrical interference on surrounding sites. ***Complies***
			15.5.5 Light spill	Any provision of outdoor lighting will be shielded or directed away from site boundaries. ***Complies***
			15.5.10 Noise	Zoning of receiving properties: 1. East – zoned recreation 2. North – Township and Settlement **1.** 50 dB LAeq (15 min) / 7.00am to 7.00pm; 45 dB LAeq (15 min) / 7.00pm to 10.00pm; 40 dB LAeq (15 min); and / 10.00pm to 7.00am

Rule	Reason	Status	Performance Standards	Comment on compliance
				<table><tr><td></td><td></td><td></td><td>70 dB LAFmax[1]</td></tr><tr><td>**2.**</td><td>55 dB LAeq (15 min)</td><td>50 dB LAeq (15 min)</td><td>40 dB LAeq (15 min); and 70 dB LAFmax[2]</td></tr></table> ***Complies***
			Setback from National Grid (National Grid sensitive activities only)	***Not applicable – none in proximity***
			Structure plan mapped area performance standards (where relevant)	***None are relevant to the site***
Land Use Activity Rule 15.3.3.22 – Visitor Accommodation	The use of residential zoned land for visitor accommodation (campground). **Complies with all performance standards**	**Restricted Discretionary**	15.5.2 Density	Site area = approx. 2.8419ha (28,419m²) Allows up to 355 visitor accommodation units. Proposing up to 150 caravans or self-contained vehicles. ***Complies***
			15.5.8 Minimum car parking	Based on definition of 'visitor accommodation unit' – this rule is not applicable.
			15.5.10 Mobility parking	There is ample space on site to manoeuvre and park this many

[1] Note - appeal only relates to Port Activity in the Industrial Port Zone as being considered earthworks - small scale; and earthworks for underground fuel storage systems
[2] Note - appeal relates to a Fonterra Limited request to increase the night time noise emission limits

Rule	Reason	Status	Performance Standards	Comment on compliance
				vehicles and therefore it is considered no infringement of the mobility parking requirement is created. ***Complies***
			Minimum vehicle loading	Based on definition of 'visitor accommodation unit' – this rule is not applicable. ***Not applicable***
Development Activity Rule 15.3.4.1 – Performance standards that apply to all development activities	The following activities proposed on the site are included within the sub-category 'site development activities': – *parking, loading and access* – *vegetation clearance.* **Complies with all performance standards**	Complies	15.6.4 Natural Hazards Performance Standards	***Not applicable***
			15.6.10 Maximum building site coverage and impermeable surfaces	Max building coverage (structures greater than 10m2) = 40% Max building , structures and impermeable surfaces = 70% ***Complies***
			15.6.13.2 Setback from scheduled tree	Provisions relate to activities in the dripline of scheduled trees. There are no scheduled trees in proximity to or within the site. ***Not applicable***
			Structure plan mapped area performance standards (where relevant)	***None are relevant to site***
Development Activity Rule 15.3.4.2 – Performance standards that apply to all building and structures activities	Small shed meets definition of 'structures', therefore this rule is applicable.	Complies	a. Boundary setbacks	
			b. Building length	
			c. Fire fighting	

Rule	Reason	Status	Performance Standards	Comment on compliance
	Complies with all performance standards		d. Height in relation to boundary	
			e. Maximum height	
			f. Number, location and design of ancillary signs	
			g. Setback from coast and water bodies	
			h. Setback from National Grid	
Residential Zone – Development activities on a scheduled heritage site, where visible from an adjoining public place or a public place within the heritage site.				
Development Activity Rule 15.3.4.20	The small shed (registration kiosk) meets definition of 'structures' and exceeds 2m² building footprint.	**Restricted Discretionary**	15.6.11 Number, location and design of ancillary signs 15.6.11.2 All signs in residential zones a. Signs must not be attached to roofs. b. Signs must not project higher than the lowest point of the roof, except as mounted flat against a parapet or gable end. c. Signs must have a maximum of 2 display faces per sign. d. Where attached to a building, signs must not protrude from a building façade by more than 1m.	***Complies with signage requirements.***

Rule	Reason	Status	Performance Standards	Comment on compliance
			Ancillary to commercial activities and community activities: a. Maximum 1 sign per site attached to a building. b. The height, above ground level, at the highest point of any sign, attached to a building is 4m. c. Signs must have a maximum area per display face of 1.5m²,	
Development Activity Rule 15.3.4.22	Parking, loading and access *Parking, Loading and Access means: New or additions and alterations to vehicle tracks, driveways, parking areas, manoeuvring areas, and loading areas. Note that vehicle tracks and driveways include vehicle crossings and vehicle accesses.*	**Restricted Discretionary**	Parking, loading and access standards (must comply with Rule 6.6)	The proposed parking does not comply with: – *Rule 6.6.1.4 Gradient of parking areas* – *Rule 6.6.1.5 Surfacing and marking of parking areas* – *Rule 6.6.1.6 Lighting of Parking Areas*
Rural Coastal				
Land Use Activity Rule 16.3.3.1 – Performance standards that apply to all land use activities	***Complies with all performance standards***	Permitted	a. Acoustic insulation (noise sensitive activities only)	While visitor accommodation is a noise sensitive activity, the activity is not located in any of the areas identified in the rule. ***Not applicable***
			b. Electrical interference	Activities must be designed and located to ensure that there are no effects from electrical interference on surrounding sites.

Rule	Reason	Status	Performance Standards	Comment on compliance
				Complies
			c. Light spill	Any provision of outdoor lighting will comply with these standards. ***Complies***
			d. Noise	***Complies***
			e. Setback from National Grid (National Grid sensitive activities only)	***Not applicable – none in proximity***
Land Use Activity Rule 16.3.3.38[3] – Visitor Accommodation	The use of rural zoned land for visitor accommodation (campground).	**Discretionary**	Nil	
Development Activity Rule 16.3.4.1 – Performance standards that apply to all development activities	The following activities proposed on the site are included within the sub-category 'site development activities': – *parking, loading and access* – *vegetation clearance.* **Complies with all performance standards**	Complies	a. Natural Hazards Performance Standards	Natural Hazard 3 overlay and no new buildings containing residential activity. ***Not applicable***
			b. Setback from scheduled tree	Provisions relate to activities in the dripline of scheduled trees. There are no scheduled trees in proximity to or within the site. ***Not applicable***
Development Activity Rule 16.3.4.2 – Performance standards	Small shed meets definition of 'structures', therefore this rule is applicable.	Complies	a. Boundary setbacks	
			b. Fire fighting	

[3] Note - appeal relates to BP new hazard facility mapped area only

Rule	Reason	Status	Performance Standards	Comment on compliance
that apply to all building and structures activities			c. Maximum height	
			d. Number, location and design of ancillary signs	
			e. Reflectivity (landscape and coastal character overlays)	
			f. Setback from coast and water bodies	
			g. Setback from National Grid	
Rural Zone – Development activities on a scheduled heritage site, where visible from an adjoining public place or a public place within the heritage site.				
Development Activity Rule 16.3.4.17	The small shed (registration kiosk) meets definition of 'structures' and exceeds 2m² building footprint.	**Restricted Discretionary**	Nil	
Development Activity Rule 16.3.4.19 – Performance standards that apply to Parking, loading and access	Parking, loading and access activities are proposed.	**Restricted Discretionary**	Parking, loading and access standards (must comply with Rule 6.6)	The proposed parking does not comply with: – *Rule 6.6.1.4 Gradient of parking areas* – *Rule 6.6.1.5 Surfacing and marking of parking areas* *Rule 6.6.1.6 Lighting of Parking Areas*
Transportation – Rule 6.6 Parking, Loading and Access Standards				
6.6.1 Car Parking Design – Rule 6.6.1.1 Minimum parking space dimensions	There is ample space on site to manoeuvre and park vehicles (including 5 mobility spaces required by rule 15.5.10 and	Complies	(b) Parking spaces provided for all other activities must have the following minimum dimensions, to allow for 99th	

Rule	Reason	Status	Performance Standards	Comment on compliance
	other parking areas proposed on the site) and therefore it is considered no infringement of the mobility parking requirement is created.		percentile design motor vehicles (See Appendix 6B, figures 6B.1, 6B.3 and 6B.6):	
6.6.1 Car Parking Design – Rule 6.6.1.2 Minimum manoeuvring space dimensions for parking areas		Complies		
6.6.1 Car Parking Design – Rule 6.6.1.3 Minimum queuing space for parking areas		Complies		
6.6.1 Car Parking Design – Rule 6.6.1.4 Gradient of parking areas	May not comply as 1 in 20 is very flat however the site (though not steep) does vary in grade likely to exceed 1 in 20 in areas	**Restricted Discretionary**	The gradient of parking areas provided for any activity other than standard residential must not exceed 1 in 20 in any one direction.	
6.6.1 Car Parking Design – Rule 6.6.1.5 Surfacing and marking of parking areas	Will not conform to these standards including: – *Will not be hard surfaced;* – *Parking spaces will not be permanently marked;* – *Mobility spaces will not be permanently marked;*	**Restricted Discretionary**	Parking areas (including associated access and manoeuvring areas) provided for any activity other than standard residential, must: be hard surfaced; have individual parking spaces permanently marked; and	
6.6.1 Car Parking Design – Rule 6.6.1.6	The parking area is required to be illuminated to a minimum maintained level of 2 lux, with high uniformity.	**Restricted Discretionary**	Parking areas must be illuminated to a minimum maintained level of 2 lux, with high uniformity, during the hours	

Rule	Reason	Status	Performance Standards	Comment on compliance
	As it is expected that vehicles may enter during night-time hours, however the site is not anticipated to be lit during this time, consent would be required.		of operation, if all of the following circumstances apply: i. the parking area is provided for any activity other than standard residential; ii. the parking area is designed to accommodate 4 or more vehicles; and iii. the parking area will be used at night.	
6.6.1 Car Parking Design – Rule 6.6.1.7 Access to Parking areas	Designed to allow vehicles using the spaces to enter and exit the site without the need to move a vehicle occupying any other parking or vehicle loading space on the site.	Complies		
Rule 6.6.2 Vehicle Loading Design	No loading or unloading areas provided therefore these rules are **not applicable**.	Not applicable		
Rule 6.6.3 Vehicle Access Design and Location	Refer to Integrated Transport Assessment for compliance.	Complies		
Earthworks activities 8A.3.2.1 – Performance standards that apply to all land use activities				
8A.3.2.1 – Performance standards that apply to all land use activities		**Non-complying**	Archaeological sites: Earthworks must comply with Rule 13.3.3 – An archaeological authority is required for the proposed earthworks	An archaeological authority is being applied for but not currently obtained

Rule	Reason	Status	Performance Standards	Comment on compliance
		Complies	Rule 8A.5.3 Batter gradient	Will comply with cut and fill requirements outlined in rule.
		Complies	Rule 8A.5.4 Setback from property boundary, buildings, structures and cliffs	Not applicable
		Complies	Rule 8A.5.5 Setback from National Grid (earthworks)	Not applicable
		Complies	Rule 8A.5.6 Setback from network utilities	Not applicable
		Complies	Rule 8A.5.7 Sediment control	Earthworks will be undertaken using best practice sediment control management to prevent sediment entering water bodies, stormwater networks, or the coastal marine area, or going across property boundaries.
		Complies	Rule 8A.5.8 Removal of high class soils	No high-class soils
		Complies	Rule 8A.5.9 NZ Environmental Code of Practice for Plantation Forestry	No plantation forestry
		Complies	Rule 8A.5.10 Setback from scheduled tree	No scheduled trees
Earthworks activities Rule 8A.3.2.2 Earthworks – Small Scale		Permitted	a. Earthworks - small scale thresholds[4]	Earthworks will be considered 'large scale' All indigenous vegetation clearance that occurs in an ASBV, ONF, ONCC,

[4] Appeal only relates to Port Activity in the Industrial Port Zone as being considered earthworks - small scale; and earthworks for underground fuel storage systems

Rule	Reason	Status	Performance Standards	Comment on compliance
				HNCC, or NCC and is not included in Rule 10.3.2.1.a is considered indigenous vegetation clearance – large scale.
Earthworks activities Rule 8A.3.2.3 Earthworks – Large scale	Over such a large area, the proposal will likely involve more than 200 m² of earthworks within the Rural Coastal / Natural Coastal Character part of the site. The total area is difficult to determine at this stage as will depend on final agreed treatment/cover of land in places. Consent is sought as a precaution and with conditions proposed.	**Restricted Discretionary**	8A.5.10 Setback from coast and water bodies states that: Earthworks – large scale must comply with Rule 10.3.3 Refer assessment below in which compliance with Rule 10.3.3 is achieved.	
Natural Environment				
10.3.2 Vegetation Clearance	Clearance of a pest plant listed in Appendix 10B (Includes Broom) always considered indigenous vegetation clearance – small scale.	Complies	10.3.2.1 Indigenous vegetation clearance – small scale thresholds All indigenous vegetation clearance that occurs in an ASBV, ONF, ONCC, HNCC, or NCC and is not included in Rule 10.3.2.1.a is considered indigenous vegetation clearance – large scale. All other indigenous vegetation clearance must not exceed the following maximum areas on any site, over the time period indicated, to be considered	Any other indigenous vegetation to be cleared would not exceed 500m2 within the coastal rural zone.

Rule	Reason	Status	Performance Standards	Comment on compliance
			indigenous vegetation clearance – small scale:	
	Vegetation clearance not required within 20 m of MHWS or of 20 m of any wetland identified in App A1.2.	Complies	10.3.2.2 Protected areas (vegetation clearance)	
	No removal of species outlined in this rule.	Complies	10.3.2.3 Protected species (indigenous vegetation clearance)	
10.3.3 Setback from Coast and Water Bodies	New structures and earthworks will be set back beyond the features identified in this rule.	Complies	New buildings and structures, additions and alterations, earthworks - large scale, storage and use of hazardous substances, and network utility activities must be set back as outlined in rule.	
10.3.4 Tree Species	Forestry and shelterbelts not proposed.	Not applicable	Requirements regarding forestry and shelterbelts.	
10.3.5 Number and Location of Permitted Buildings	Only the small registration kiosk (less than 10 m²) is proposed.	Complies	In the Natural Coastal Character (NCC) overlay a maximum of three new buildings less than or equal to 60m² footprint may be erected per site, provided that they are located within 30m of any building greater than 60m² footprint on the same site.	
10.3.6 Reflectivity	Materials will adhere to these requirements.	Complies	Exterior surfaces, including roofs, that have a light reflectance value (LRV) of 30% or less	

Rule	Reason	Status	Performance Standards	Comment on compliance
Natural Hazards				
Rule 11.3 Natural Hazards Performance Standards	Site subject to Hazard 3 (coastal) Overlay Zone (part of site parallel with coastline but not entire part of site zoned rural), Risk: Low, Location: South Dunedin, Otago Harbour, Long Beach & Blueskin Bay (Area B) The proposal does not involve 'new buildings'.	Complies	11.3.3 Relocatable Buildings *(note rule under appeal)* In the hazard 3 (coastal) overlay zone, new buildings containing residential activity on the ground floor must be relocatable.	***Rule is not applicable***
Heritage – Warrington moa hunting site (NZAA Reference 144/177) and Plan IDA040, Appendix A.1.1				
Rule 13.3 Development Performance Standards	Not applicable.	Complies	13.3.1 Building Colour – Relevant to paint on a roof or wall of a 'building'.	
	Not applicable.	Complies	13.3.2 Materials and Design – Relevant to a character-contributing building, any protected part of a scheduled heritage building or scheduled heritage structure, or any non-protected part of a scheduled heritage building within a heritage precinct.	
	An archaeological authority is being applied for but not yet obtained.	***Non-complying***	13.3.3 Archaeological Sites – Earthworks on a scheduled archaeological site must have an archaeological authority if required.	

Rule	Reason	Status	Performance Standards	Comment on compliance
Manawhenua – Wāhi Tupuna Mapped Areas, Pūrākaunui to Hikaroroa to Huriawa; Okahau; and Blueskin Bay				
Rule 14.3.2.1 Assessment of performance standard contraventions	All performance standard contraventions: – *Rule 6.6.1.4 Gradient of parking areas* – *Rule 6.6.1.5 Surfacing and marking of parking areas* – *Rule 6.6.1.6 Lighting of Parking Areas*		*Potential circumstances that may support a consent application.* *General assessment guidance.*	
Rule 14.4.2.1 Assessment of All restricted discretionary activities	– *Rule 15.3.3.22 Visitor Accommodation* – *Rule 15.3.4.28 All other new structures* – *Rule 15.3.4.30 Parking, loading and access* – *Rule 16.3.4.16 All other new structures* – *Rule 16.3.4.19 Parking, loading and access* – *Rule 6.6.1.4 Gradient of parking areas* – *Rule 6.6.1.5 Surfacing and marking of parking areas* – *Rule 6.6.1.6 Lighting of Parking Areas* – *Rule 8A.3.2.3 Earthworks – Large scale*		General assessment guidance: a. Council will consider the findings of any cultural impact assessment provided with a resource consent application, where required (see Special Information Requirements - Rule 14.7). b. In assessing the effects on Manawhenua and their relationship with a wāhi tūpuna mapped area, Council will consider the values in Appendix A4. Potential circumstances that may support a consent application: c. The development incorporates conservation activity that will have significant positive effects	

Rule	Reason	Status	Performance Standards	Comment on compliance
			on biodiversity or natural character values.	

Table 2: Compliance assessment – Operative Dunedin City District Plan 2006 (ODP)

Rule	Reason	Status	Performance Standards
Rural Zone			
Rule 6.5.7 Any activity not specifically identified as permitted, controlled, discretionary or prohibited by the rules in this zone or in the rules of Sections 17 to 22 of this Plan is non-complying. This rule does not apply to activities identified as permitted, controlled or discretionary in the rules of Sections 13 to 16 of the Plan, regardless of where in the zone those activities are undertaken.	Following the approach taken for existing NZMCA activities in Dunedin, the proposed activity is not deemed to be defined as a commercial residential activity, nor a recreational activity. As it is not specifically provided for as a permitted activity and does not fit comfortably within the above definitions, it is deemed to be non-complying.	Non-complying	Nil Rule 6.7 Assessment of Resource Consent Applications
Rule 6.5.3 Conditions Attaching to Permitted Activities	*(v) Design of parking spaces* *May not comply as 1 in 20 is very flat however the site (though not steep) does vary in grade likely to exceed 1 in 20 in areas.* *Applied for as a precaution.*	Restricted Discretionary	**Car Parking Loading and Access** – On-site car parking shall comply with the performance standards of Section 20 (Transportation – See below)
		Complies	**Noise, Glare, Lighting and Electrical** Interference (Refer to the performance standards of the Environmental Issues Section).

Table 2: Performance Standards

Transportation – Rule 20.5.5 Parking Performance Standards *(Policies 20.3.1, 20.3.4)*		
(v) Design of parking spaces	a. The gradient for off-street parking surfaces for all non-residential activities shall be no more than 1 in 20 in any one direction. b. The surface of all parking, associated access and manoeuvring areas (except parking areas for residential activities requiring 5 or less car parking spaces) shall be formed, hard surfaced and, if impermeable surfacing is used, drained, and parking spaces permanently marked. [Amended by Plan Change 10, 18/1/11] c. All parking areas, excluding those for residential activities, which are designed to accommodate 4 or more vehicles and which are used at night shall be illuminated to a minimum maintained level of 2 lux, with high uniformity, during the hours of operation. d. The dimensions of all spaces shall comply with the appropriate dimensions in Appendix 20B. e. All parking areas shall have clearly defined access and the remainder of the property road boundary shall have a physical barrier which separates the parking area from the road. [Inserted by Consent Order, 20/12/01]	
(vi) On-site manoeuvring	(b) All on-site manoeuvring areas for non-residential activities shall be designed to accommodate at least a 99 percentile design motor vehicle, as shown in Appendix 20C, unless otherwise specified. This manoeuvring area shall be provided without the need for a turntable. [Amended by Plan Change 10, 18/1/11] (c) On-site manoeuvring shall be provided to ensure that no vehicle is required to reverse either onto or off	

	a national, regional, district or collector road, identified on District Plan Maps 73 and 74. (e) For non-residential activities, on-site manoeuvring for a 99 percentile motor vehicle shall be provided to ensure that no 99 percentile motor vehicle is required to reverse onto or off a site where: (i) 5 or more parking spaces share a common access; or (ii) The activity is on a rear site.	
Transportation – Rule 20.5.7 Vehicle Access Performance Standards *(Policies 20.3.1, 20.3.4, 20.3.5, 20.3.8)*		
(i) Maximum number of vehicle crossings	1 crossing is permitted	1 crossing is provided **Complies**
(iii) Distances of vehicle crossings from intersections	(b) In all cases where a site adjoins a legal road that is constructed of hard surfaced footpath or carriageway, the vehicle access shall be hard surfaced from the edge of the existing hard surfacing on the footpath or carriageway to the property boundary and for a minimum of 5m inside that boundary. (c) In all zones other than Rural and Rural Residential, the full length of any private way that serves 2 or more units shall be hard surfaced. (e) Vehicle access shall be designed to minimise longitudinal gradients; and the maximum change in gradient without transition for all vehicular access shall be no greater than 1 in 8 for summit grade changes or 1 in 6.7 for sag grade changes.	**Complies**
(v) Dimension requirements for vehicle access on a site	(a) For all sites except those specified in Rules 8.9.2(ix)(c) and 9.8.2(viii)(a)(i) in Sections 8: Residential and 9: Activity, the maximum width of each vehicle crossing shall be in accordance with the standards set out in Table 20.6:	**Complies**

	Other Activities = 9m (b) The minimum widths of all private ways and vehicular access on a site shall be in accordance with the standards set out in Table 20.7. Minimum formed width = 5 m	
Environmental Issues – Rule 21.5.1 Performance Standards: Noise Limits – General Levels		
(i) Maximum L10 and Lmax Limits		Subject to (ii), the maximum noise limits generated by any activity shall not exceed: (a) The maximum day-time, night-time and shoulder period L10 noise limits identified on District Plan Maps 62 to 70, measured at the boundary or within any other property within the same noise area, except that in the case of noise generated within any Rural or Residential Zone noise shall be measured at or within the notional boundary of any dwelling not on the same site. (b) Between 9.00 pm on any night and 7.00 am the following day no noise shall exceed an Lmax of 75 dBA measured at the boundary of the site or within any other site.
(ii) Limits applying at Noise Area Boundaries		At the boundary of any noise area, the maximum level of noise generated by any activity in the noise area shall not exceed: (a) Day-time: the lower of the day-time maxima for the noise area within which the activity is located and any adjoining noise area. (b) Night-time: the lower of the night-time maxima for the noise area within which the activity is located and any adjoining noise area. (c) Shoulder period: the lower of the shoulder maxima for the noise area within which the activity is located and any adjoining noise area.

(iii) Shoulder Period Limits		Where there is a difference in noise limits between day and night-time, a shoulder period will apply which reduces the allowable day-time level by 5 dBA during that shoulder period.
Rule 21.5.4 Performance Standard: Glare and Lighting		
(i) Glare and lighting	Except in any Industrial 1 or Port Zone, no activity shall result in greater than: (a) 16 lux of light onto any other site in a Residential Zone, measured inside that site. (b) 8 lux of light onto any other site used for residential purposes during night-time hours, measured at the windows of any such residentially occupied building. *This rule does not apply to headlights of motor vehicles.*	
Rule 21.5.5	Except in any Port Zone, electrical interference emanating from any site shall not be discernible beyond that site.	

Appendix K Proposed Conditions

1) The works shall be carried out in general accordance with the resource consent application RMXXXXXX received by Council on XXX 2018 unless otherwise inconsistent with the conditions of consent, in which case these conditions shall prevail.

2) The landscape planting shall be undertaken in general accordance with the approved Landscape Plan. Landscaping internal to the site will be used to delineate the camping bays but may not be established exactly as shown on the site plan.

3) The landscape boundary planting along the northern boundary of the site shall be maintained to a minimum height of 2m and a minimum width of 1 metre to provide adequate screening of the site. Any dead plants shall be replaced to maintain this screening function.

4) The plantings referred to in condition (2) above shall be implemented within 12 months of the motor caravan park commencing operation, and shall be maintained (and replaced, as necessary) thereafter.

5) Vehicle access to the site for the purpose of NZMCA members camping at the site shall be via Bay Road only.

6) The vehicle access to the motor caravan park shall be formed to a width of 6m, hard surfaced from the edge of the carriageway of Bay Road to a distance not less than 5m inside the property boundary, and be adequately drained for its duration.

7) Gas generators shall not be used within the site between the hours of 8:00pm and 8:00am, and advice to this effect shall be included on the sign erected on site.

8) The use of the site for camping on a temporary basis shall be restricted to NZMCA financial members travelling in NZS 5465:2001 certified self-contained vehicles only.

9) The activity shall result in no greater than 8 lux of light onto any other site used for residential purposes during night-time hours, measured at the windows of any such residentially occupied building.

10) Prior to earthworks, a technical specification of the pavement design shall be prepared in accordance with construction considerations recommended in the Pavement Options Memo submitted with the resource consent application.

11) As a first principle, every practical effort should be made to avoid damage to any archaeological site, whether known, or discovered during any redevelopment of the site.

12) A site instruction document and contractor briefing document shall be prepared for NZMCA. Before the start of any on-site works, all contractors should be briefed by an archaeologist on the legislative requirements of working within archaeological sites.

13) All subsurface works should be monitored by an archaeologist. Any archaeological features or recovered material should be appropriately recorded and analysed.

14) Before site works commence notification should be given with at least 2 working days' notice, to HNZPT, Aukaha. An invitation should be extended for a representative from local rūnaka to attend site during all earthworks.

15) If at any stage during the redevelopment Māori material is discovered, NZHP should be called in the first instance. NZHP will assist the NZMCA to contact all relevant parties, including HNZPT, and Aukaha. If Māori material does exist in the area to be developed, damage to this should be minimised. Any Maori artefacts will be, prima facie, property of the Crown and will be submitted to the appropriate institutions.

16) A full report on any archaeological material that is found should be prepared and submitted to the HNZPT within one year of the completion of archaeological site works.

Advice Note:

17) An archaeological authority under Section 44 of the HNZPTA 2014 should be obtained from the HNZPT prior to any modification of the site.

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