



---

Dunedin City Council

**NOTICE OF REQUIREMENT –  
MOSGIEL COMMUNITY AND  
RECREATIONAL AREA**

October 2018

# CONTENTS

## Part A: Notice of Requirement

## Part B: Assessment of Environment Effects

<b>1.</b>	<b>Introduction</b>	<b>1</b>
1.1	Introduction	1
1.2	Statutory Framework – Notice of Requirement	1
<b>2.</b>	<b>Overview of the Proposed Designation</b>	<b>3</b>
2.1	Introduction	3
2.2	Site Location	4
2.3	Existing Activities and Facilities	6
2.4	Future activities	8
<b>3.</b>	<b>Proposed Nature and Form of the Designation</b>	<b>8</b>
3.1	Purpose of the Designation	8
3.2	Designation Extent	9
3.3	Designation Controls	10
<b>4.</b>	<b>Reasons Why the Designation is Necessary - Objectives of the Requiring Authority</b>	<b>11</b>
<b>5.</b>	<b>Permitted Baseline/Existing Environment - District Plan Zone Provisions</b>	<b>12</b>
5.1	Dunedin City Operative District Plan	12
5.2	Dunedin City Proposed District Plan (“2GP”)	14
<b>6.</b>	<b>Assessment of Effects on the Environment</b>	<b>15</b>
6.1	Positive Effects	15
6.2	Visual and Amenity / Urban Design Effects	16
6.3	Traffic and Transportation Effects	17
6.4	Noise Effects	19
6.5	Effects on Infrastructure and Existing Land Uses (e.g. flood risk)	20
<b>7.</b>	<b>Management of Effects</b>	<b>22</b>
7.1	Proposed Conditions	22
<b>8.</b>	<b>Section 168A – Statutory Framework and Planning/ Strategy Documents</b>	<b>28</b>
8.1	Regional Policy Statement	28
8.2	Proposed Regional Policy Statement	29
8.3	Dunedin City District Plan (Operative)	29
8.4	2GP	31
<b>9.</b>	<b>Relevant Other Matters</b>	<b>32</b>
9.1	Introduction	32
9.2	Kai Tahu Ki Otago – Natural Resources Management Plan	32
9.3	DCC Spatial Plan	33
<b>10.</b>	<b>Consideration of Alternatives</b>	<b>34</b>
10.1	Introduction	34



10.2	Consideration of Alternative Methods	34
10.3	Option 1 - Designation	35
10.4	Option 2 - Resource Consent	36
10.5	Option 3 - Variation To the District Plan	37
10.6	Preferred Method	38
10.7	Consideration of Alternative Sites	38
<b>11.</b>	<b>Consultation</b>	<b>39</b>
11.1	Approach to Consultation	39
11.2	Sports field users consultation session Wednesday 12 September 2018, 6.30-8.00pm	39
11.3	Neighbours and interested parties consultation session Saturday, 15 September 2018, 10.00am-12.30pm Mosgiel Library	40
11.4	Direct Neighbour Consultation	41
11.5	Stakeholder Consultation	41
<b>12.</b>	<b>Part 2 Considerations</b>	<b>41</b>
<b>13.</b>	<b>Conclusion</b>	<b>42</b>

## APPENDICES

<b>Appendix A:</b>	Certificates of Title
<b>Appendix B:</b>	Landscape and Visual Effects Assessment Report, Mike Moore
<b>Appendix C:</b>	Transportation Assessment, Carriageway Consulting
<b>Appendix D:</b>	Noise Assessment, Marshall Day Acoustics
<b>Appendix E:</b>	Infrastructure Review, GHD
<b>Appendix F:</b>	Consultation Material
<b>Appendix G:</b>	Proposed Designation Conditions



## REPORT INFORMATION

<b>Report Status</b>	Final
<b>Our Reference</b>	8909
<b>File Location</b>	05 Designation / 05 NOR
<b>Author</b>	Anna Jones
<b>Review By</b>	Louise Taylor

© Mitchell Daysh Limited (2018).

This document and its contents are the property of Mitchell Daysh Limited.  
Any unauthorised employment or reproduction, in full or in part, is forbidden.







## **PART A**

Notice of Requirement

Form 18

FORM 18

**NOTICE OF REQUIREMENT BY MINISTER, LOCAL AUTHORITY, OR  
REQUIRING AUTHORITY FOR DESIGNATION OR ALTERATION OF  
DESIGNATION**

Sections 145, 168(1), (2), 168A, and 181, and clause 4 of Schedule 1,  
Resource Management Act 1991

To **Dunedin City Council**

1. **Dunedin City Council** gives notice of a requirement for a designation for a public work.

2. The site to which the requirement applies is as follows:

The area comprising Peter Johnstone Park (Reid Avenue), Memorial Park (Gordon Road) and Mosgiel Pool (215 Gordon Road), Mosgiel. The legal descriptions of the sites are as follows:

**Table 1: Legal Descriptions of Sites**

Address	Legal Description	Area
<b>Memorial Park, Gordon Road, Mosgiel</b>	Section 1 Survey Office Plan 11828 CT 296322 Lot 1 Deposited Plan 9385 CT 289571 Lot 2 Deposited Plan 9385 CT 289572 Lot 8 Deposited Plan 25666 OT17D/61	113,218 m <sup>2</sup>
<b>Peter Johnstone Park, Reid Avenue, Mosgiel</b>	Part Lot 15 Deposited Plan 8961 CT 99822 Section 25 Block VI East Taieri Survey District OT3A/968	105,092 m <sup>2</sup>
<b>215 Gordon Road, Mosgiel</b>	Lot 1 Block V Deposited Plan 3697 OT281/68 Part Lot 2 Block V Deposited Plan 3697 OT281/68 Part Section 6 Block VI East Taieri Survey District OT281/68 Lot 3 Block V Deposited Plan 3697 OT269/299	3,023 m <sup>2</sup>
<b>Reid Avenue, Mosgiel</b>	Road Reserve as shown on Figure 2 below	-
<b>Total</b>		<b>221,333 m<sup>2</sup></b>

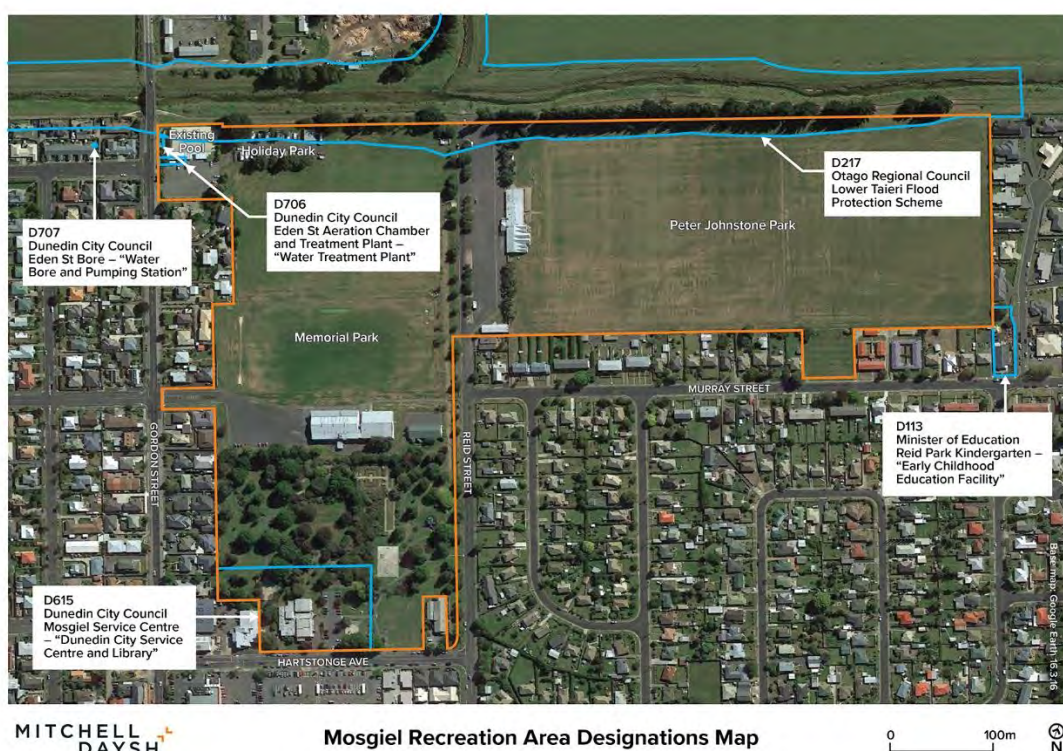
The location and site plan are shown in Figure 1 and the extent of the proposed designation is depicted in Figure 2.



Figure 1 : Location and Site Plan, Memorial and Peter Johnstone Parks, Mosgiel

Figure 1: Location and Site Plan





**Figure 2: Extent of the Designation**

3. The nature of the proposed public work (or project or work) is:

The “Mosgiel Community and Recreation Area” to authorise the following activities:

- Community and recreational amenities and facilities including but not limited to:
  - An aquatic centre;
  - Mosgiel Service Centre and Library;
  - Memorial Park and Gardens;
  - Peter Johnstone Park;
- Sporting, recreational and community activities;
- Food and beverage outlets ancillary to community or recreation facilities;
- Buildings and offices associated with club rooms, community facilities and services;
- Vehicle and pedestrian access to facilities;
- Car, cycle and coach parking areas for facilities;
- Directional signage, public art works and other public amenities such as toilets; and





- Landscaping, infrastructure, construction and earthwork activities associated with the above.

See section 3 of the Assessment of Environmental Effects (**AEE**).

4. The nature of the proposed conditions that would apply are:

- Building height, floor area (per building) and combined building site coverage;
- Minimum building setbacks from boundaries and height in relation to boundaries;
- Building design and appearance;
- Landscape treatment to car parking areas;
- Signage;
- Tree protection;
- Lighting;
- Car parking requirements;
- Protection of Otago Regional Council Lower Taieri Flood Protection Scheme designation;
- Noise;
- Earthworks;
- Minimum floor levels;
- Subdivision; and
- Stormwater.

See section 7 of the AEE and **Appendix G** attached.

5. The effects that the public work (or project or work) will have on the environment, and the ways in which any adverse effects will be mitigated, are:

The effects of the proposal have been assessed by various specialists, including with regards to traffic, noise, infrastructure and landscape and amenity, as being no more than minor. Any adverse effects can be effectively avoided, remedied or mitigated via the proposed conditions. See sections 6 and 7 of the AEE and **Appendix G** attached.

6. Alternative sites, routes, and methods have been considered to the following extent:

The site is currently used for recreational and community activities and relocating these has not been considered (except for the swimming pool). Various alternative sites were



considered for the future swimming pool development. Various planning methods have also been considered, including resource consent, designation and a variation to the District Plan. See section 9 of the AEE.

7. The public work (or project or work) and designation (or alteration) are reasonably necessary for achieving the objectives of the requiring authority because:

The designation will provide flexibility for the efficient management of the area into the future, including the establishment of a new aquatic facility to replace the existing Mosgiel Pool. There will be parameters put in place via conditions of the designation to control built form, activities and to ensure aspects such as car parking is appropriately provided for the size and location of any developments on the site. See section 4 of the AEE.

8. The following consultation has been undertaken with parties that are likely to be affected:

Both public and stakeholder consultation has been undertaken. Stakeholders consulted included iwi, New Zealand Transport Agency (NZTA), Otago Regional Council flood hazard, DCC transportation, planning (both consenting and policy) and three waters. See section 11 of the AEE.

9. DCC attaches the following information required to be included in this notice by the district plan, regional plan, or any regulations made under the Resource Management Act 1991.

- Certificates of Title
- Landscape and Visual Effects Assessment Report, Mike Moore
- Traffic Assessment, Carriageway Consulting
- Noise Assessment, Marshall Day
- Infrastructure Review, GHD
- Consultation Documents
- Proposed Designation Conditions

Signature:

Sue Bidrose  
Chief Executive Officer  
Dunedin City Council

Date: 11 October 2018

Electronic address for Service: [louise.taylor@mitchelldaysh.co.nz](mailto:louise.taylor@mitchelldaysh.co.nz)

Telephone: 03 4777884

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

Mitchell Daysh Limited

PO Box 489

Dunedin 9054

Contact person: Louise Taylor

### **Note to person giving notice**

If the notice relates to a requirement for a designation, or an alteration to a designation, under section 168A of the Resource Management Act 1991, you must use—

this form if the requirement is lodged with the Environmental Protection Authority; or

form 20 if the requirement is not lodged with the Environmental Protection Authority.

If the requirement is lodged with the Environmental Protection Authority, you must also lodge a form in form 16A at the same time.

You must pay any charge payable to the territorial authority for the requirement or alteration to the requirement under the Resource Management Act 1991.

If this notice is to the Environmental Protection Authority, you may be required to pay actual and reasonable costs incurred in dealing with this matter (see section 149ZD of the Resource Management Act 1991).

Schedule 1 form 18: amended, on 1 November 2010, by regulation 19(1) of the Resource Management (Forms, Fees, and Procedure) Amendment Regulations 2010 (SR 2010/279).





## **PART B**

Assessment of Environmental Effects



## 1. INTRODUCTION

### 1.1 INTRODUCTION

The Dunedin City Council (**DCC** or **Council**) is a requiring authority under section 166 of the Resource Management Act 1991 (**RMA** or **the Act**). In accordance with the Council's statutory functions as a requiring and local authority, the DCC has an ability to designate land. DCC is proposing to designate the area comprising Peter Johnstone Park (Reid Avenue), Memorial Park (Gordon Road) and Mosgiel Pool (215 Gordon Road), Mosgiel, within the Dunedin City District Plan (**District Plan**) to provide for a range of recreation and community uses to reflect the existing uses of the land, along with future developments and changes. DCC is the land owner, and leases some of the land primarily to sport and recreation clubs, along with a holiday park.

The designation will cover these areas to provide flexibility for the efficient management of the area into the future, including the establishment of a new aquatic facility to replace the existing Mosgiel Pool. There will be parameters put in place via conditions of the designation to control built form, activities and to ensure aspects such as carparking are appropriately provided for the size and location of any developments on the site.

### 1.2 STATUTORY FRAMEWORK – NOTICE OF REQUIREMENT

The statutory framework for notices of requirement by territorial authorities is set out in section 168A of the RMA. The particularly relevant clauses are:

#### ***168A Notice of requirement by territorial authority***

- (1) This section applies if a territorial authority decides to issue a notice of requirement for a designation—*
  - (a) for a public work within its district and for which it has financial responsibility; or*
  - (b) in respect of any land, water, subsoil, or airspace where a restriction is necessary for the safe or efficient functioning or operation of a public work.*
- ~*
- (4) The territorial authority may decide to—*
  - (a) confirm the requirement:*
  - (b) modify the requirement:*
  - (c) impose conditions:*
  - (d) withdraw the requirement.*
- (5) Sections 173, 174, and 175 apply, with all necessary modifications, in respect of a decision made under subsection (4).*

Section 168A(1A) requires the consent authority to determine whether the Notice of Requirement should be notified in accordance with the standard requirements in sections 95A-95G of the RMA. In this case, the DCC requests the application be publicly notified due to potential public interest in the proposal.

The framework for assessment of notices of requirement by territorial authorities is contained in section 168A(3). When considering a requirement, a territorial authority must, subject to Part 2 of the RMA, consider the effects on the environment of allowing the requirement, having particular regard to:

- (a) *Any relevant provisions of a national policy statement, New Zealand coastal policy statement, regional policy statement or proposed regional policy statement, plan or proposed plan;*
- (b) *Whether adequate consideration has been given to alternative sites, routes, or methods of undertaking the work, if the requiring authority does not have an interest in the land sufficient for undertaking the work, or it is likely that the work will have a significant adverse effect on the environment;*
- (c) *Whether the work and designation are reasonably necessary for achieving the objectives of the requiring authority for which the designation is sought; and*
- (d) *Any other matter the territorial authority considers reasonably necessary in order to make a decision on the requirement.*

Under section 168A(4), the territorial authority may decide to confirm, modify, impose conditions, or withdraw the requirement.

Under section 177, where land is subject to an existing designation, before doing anything in accordance with its designation, the requiring authority responsible for the later designation must obtain the prior written consent of the authority responsible for the earlier designation. There are three existing designations on the site. Two are administered by DCC, being the Eden Street aeration tank and water treatment plant on Gordon Road (D706); and the Mosgiel Service Centre and Library (D615). The third is the Lower Taieri Flood Protection Scheme (D217) administered by the Otago Regional Council (**ORC**). Any works on the site will be designed to ensure no conflict with D706 and D217, and the Mosgiel Service Centre and Library designation will be incorporated into the proposed new designation and removed from the district plan once the new designation is operative.

A designation serves two separate but related purposes:

- It *protects the opportunity* to use the designated land for a public work, project or work, in that no one can undertake an activity that would prevent or hinder the designated work, without the prior written approval of the requiring authority that holds the designation; and



- It *provides district planning authorisation* for a public work or project or work in place of any rules in the district plan and removes the need for land use consents under the district plan.

Case law has established that designations can be quite specific, identifying particular works on a particular site and containing detailed conditions, whereas others may be more general, simply identifying a site as being used for a certain purpose. A Notice of Requirement may also be in general terms, with more specific details, where necessary, left to be addressed by an outline plan submitted to the Council prior to construction. This is essentially what is proposed here.

The DCC intends to provide for a range of recreation and community uses to reflect the existing uses of the land, along with future developments and changes. The designation will be broad enough for future changes to be made, whilst conditions will control built form including noise and lighting (thus protecting the amenity of residential neighbours and staying away from the ORC's Lower Taieri Flood Protection Scheme) and car parking.

Once in place, a designation has the following effects, pursuant to section 176(1) of the RMA:

- It removes any requirement for the requiring authority to obtain resource consents otherwise required under the district plan;
- It gives the requiring authority consent to do anything in accordance with the designation (subject to the outline plan requirements of section 176A of the RMA);
- It prevents any use of land subject to the designation which would prevent or hinder the work without written permission of the requiring authority.

Outline plans relate to the implementation of the project or work. Accordingly, outline plans will be submitted once the Council is ready to commence building works on the site (e.g. for the Taieri Aquatic Facility).

It is noted that any requirements that emanate from National Environmental Standards and Regional Plans must still be met by the requiring authority.

## **2. OVERVIEW OF THE PROPOSED DESIGNATION**

### **2.1 INTRODUCTION**

It is proposed that the designation will provide for community and recreational facilities and activities similar to what already occurs within the site.

The designation will enable the ongoing use, maintenance, protection, upgrading and development of the existing community and recreational facilities and activities that are undertaken at this site.

The designation will provide flexibility for the efficient management of the area into the future, including the establishment of a new aquatic facility to replace the existing Mosgiel Pool. Conditions of the designation will be put in place to control built form, and to ensure aspects such as carparking are appropriately provided according to the size and location of any developments on the site (refer to **Appendix G** for proposed designation conditions).

## 2.2 SITE LOCATION

The area to be designated, the Mosgiel Community and Recreation Area, is located in Mosgiel, Dunedin. It is intended to comprise Memorial Park (Gordon Road) and Peter Johnstone Park (Reid Avenue), the Mosgiel Service Centre and Library, the Eden Street Aeration Chamber and Treatment Plant - Water Treatment Plant, and the Mosgiel Pool.

The legal descriptions of the sites, which are owned by DCC, are shown in Table 1. The Certificates of Title are attached in **Appendix A**.

**Table 1: Legal Descriptions of Sites**

Address	Legal Description	Area
Memorial Park, Gordon Road, Mosgiel	Section 1 Survey Office Plan 11828 CT 296322 Lot 1 Deposited Plan 9385 CT 289571 Lot 2 Deposited Plan 9385 CT 289572 Lot 8 Deposited Plan 25666 OT17D/61	113,218 m <sup>2</sup>
Peter Johnstone Park, Reid Avenue, Mosgiel	Part Lot 15 Deposited Plan 8961 CT 99822 Section 25 Block VI East Taieri Survey District OT3A/968	105,092 m <sup>2</sup>
215 Gordon Road, Mosgiel	Lot 1 Block V Deposited Plan 3697 OT281/68 Part Lot 2 Block V Deposited Plan 3697 OT281/68 Part Section 6 Block VI East Taieri Survey District OT281/68 Lot 3 Block V Deposited Plan 3697 OT269/299	3,023 m <sup>2</sup>
Reid Avenue, Mosgiel	Road Reserve as shown on Figure 2 below	-
<b>Total</b>		<b>221,333 m<sup>2</sup></b>

**Figure 1** below depicts the location and site plan of the designation area.



**Figure 1: Location and Site Plan**



Mosgiel is located approximately 15 km west of Dunedin.

North of the site is the Silver Stream and an area designated by Otago Regional Council for flood protection purposes (D217 Lower Taieri Flood Protection Scheme). This designation encroaches onto the Mosgiel Community and Recreation Area at the northern boundary. Beyond the stream is predominantly farmland. To the south, east and west of the site is predominantly residential development.

There are other designations in the immediate vicinity also. Existing designations are listed in Table 2 below. Where the proposed designation overlays existing designations, the existing designations will take priority. If DCC wanted to undertake any works within the areas of existing designations, it must obtain written consent from the requiring authority of that designation. The Mosgiel Service Centre designation will be uplifted once the proposed new designation is operative. The proposed designation does not directly affect the Eden Street Bore, the Aurora Substation or Reid Park Kindergarten.

**Table 2: Existing Designations**

<b>Designation Number / Name</b>	<b>Requiring Authority</b>	<b>Designation Purpose</b>
D615 – Mosgiel Service Centre	Dunedin City Council	Dunedin City Service Centre and Library
D706 – Eden Street Aeration Chamber and Treatment Plant	Dunedin City Council	Water treatment plant
D707 – Eden Street Bore	Dunedin City Council	Water bore and pumping station
D217 - Lower Taieri Flood Protection Scheme	Otago Regional Council	Flood protection purposes
D242 – Mosgiel Zone Substation	Aurora energy Limited	Electricity Purposes
D113 – Reid Park Kindergarten	Minister of Education	Early childhood education facility

## **2.3 EXISTING ACTIVITIES AND FACILITIES**

While DCC owns the site and operates some facilities at the site, the remaining land is leased to other parties for a variety of uses. Uses include the swimming pool, a caravan park, rugby and football clubs, sporting facilities, library and gardens. These existing facilities and activities at the site are detailed below:

### **Mosgiel Pool**

- Operates 7 days a week, during summer months only.

### **Mosgiel Caravan Park**

- Located adjacent to the existing pool.
- Caters for approximately 20 caravans.

### **Peter Johnstone Park**

- Taieri Rugby Football Club rooms:
  - Weekend and evening use for Rugby Club.
  - Rugby Club hall is available for hire so there are occasional other uses e.g. weddings and functions.
  - All fields are available for use either through leases or by hiring them for events or one-offs through Sportbook.
  - Five full rugby fields, plus five junior rugby fields/touch fields – used throughout the year after school and weekends, as well as for other events such as Weetbix Tryathlon and other events, and for informal recreation use.
- Mosgiel Scout Hall.
- Caravan dump station.

### **Mosgiel Association Football Club (Green Roof Building)**

- Club rooms – Club use plus functions.

### **Memorial Park**

- Basketball courts.
- Grandstand for viewing football, athletics and cricket (publicly accessible).
- Squash Courts.
- Gymnasium (also used as emergency centre).
- Cricket fields – two.
- Athletics track and facilities.
- Athletics Taieri Clubrooms.
- Soccer fields – six (including two junior).
- Skate Ramps.
- Other uses and events, e.g. Weetbix Tryathlon.

#### **Mosgiel Service Centre**

- Public Library.
- Council offices.

#### **Mosgiel Public Gardens**

- Gardens (including rose gardens).
- Public toilets.
- Mosgiel Playground.
- Skatepark.

#### **Infrastructure**

- Significant underground and above ground infrastructure extends through the site, including power, waste water, stormwater and water supply pipes and facilities. Some routes are secured by way of easements.

### **2.4 FUTURE ACTIVITIES**

It is proposed that the designation will generally provide for community and recreational facilities and activities within the site. The designation will enable the ongoing use, maintenance, protection, upgrading and development of the existing community and recreational facilities and activities that are undertaken at this site.

A key objective is that the designation will enable the DCC to maintain and upgrade the facilities, services and amenities within the area in a manner that provides for the current and future needs and social economic wellbeing of the Mosgiel community.

Specifically, DCC intends to establish a new Aquatic Centre within the designation area. The new Aquatic Centre is a key driver of the designation and will replace the aging existing pool.

## **3. PROPOSED NATURE AND FORM OF THE DESIGNATION**

### **3.1 PURPOSE OF THE DESIGNATION**

It is proposed that the designation will be called “Mosgiel Community and Recreation Area” and authorise the following activities:

- Community and recreational amenities and facilities including but not limited to:
  - An aquatic centre;
  - Mosgiel Service Centre and Library;
  - Memorial Park and Gardens;



- Peter Johnstone Park;
- Sporting, recreational and community activities;
- Food and beverage outlets ancillary to community or recreation facilities;
- Buildings and offices associated with club rooms, community facilities and services;
- Vehicle and pedestrian access to facilities;
- Car, cycle and coach parking areas for facilities;
- Directional signage, public art works and other public amenities such as toilets; and
- Landscaping, infrastructure, construction and earthwork activities associated with the above.

### **3.2 DESIGNATION EXTENT**

The designation is to include the area comprising Mosgiel Pool, Memorial Park and Peter Johnstone Park, as depicted in Figure 2. The legal descriptions for the sites are detailed in section 2.2 of this report. Figure 2 also shows existing designations in the area. D615 will be uplifted once the proposed designation becomes operative. The remaining designations on the site will remain in place.

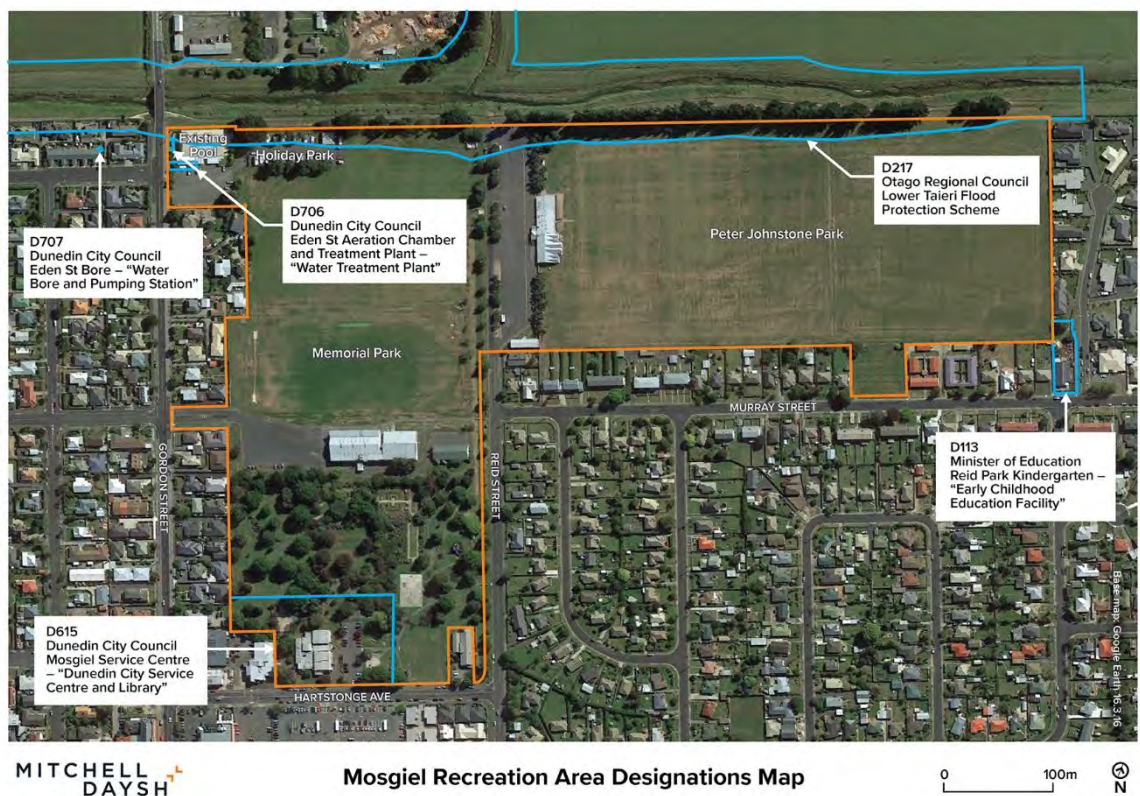


Figure 2: Extent of Designation

### 3.3 DESIGNATION CONTROLS

A set of conditions are proposed to be applied to the designation to ensure the values of the site and area are protected, and potential effects are appropriately mitigated. These conditions have been developed following guidance from:

- the technical specialists who assessed the proposal and whose reports are attached to this Notice of Requirement,
- Dunedin City Council departmental staff;
- key stakeholders such as:
  - the Taieri Community Facilities Trust,
  - New Zealand Transport Agency (NZTA),
  - Otago Regional Council,
  - sports field users (e.g. Football Club and Rugby Club),
  - iwi,
  - neighbours, and
  - interested parties.

Proposed conditions are listed in section 7.1 of this report. In summary, they address:

- Building height;
- Building floor area;
- Building site coverage;
- Minimum building setbacks from boundaries and height in relation to boundary controls;
- Building design and appearance;
- Landscape treatment and carparking controls;
- Signage;
- Tree protection;
- Lighting;
- Carparking requirements;
- Otago Regional Council Lower Taieri Flood Protection Scheme designation;
- Noise;
- Stormwater;
- Subdivision;
- Building floor levels; and
- Earthworks.

#### **4. REASONS WHY THE DESIGNATION IS NECESSARY - OBJECTIVES OF THE REQUIRING AUTHORITY**

The requiring authority is required to show that the public work and the designation will meet its objectives. Accordingly, it is first necessary to set out the objectives of the requiring authority, and then demonstrate that the proposed works to be carried out in terms of the designation will meet these objectives.

The DCC seeks to ensure that the variety of functions, as outlined in this Notice of Requirement, can be carried out efficiently and effectively.

It is intended that the designation will establish the planning framework for the site. It will mean that all existing activities such as the sports grounds, gardens and existing Mosgiel Pool can continue to operate.

The designation will also mean that if the DCC seeks to progress with any developments or upgrades within the site (such as the proposed Taieri Aquatic Facility), it will be able to do so without seeking further planning approval, provided the development complies with

the conditions of the designation<sup>1</sup>. The conditions of the designation will establish limits that any future development will need to sit within. These conditions will seek to manage any actual or potential effects that could arise on surrounding neighbours and the community and will relate to matters such as traffic and access requirements, the management of noise and visual amenity considerations (e.g. building height and setbacks).

The objectives of the project are:

- To operate, maintain, upgrade and expand the facilities within the Mosgiel Community and Recreational Area to provide for a range of sporting, cultural and community activities.
- To provide for, maintain and upgrade the facilities, services and amenities within the Mosgiel Community and Recreational Area in a manner that provides for the current and future needs and social and economic wellbeing of the Mosgiel and surrounding community.
- To enable an efficient and flexible approach to the maintenance and development of the Mosgiel Community and Recreational Area, while also managing any actual or potential adverse effects of future development on the surrounding community.

All the sporting, recreational and community activities catered for at the site are a critical part of Mosgiel's community. Bringing all of these together under a designation, a 'tailor-made' planning framework, allows Council to enable and manage change on the site and provide for the current and future needs and social and economic wellbeing of the community.

A designation will ensure that the facilities can be managed efficiently and effectively by the requiring authority. A designation is an appropriate planning method to ensure that the DCC can provide for any future works and services at the proposed site in a timely and efficient manner whilst appropriately managing effects on the environment, particularly nearby sensitive activities such as neighbours.

## **5. PERMITTED BASELINE/EXISTING ENVIRONMENT - DISTRICT PLAN ZONE PROVISIONS**

### **5.1 DUNEDIN CITY OPERATIVE DISTRICT PLAN**

A summary of the Dunedin City Operative District Plan zoning and rules that apply to the current site is provided below.

---

<sup>1</sup> It is acknowledged that resource consent may be required under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health if that part of the site to be earth worked is a HAIL site.

**Table 3: Zoning and other planning requirements at the current site.**

Operative District Plan	
Zone	Residential 1 Zone
	On the boundary of the Groundwater Protection Zone B
	Partly within the Urban Landscape Conservation Area 09 – “Silverstream Banks and Adjoining Parks, Mosgiel”
	Designation 706 Dunedin City Council Eden Street Aeration Chamber and Treatment Plant, Gordon Road
	Designation D217 Otago Regional Council Lower Taieri Flood Protection Scheme
	Designation 615 Dunedin City Council Mosgiel Service Centre, Dunedin City Service Centre and Library
Noise Area	50Dt / 35Nt dBA

Residential Zone Rule 8.7.1(ii) provides for Recreational Activities, except for structures in excess of 25m<sup>2</sup>, as permitted activities, subject to achieving certain conditions. The relevant conditions include:

- minimum yard setbacks for buildings – from the road: 4.5m; all other boundaries: 2m;
- building height limits: 9m;
- height plane angle: 63°;
- maximum site coverage: 40% for front sites, 40% excluding access leg for rear sites;
- parking– for recreation activities car park per 750m<sup>2</sup> of site area;
- loading – no requirement;
- access – to comply with the requirements in Chapter 20 of the District Plan<sup>2</sup>;
- signs - limited to 0.5m<sup>2</sup> per site;
- noise, glare, lighting, electrical interference;
- earthworks.

<sup>2</sup> Compliance with these rules cannot be determined until detailed site plans are available.

Where a permitted activity does not achieve the above conditions, that aspect of the activity comprises a restricted discretionary activity (Rule 8.7.4(i)).

Rule 8.7.5 (ii) provides for structures for recreational activities with a floor area greater than 25m<sup>2</sup> as discretionary activities. The aquatic centre will be greater than 25m<sup>2</sup> in area and therefore will comprise a *discretionary activity*.

In relation to the Urban Landscape Conservation Area 09, the erection of a structure greater than 20m<sup>2</sup> in area and 5m in height is a controlled activity (Rule 13.8.1), and the removal of bush in any Urban Landscape Conservation Area is a restricted discretionary activity (Rule 13.8.2). These rules would not alter the discretionary activity status of the proposal, however, they will require additional matters to be considered via the resource consent process.

The earthworks required to establish any sizeable facility would also require resource consent. Further, it is expected that a Detailed Site Investigation would be required under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011, given the use of the site for a swimming pool and sports fields.

Transportation matters such as ensuring sufficient car parking and access to the site is provided, and managing the effects of the car parking and access on neighbours and the wider transport network would be considered via any consent process.

## **5.2 DUNEDIN CITY PROPOSED DISTRICT PLAN (“2GP”)**

Under the 2GP the site is zoned Recreation Zone, and is within:

- An infrastructure constraint area;
- Hazard 3 – Flood Hazard Area 20 (there are no rules under this overlay that affect this proposal);
- Dunedin Airport Approach Fan;
- Designation D217 – Otago Regional Council Lower Taieri Flood Protection Scheme;
- Designation D706 Dunedin City Council - Eden Street Aeration Chamber and Treatment Plant - "Water Treatment Plant".

The pool and most of the other existing uses on the site are defined as a ‘Sport and Recreation’ activity under the 2GP, and this activity is a permitted activity in the Recreational Zone, subject to compliance with the relevant performance standards relating to hours of operation and car parking.

Regarding the hours of operation, the 2GP limits hours to Sunday to Thursday – 7.00am-10.30pm, and Friday to Saturday – 7.00am-midnight.

Regarding minimum car parking, the 2GP requires 1 parking space for every 5 persons that the facility can accommodate at one time.

In addition, the bulk and location requirements apply to any buildings, so are therefore relevant. These include the rules for managing hazards such as flooding. The relevant rules are set out below:

- Setback from rivers – buildings must be set back 5m from the top of the stop bank (approx.);
- Buildings that are over 350m in area – Restricted Discretionary activity;
- Earthworks – Restricted Discretionary activity;
- Parking area for over 50 parks – Restricted Discretionary activity;
- Storage and use of hazardous substances – Permitted activity (subject to limitations).

Decisions are expected to be released on the 2GP during November 2018. Once the decisions are released, the 2GP provisions can be relied upon (except for those that are appealed).

## **6. ASSESSMENT OF EFFECTS ON THE ENVIRONMENT**

### **6.1 POSITIVE EFFECTS**

The existing facilities at the proposed designation site are currently widely used by the Mosgiel and surrounding communities. The proposed designation provides for the ongoing operation, maintenance, upgrade and expansion of valuable community, cultural, sporting and recreational facilities / activities within the proposed designation site, providing for the current and future needs and social and economic wellbeing of the Mosgiel and surrounding community.

All the sporting, recreational and community activities catered for at the site are a critical part of Mosgiel's community. Bringing all of these together under a designation, a 'tailor-made' planning framework, allows Council to enable and manage change on the site and provide for the current and future needs and social and economic wellbeing of the community.

Currently the swimming pool on the site is under sized and only open for the summer months. The designation will provide for the future development of a new, larger swimming complex on the site servicing the Mosgiel and surrounding communities.

The inclusion of conditions to the designation provides certainty to the community of the scale and type of future development that can occur on the site and means that any actual or potential adverse effects of future development on the surrounding community can be

effectively managed. The conditions also provide protection for landscape and amenity values.

Overall, the proposed designation results in significant positive effects for the Mosgiel and surrounding communities.

## **6.2 VISUAL AND AMENITY / URBAN DESIGN EFFECTS**

Mike Moore, Landscape Architect, has prepared a Landscape and Visual Effects Assessment Report (attached as **Appendix B**) with regards to the proposed designation. The report notes that the designation provides for the continuation and further development of the activities and facilities that are already existing on the site presently (community and recreational activities) and generally, the existing landscape character (and overall scale) is unlikely to be significantly changed.

Whilst the designation needs to retain flexibility for development, amenity conditions (see section 7.1 of this report for proposed conditions) can provide safeguards that the open space / parkland values will be protected. This aside, it is acknowledged that development could result in the reduction of openness or loss of trees in some areas. Equally however, development of facilities has the potential to improve the landscape values, e.g. through associated additional tree planting or the quality of building design.

Overall, any adverse landscape effects are assessed as being of low significance. Development involving sensitive (building and landscape) design could also have positive effects.

In terms of visual amenity effects, the landscape report identified the people likely to be most sensitive to change would be passive recreational users and adjacent neighbours.

The provision for increased built form, along with the associated potential for more parking areas and / or possible tree removal could give rise to adverse effects on the passive recreational amenity values, but the proposed mitigation conditions will ensure that these effects are appropriately contained and / or rectified. It is considered any adverse effects (excluding short term construction effects) will be low, and the existing character will be essentially conserved and possibly enhanced.

The designation provides for further development of buildings and car parks and could involve the removal of trees. This entails the potential for adverse amenity effects for adjacent neighbours. The proposed conditions however, will mitigate adverse effects to a standard considered generally consistent with amenity standards in residential zones. Potential building scale (both height and footprint) is greater than that permitted in Residential or Recreation zones but the setbacks proposed are greater to recognize this. Conditions are also proposed to mitigate any adverse effects associated with car parking, signage and lighting.



Overall, it is considered that the mitigation conditions proposed will appropriately protect landscape and amenity values, with any adverse effects being of low significance.

### **6.3 TRAFFIC AND TRANSPORTATION EFFECTS**

Carriageway Consulting Limited were commissioned to prepare a Transportation Assessment for the proposed designation (attached as **Appendix C**). Discussions have also taken place with the New Zealand Transportation Agency (**NZTA** or **the Agency**) regarding traffic flows onto Gordon Road, which is a State Highway.

The site is already being used for community and recreation purposes, and in this regard, the existing uses of the site are expected to continue. The likely changes arising from the designation are the potential for a new aquatic centre to be established, potential further intensification of the site's use and for new community events to take place. The assessment looked at the potential effects of these changes on the roading network capacity, non-car modes of travel, form of the access intersection(s) and road safety. The findings of this assessment are as follows:

#### **6.3.1 Roothing Network Capacity**

In terms of roading network capacity, the assessment forecast the greatest increase in traffic flow would likely be on Reid Avenue (up to 29% increase or up to an additional 80 vehicle movements per hour), followed by Murray Street (up to 15% increase or up to an additional 20 vehicle movements per hour). This level of traffic is likely to be unnoticeable within the context of the prevailing volumes, and it does not give rise to any change in the level of service provided.

In addition, if the aquatic centre was to be located with frontage onto Gordon Road, the forecast traffic flows are already being generated on each of the affected roads during the September - March period each year. Thus, any 'effects' relate solely to potential for extending this seven month period to a year-round activity. It could reasonably be expected that if there are any capacity-related effects associated with the potential aquatic centre then they will already be occurring within this period.

The traffic generated by the establishment of an aquatic centre can be accommodated on the adjacent roading network without capacity or efficiency issues arising. Existing levels of service will be maintained on the roads potentially subject to an increase in traffic, and even when there is a change in the level of service, this remains within the zone of stable flow.

No details are available regarding the potential community and cultural activities which may take place at the site (such as their size, timing or frequency), and thus their traffic generation cannot be calculated. However, large events will change the normal operating conditions on the road network, and hence they would be required to operate under a Traffic Management Plan, which will be required to be approved by the Council (and

potentially also NZTA). As part of this, an assessment is required of the amount of traffic generation and ways in which it can be accommodated on the road network.

Smaller events may occur more frequently, but it is common that these take place during the weekend and outside the peak periods on the roading network, meaning that they will not have adverse effects on road efficiency or safety.

### **6.3.2 Non-Car Modes of Travel**

The capacity of the pedestrian network in the area is highly unlikely to be exceeded as a result of any additional travel to and from the site. While there may be some increase in cycling and public transport users, the numbers will be insufficient to give rise to the need for any improvement of any infrastructure of services.

### **6.3.3 Form of the Access Intersection(s)**

The Transportation Assessment forecast maximum traffic volumes for the proposal. Based on a maximum volume of 650 vehicles per hour on Gordon Road, an auxiliary lane is required when more than 12 vehicles turn right into the site. This is likely to be achieved solely by the potential aquatic centre, and it is highly likely that it is already achieved by the existing uses on the site. Therefore, it is considered that any access onto Gordon Road should have either a right-turn lane provided, or some other means implemented by which turning vehicles can be separated from through traffic.

However, the prevailing 275 vehicles per hour on Reid Avenue mean that auxiliary lanes are required when there are more than 75 turning vehicles. It is not considered that this is likely to be achieved.

Discussions with NZTA have identified the need to discuss access arrangements with the Agency during the detailed design phase of the project to ensure intersection upgrades are planned appropriately should they be needed.

### **6.3.4 Road Safety**

The accident history in the vicinity of the site does not indicate that there are any particular features or factors that could be exacerbated by the proposed designation, even allowing for the additional traffic movements that will be generated.

### **6.3.5 Car Parking**

In terms of the potential aquatic centre, the proposal makes allowance for 1 space for every 3 people that the building is designed for, which is considered appropriate.

### 6.3.6 Conclusions

Overall, the proposed designation can be supported from a traffic and transportation perspective. The proposed designation will not result in adverse effects on traffic and transportation that cannot be appropriately avoided, remedied or mitigated.

## 6.4 NOISE EFFECTS

Marshall Day Acoustics Limited were commissioned to prepare a Noise Assessment for the proposed designation (attached as **Appendix D**). The findings of the assessment are as follows.

The application site is a long established facility providing a wide array of recreational and community facilities. While largely sited in a residential context, the site (and the surrounding residential area) adjoins Rural and Commercial zoned land, with Industrial zoned land at greater distance. In addition, the site is adjacent to a community aerodrome and under the approach and departure route for Dunedin Airport. While likely to be reasonably quiet in the evenings and at night, the area can be expected to be moderately noisy during the daytime, with significant peaks of noise associated with aircraft and rail transport links.

It is against this context that the likely noise effects that may arise from recreational facilities within the designation area were considered.

Marshall Day favour the approach taken by the proposed 2GP District Plan to make certain activities associated with recreation exempt from the District Plan noise standards.

For much of the time (i.e. normal evening and weekend use), noise levels received at nearby dwellings will not be likely to exceed the operative District Plan permitted activity standard of 50 dB LA10 (day-time) and 45 dB LA10 (evenings). This is commensurate with the most stringent guidance described in the Noise report. Where noise levels exceed the day-time noise standard, such as may occur for games of note or where multiple games are being played concurrently, this will be for defined and relatively brief periods related to seasonal field sports activities; and then only at times. Actual levels of noise received will be lower at other times.

If noise from the hire of facilities for functions is required to comply with the applicable District Plan noise performance standards, there will be no significant adverse noise effects.

Similarly, where fixed plant operates at night, there will be no significant adverse noise effects if this achieves the applicable night-time noise standard (Marshall Day suggest the 2GP proposal of 40 dB LAeq).

Marshall Day set out a number of recommendations to control and mitigate potentially adverse effects arising from functions and mechanical plant within the designation, including:

- A condition that noise from functions complies with the applicable District Plan noise limits;
- A condition of consent requiring all mechanical plant to cumulatively comply with the applicable District Plan noise limits.
- A condition requiring noise control fencing should any car park be established within 5m of a residential site. The car park is to be designed such that the front of a car is to be at least 1m from the fence.
- That any organisation providing facilities for function hire have a Noise Management Plan (NMP), approved by Dunedin City Council, that covers such matters as:
  - Management of facility user expectations;
  - Controls around hours of use;
  - Ensuring music and crowd noise does not exceed consented limits;
  - Ensuring that no glass or other hard materials is dumped outdoors at night;
  - Traffic control (where applicable);
  - Any other matters considered relevant;
  - Complaints and community relationships; and
  - Regular reviews of the NMP.

Overall, it is considered that any adverse noise effects arising from the operation of recreational and community activities within the designation will be minimal and can be appropriately avoided, remedied or mitigated by the proposed designation conditions.

## **6.5 EFFECTS ON INFRASTRUCTURE AND EXISTING LAND USES (E.G. FLOOD RISK)**

GHD were commissioned to prepare an Infrastructure Review for the proposed designation (attached as **Appendix E**). The findings of this review are as follows:

### **6.5.1 Water Supply**

The new pool facility and development covered by the designation will result in increased water demand, however this can be met by the current network without the need for upgrades. Stress on the water supply system associated with establishment of irrigation for the cricket pitches can be managed by programming irrigation during off-peak periods or the groundwater bores at Gordon Street could be used as a supply source as the irrigation would not need to be from a potable supply.

### **6.5.2 Wastewater**

The wastewater network has capacity to accommodate the increased flows associated with the pool during normal operation. It is noted that the existing system does experience peaks in flow during wet weather. Until this is addressed, the associated frequency of overflows to Silver Stream and the risk of surcharge in the lower sections associated stormwater and groundwater ingress will increase slightly with the additional flows from the new development. The nature of the wastewater discharges will have no significant effect on the downstream wastewater treatment system.

### **6.5.3 Stormwater**

While the current stormwater system is currently under capacity, there are upgrades currently in construction. The upgrade design is assumed to include an allowance for some increase in impervious surfacing within the designation area. If this is not the case, or a greater allowance is required, the provision of pumped stormwater system discharging directly to Silver Stream would mitigate any adverse effects. On-site attenuation can also be considered, such as via rain gardens or wetlands.

### **6.5.4 Flooding**

Any development at the site covered by the proposed designation will have a less than minor effect on volumes and flood levels in Silver Stream and flood risk to the adjacent farmland and properties downstream.

### **6.5.5 Power**

There are 11kV cables running alongside and through the designation area to the site. Therefore, there will be no significant issues associated with servicing the site, however relocation of the part of the cable running through the site may be required depending on the selected location of the pool development.

### **6.5.6 Summary**

The proposal can adequately be serviced by existing infrastructure in terms of water and power supply and wastewater disposal. There are currently upgrades to the stormwater system under construction. Any development associated with the proposed development will have a less than minor effect on flooding.

Overall, the effects on infrastructure are less than minor and can be appropriately managed by the proposed conditions.

## 7. MANAGEMENT OF EFFECTS

### 7.1 PROPOSED CONDITIONS

In order to appropriately protect or enhance landscape, infrastructure, transportation and amenity values, a series of proposed conditions to the designation are attached at

**Appendix G.** They are summarised in Table 4 below:

**Table 4: Proposed Designation Conditions.**

Proposed Condition	Reasons
<p><b>Building height</b></p> <p>New buildings and extensions to existing buildings shall be a maximum height of 10m (excluding rooftop servicing equipment).</p> <p>New lighting towers shall be a maximum height of 30m.</p>	<p>A maximum building height limit is required to provide an amenity bottom-line.</p> <p>The proposed 10m height limit provides for the foreseeable needs for community and recreational facility development.</p> <p>The highest existing building in the parks, the Memorial Park grandstand building, is around 9.5m high and the maximum height proposed is consistent with, and provides for buildings of this (existing) scale.</p> <p>The 10m height proposed is not significantly greater than the 9m maximum building height standard for surrounding Residential zones and is consistent with the 10m maximum building height in the adjacent Rural zone.</p> <p>The scale of the parkland is such that buildings of up to 10m in height can be accommodated without significant adverse effects on the existing landscape character.</p> <p>It is necessary to include exclusions for servicing equipment and lighting towers as these are essential components of sports grounds.</p>
<p><b>Building floor area (per building)</b></p> <p>The maximum floor area for any individual building (new or existing extended) shall be 3200m<sup>2</sup>.</p>	<p>A maximum floor area limit per building is required to provide an amenity bottom-line.</p> <p>The proposed 3200m<sup>2</sup> floor area limit provides for the foreseeable needs for the community and recreational facility development.</p> <p>The scale of the parkland is such that buildings of up to approximately 3200m<sup>2</sup> (in combination with the proposed building height limit and proposed design and appearance standards) can be accommodated without significant adverse</p>

	effects on open space character and the existing landscape character.
<p><b>Combined building site coverage and setbacks</b></p> <p>The maximum building site coverage within the designation area shall be 5.5%.</p>	<p>A maximum combined building site coverage control is required to provide an amenity bottom-line.</p> <p>The existing building site coverage is approximately 3% and does not significantly adversely affect open / green space values. An additional 2.5% will provide for the foreseeable needs for community and recreational facility development but (in combination with other proposed amenity protection provisions) will not significantly adversely affect the existing open space character values and landscape values of the parkland.</p>
<p>Minimum building setbacks and height in relation to boundaries.</p> <p>The minimum building setback from Council drains shall be 1.5m.</p> <p>The minimum building setback from boundaries shall be 4.5m.</p> <p>[Note that buildings designed to cater for functions, large numbers of people and/or mechanical plant are likely to need additional setbacks to achieve required noise standards – see below].</p> <p>For all boundaries other than road boundaries, buildings (excluding lighting towers) must not protrude from a plane rising at an angle of 45 degrees measured from ground level at the boundary.</p> <p>For all boundaries other than road boundaries, lighting towers must not protrude through a plane rising at an angle of 75 degrees measured from ground level at the boundary [this results in an 8.4m setback for a 30m lighting tower].</p>	<p>Minimum building setbacks from Council drains are required to protect such drains and ensure they are not damaged during construction, and that access for maintenance is retained.</p> <p>Minimum building setbacks and height in relation to boundaries controls are required to provide an amenity bottom-line.</p> <p>The setbacks proposed are consistent with those notified in the Recreation zone and the Residential 1 zone in the 2GP and are in keeping with the existing character of the area.</p> <p>The 4.5m setback proposed from boundaries will assist in protecting open space values. In combination with the proposed height in relation to boundary controls, it will mitigate any adverse effects on spaciousness and shading. In combination, these controls are more restrictive than those notified in the 2GP for the Recreation and Residential zones – to recognize that buildings provided for under the designation could be higher and larger than permitted buildings in these zones.</p>
<p><b>Building design and appearance</b></p> <p>The maximum length of any new or extended existing building shall be 65m, however any building façade greater than 20m in length shall have glazing or other architectural feature to break up the solid appearance of the building.</p>	<p>Building design and appearance controls are required to provide an amenity bottom-line.</p> <p>The length of buildings is an important determinant of their apparent scale and degree of prominence. The combined length of the Memorial Park Grandstand / Squash Courts buildings is approximately 78m and is considered unduly prominent. A 65m maximum is proposed</p>

<p>Painted finishes for new or extended existing buildings shall not exceed Light Reflectance Values (LRV) of 35%.</p> <p>Service and storage areas associated with new or extended existing buildings are to be effectively screened by fencing and / or planting from adjacent roads and properties and from high use public areas within the parks.</p>	<p>to provide for the foreseeable needs for community and recreational facility development, but (in combination with other controls) will provide a reasonable limit to the apparent scale of buildings.</p> <p>Light reflectance values are an important determinant of the visual prominence of buildings. Mid and darker tones as proposed are more recessive and contrast less with parkland elements such as trees and grass.</p> <p>Service and storage areas can contribute clutter and reduced amenity levels which can be effectively mitigated by screening.</p>
<p><b>Landscape treatment to car parking areas</b></p> <p>New or extended car parking areas are to be set back a minimum of 1.5m from all external boundaries and these areas are to be planted to mitigate adverse effects of the car parks from adjacent residential properties, including from light spill from vehicles.</p> <p>New or extended car parking areas are to have a minimum of 12% of the total area of the car park planted, including at least 1 tree, at least 3m high, per 120m<sup>2</sup> of the total car park area.</p>	<p>Landscaping requirements for car park areas are required to provide an amenity bottom-line.</p> <p>Car parks can detract from amenity values through the visual impact of large areas of sealed surfaces and clutter associated with parked vehicles. Vegetation, in particular trees, help to relieve and soften this effect.</p> <p>Planting areas and the plants themselves, need to be of appropriate scale and frequency to provide for the mitigating effect required.</p>
<p><b>Signage</b></p> <p>a. All ancillary signs, except commercial sponsorship signs must only display the name, and logo of the relevant land use activity or organisation, locational, directional or informative information relevant to the area.</p> <p>b. Signs attached to buildings:</p> <ol style="list-style-type: none"> <li>i. any signs displaying the club/s name on clubrooms must not exceed a maximum total area of 5m<sup>2</sup> per building face;</li> <li>ii. the maximum number of permanent commercial sponsorship signs is one sign for the naming rights sponsor of the sport and recreation activity (club), with a maximum area of 3m<sup>2</sup>, except: for clubs that operate in an enclosed area that is only open to members, apart from during events, there is no maximum number of commercial sponsorship signs, provided those signs</li> </ol>	<p>Controls over signage are required to protect amenity values and it is considered that those outlined are appropriate to this area.</p>



<p>are not visible from outside of the enclosed area;</p> <ul style="list-style-type: none"> <li>iii. other signs must not exceed a total maximum area of 1m<sup>2</sup> per building face;</li> <li>iv. signs must remain entirely within the visual profile of the building or structure; and</li> <li>v. signs must not project higher than the lowest point of the roof, except as mounted flat against a parapet or gable end.</li> </ul> <p>c. Freestanding signs</p> <ul style="list-style-type: none"> <li>i. must not exceed a maximum total area of all display faces of 3m<sup>2</sup>; and each display face must not exceed 1.5m<sup>2</sup> in area;</li> <li>ii. must not exceed a maximum height above ground level of 4m; and</li> <li>iii. must be positioned within the site boundaries and located so they do not obstruct any parking, loading or access areas.</li> </ul> <p>d. Portable freestanding signs:</p> <ul style="list-style-type: none"> <li>i. Commercial sponsorship signs erected for matches, competitions, or events must not be displayed for more than one day before the competition/event, and must be removed within one day of completion of the competition/event.</li> <li>ii. Any other portable signs must not exceed one sign per activity, and 0.9m in height and 0.6m in width.</li> <li>iii. Signs must be positioned within site boundaries.</li> </ul>	
<p><b>Tree protection</b></p> <p>Any trees that are removed through the development of community and recreational facilities are to be replaced.</p> <p>No new trees shall be planted within 1.5m of Council drains.</p>	<p>The trees within these areas contribute positively to the amenity of the parks themselves and the wider townscape. Development of community and recreational facilities should not result in reduced tree cover and associated amenity in the long term.</p> <p>Minimum new tree setbacks from Council drains are required to protect such drains and ensure they are not damaged by root invasion, and that access for maintenance is retained.</p>
<p><b>Lighting</b></p> <p>All lighting is to comply with the provisions of the Recreation zone in the 2GP.</p>	<p>Controls over lighting, and in particular light spill, are required to protect amenity values and it is considered that those outlined in Section 20.5.4</p>

<p>1. Light spill measured at the boundary of a Residential zone or any site used for residential purposes must not exceed the following limits:</p> <table><tr><th colspan="2">Time</th><th>Limit</th></tr><tr><td>a</td><td>7am – 10pm</td><td>10 Lux</td></tr><tr><td>b</td><td>10pm – 7am</td><td>3 Lux</td></tr></table> <p>c. This standard does not apply to light spill from the headlights of motor vehicles.</p>	Time		Limit	a	7am – 10pm	10 Lux	b	10pm – 7am	3 Lux	<p>(and 9.3.5) of the 2GP are appropriate to this area.</p>
Time		Limit								
a	7am – 10pm	10 Lux								
b	10pm – 7am	3 Lux								
<p><b>Carparking and Access Requirements</b></p> <p>1 carpark to every 3 people a new building will be designed for.</p> <p>Should a new building greater than 500m<sup>2</sup> in area be established consideration shall be given to whether upgrade or reconfiguration of the vehicle access into the site is necessary to manage increased traffic flows and the outcomes of this consideration be included in the outline plan for the works.</p> <p>Prior to the design of the aquatic centre being finalised and an outline plan lodged with Council, consultation shall be undertaken with the New Zealand Transportation Agency to identify the most effective, efficient and safe access to SH87.</p>	<p>Sufficient carparking should be provided on-site for any new developments to the extent necessary. Given the value of the designation site for recreation purposes, it is important not to commit more site than necessary for carparking, thus losing the recreational benefit of the site.</p> <p>Access arrangements should be discussed with NZTA prior to the finalisation of the new aquatic centre.</p>									
<p><b>Otago Regional Council Lower Taieri Flood Protection Scheme Designation</b></p> <p>No buildings shall be located within Otago Regional Council’s Designation D217 (Lower Taieri Flood Protection Scheme)</p>	<p>Required by the ORC designation to ensure no risk to the important Flood Protection Scheme.</p>									
<p><b>Noise</b></p> <p>Comply with proposed district plan rules (note some activities exempt – night-time rules to apply for buildings with mechanical plant and/or to be used for functions).</p> <p><i>Carparks:</i></p> <p>Noise control fencing shall be provided should any new carpark be established within 5m of the boundary with a residential site, and the carpark shall be designed such that the front of the car</p>	<p>The designation provides for a range of community and recreation activities. Amenity of nearby residential neighbours will be managed by requiring compliance with night-time district plan noise limits, including the potential for acoustic insulation and/or noise mitigation fencing for carparks or buildings with mechanical plant and/or used for functions which are close to residential neighbours.</p>									

<p>shall be at least 1m from a noise control boundary fence.</p> <p>Noise control fence: Noise control fence to be minimum 1.8m above car park surface. It shall be constructed from a durable material of at least 10kg/m<sup>2</sup> free from cracks, gaps and holes.</p> <p><i>Buildings:</i></p> <p>Suitable noise insulation for buildings and plant shall be utilised to ensure noise generated onto adjacent residential properties achieves district plan night-time noise levels.</p> <p>[This means buildings that will never need to have functions considered, mech plant can 'use' the whole allowance. Where functions may be a frequent or important ad hoc service offered by the building, mech plant should be designed to be District Plan night-time minus 10dB to avoid cumulative effects.]</p>	
<p><b>Stormwater</b></p> <p>For any increase in hard stand (excluding buildings) of more than 2.1% of the designated site or 4,500m<sup>2</sup>, a stormwater assessment is required to determine whether a site-specific stormwater solution is necessary (with potential for direct flow to Silver Stream via pump).</p> <p>As part of such an assessment, consideration shall be given to whether stormwater detention via wetlands/greenspace is appropriate.</p>	<p>Council is currently upgrading its stormwater system for the area and has plans to install a new pump station adjacent to the Silvers Stream on the site. For any major increases in hardstand further consideration of stormwater disposal may be necessary to ensure there is still capacity in the system.</p> <p>On-site stormwater detention via wetland or other greenspace may be appropriate to assist with stormwater management.</p>
<p><b>Minimum floor levels</b></p> <p>In Hazard 3 (flood) overlay zone, new buildings to be used for sensitive activities must have a floor level that is equal to or greater than the floor level shown on the Flood Minimum Floor Level Map, or if not shown on that map, at least 500mm above ground level.</p> <p>Buildings that do not have people regularly present (for example, garages, carports, and sheds) are exempt from the above performance standard for minimum floor levels.</p>	<p>As per proposed 2GP provisions.</p>
<p><b>Earthworks</b></p> <p>For earthworks exceeding 1000m<sup>3</sup> of excavation or fill, appropriate sediment control measures will be submitted to Council for certification prior to</p>	<p>Given the flat nature of the site, it is unlikely that significant earthworks will be required. However, should large scale earthworks be proposed, appropriate sediment control measures should</p>

earthworks being undertaken on-site. These shall be in accordance with appropriate guidelines such as Environment Canterbury Erosion and Sediment Control Toolbox or similar.	be installed, and should be certified by Council to manage any run-off risk.
---	--

## 8. SECTION 168A – STATUTORY FRAMEWORK AND PLANNING/ STRATEGY DOCUMENTS

While developments under a designation are not required to comply with the rules set out within relevant District Plans, the Council must have particular regard to all relevant provisions of any national policy statement, regional policy statement, proposed regional policy statement, regional plan, proposed regional plan, district plan, or proposed district plan when considering the Notice of Requirement (in accordance with section 171(1)(a) of the RMA). Accordingly, the relevant provisions in the Otago Regional Policy Statement, Proposed Otago Regional Policy Statement and the Dunedin City District Plans are summarised below.

### 8.1 REGIONAL POLICY STATEMENT

The Regional Policy Statement for Otago (**RPS**) provides an overview of the resource management issues for the Otago region. It sets out how natural and physical resources are to be managed in an integrated way to promote sustainable management.

The objectives and policies of the RPS that are relevant to the designation are discussed below.

Land Objective 5.4.4 and supporting Policy 5.5.7 seek to ensure that public access opportunities exist in respect of Otago's natural and physical land features. Designating the site for recreational purposes means that the site and activities on it will be maintained and protected for public access and use.

Built environment Objective 9.4.3 and supporting Policies 9.5.1, 9.5.4 and 9.5.5 seek to avoid, remedy or mitigate the adverse effects of Otago's built environment on Otago's natural and physical resources. In particular, Policy 9.5.5 seeks to maintain and, where practicable, enhance the quality of life for people and communities. The designation has appropriate conditions attached so as to appropriately avoid, remedy or mitigate the effects of any future development on the site and enables carefully planned recreation and community activities. The outline plan of works will address matters including landscaping, carparking and confirm adherence to the conditions of the designation.

Natural hazards Objective 11.4.2 and supporting Policy 11.5.3 seek to avoid or mitigate the adverse effects of natural hazards to acceptable levels by restricting development on sites or areas recognised as being prone to significant hazards. The designation achieves this

by preventing buildings in the area of land designated by Otago Regional Council for flood protection purposes and requiring a minimum floor level.

It is considered the proposed designation is consistent with the relevant objectives and policies of the RPS.

## **8.2 PROPOSED REGIONAL POLICY STATEMENT**

The Proposed Regional Policy Statement for Otago (**Proposed RPS**) was notified on 23 May 2015. Following the submissions and hearings on this document, a decision version of the Proposed RPS was released on 1 October 2016. The decisions attracted 26 appeals to the Environment Court.

The Proposed RPS seeks to achieve the following five key outcomes:

- Resource management in Otago is integrated;
- Kāi Tahu values and interests are recognised and kaitiakitaka is expressed;
- Otago has high quality natural resources and ecosystems;
- Communities in Otago are resilient, safe and healthy;
- People are able to use and enjoy Otago's natural and built environment.

The objectives and policies of the Proposed RPS that are of particular relevance to the designation seek to maintain or enhance public access to areas of value to the community (Objective 4.1 and supporting Policy 4.1.1), ensure that Otago's communities can make the most of the natural and built resources available for use (Objective 4.4) and ensure that any adverse effects of using and enjoying Otago's natural and built environment are minimized (Objective 4.5).

The purpose of the proposed designation is to provide for recreational and community facilities and to enable and manage future changes at the site. Thereby ensuring communities have continued access to these resources whilst managing and minimizing any adverse effects on the environment. It is considered the designation is consistent with relevant objectives and policies of the Proposed RPS.

## **8.3 DUNEDIN CITY DISTRICT PLAN (OPERATIVE)**

The objectives and policies of the Manawhenua chapter of the Operative Plan are relevant to this Notice of Requirement. Objective 5.2.1 and associated Policies 5.3.1 – 5.3.5 seek to ensure that the principles of the Treaty of Waitangi are taken into account in the management of natural and physical resources by consulting manawhenua on natural and physical resource matters of importance to them throughout the designation process and ensuring that adverse effects are avoided, remedied or mitigated. Consultation with Maree Leinlangeweelsloo on behalf of Ōtākou confirms that the runanga does not have an interest

in the designation, but is interested in talking with the project team about recognition of the site through interpretation panels or similar. This will occur during the detailed design phase.

The objectives and policies of the Residential 1 zone are relevant to this Notice of Requirement. Objectives 8.2.1 and 8.2.2 and associated Policies 8.3.1, 8.3.6, 8.3.9 and 8.3.10 seek to ensure that the adverse effects of activities on amenity values and the character of residential areas are avoided, remedied or mitigated and that activities do not adversely affect the special amenity values of rural townships and settlements. The designation seeks to maintain the area for recreational and community facilities. Conditions will be attached to the designation to ensure that the adverse effects of activities on the site do not detract from the existing amenity values and character of the surrounding residential area.

Objective 8.2.6 and supporting Policy 8.3.11 seek to recognise the positive effects of recreational activities while ensuring that their adverse effects are avoided, remedied or mitigated. The proposed designation provides for current and future important recreational and community facilities for the Mosgiel and surrounding communities.

Objective 8.2.7 and supporting Policy 8.3.10 seek to recognise that some community support activities contribute to the maintenance and enhancement of residential character and amenity. The designation will continue to provide for the Mosgiel Service Centre activities on the site. These are important services for the Mosgiel and wider communities.

Landscape Objectives 14.2.3 and 14.2.4, and supporting Policies 14.3.3 and 14.3.4, seek to ensure that land use and development do not adversely affect the quality of the landscape and to encourage the maintenance and enhancement of the quality of this landscape. The designation will have specific conditions attached to it to ensure landscape quality is maintained. Any future developments on the site will have to adhere to these conditions.

Hazards Objective 17.2.1 and supporting Policies 17.3.1 - 17.3.7 seek to ensure that the effects of natural hazards are avoided, remedied or mitigated. The designation has controls to ensure that no building is to be located within the Otago Regional Council flood protection designation area that overlaps this designation.

Objective 17.2.3 and Policy 17.3.9 seek to ensure earthworks are undertaken in a manner that does not put the safety of people or property at risk. The controls and conditions that are attached to the designation will effectively ensure that adverse effects of earthworks are minimised.

Transportation Objective 20.2.2 and supporting Policies 20.3.4 - 20.3.6 seek to ensure that land use activities are undertaken in a manner which avoids, remedies or mitigates adverse effects on the transportation network, and Objective 20.2.4 and Policies 20.3.5 and 20.3.6 seek to maintain and enhance a safe, efficient and effective transportation

network. Controls and conditions will be attached to the designation to ensure that any traffic-generating activities are effectively and efficiently managed so as to not adversely affect the safe and efficient operation of the roading network. Traffic assessments have been undertaken to ensure that traffic volumes generated can be handled by the existing roading infrastructure. Access ways will be upgraded as necessary.

Environmental Issues Objective 21.2.2 and associated Policies 21.3.3 – 21.3.5 and 21.3.7 seek to ensure that noise associated with the development of resources or the carrying out of activities does not affect public health or amenity values. Any development or activities on the site will have to comply with the noise controls attached to the designation.

It is considered that the designation will be consistent with relevant District Plan objectives and policies.

## **8.4 2GP**

The objectives and policies of the Recreation zone of the 2GP are relevant to this designation application.

Objective 20.2.1 and supporting Policies 20.2.1.1 and 20.2.1.3 - these policies are of particular relevance to the proposal as they aim to enable sport and recreation, leisure activities and a wide range of community activities in this zone.

Objective 20.2.2 seeks to support the efficient and effective operation of the recreation area, maintain a high standard of on-site amenity for users of the recreation area and maintain or enhance neighbourhood amenity and the amenity of any surrounding residential properties. This is supported by Policies 20.2.2.1 – 20.2.2.3, 20.2.2.5, 20.2.2.7 and 20.2.2.10. These policies seek to maintain on-site amenity for recreation area users, neighbourhood amenity and the amenity of surrounding residential properties by controlling such things as open space areas, building height, areas and setbacks, fence heights, car parking and signs. The proposed conditions to be attached to the designation address these matters and it is considered that they are consistent with these objectives and policies.

Objective 20.2.3 seeks to support earthworks necessary for land development whilst avoiding, remedying or mitigating adverse effects on visual amenity or surrounding properties. This is supported by Policies 20.2.3.1 – 20.2.3.3. The proposed conditions to the designation include appropriate controls to ensure any earthworks do not result in adverse visual amenity effects or effects on surrounding neighbours.

The objectives and policies of the Manawhenua chapter 14 of the 2GP are also of relevance. Objective 14.2.1 seeks to maintain the relationship between manwhenua and the natural environment. Policy 14.2.1.2 supports this by requiring buildings to be set back

from water bodies that are wahi tupuna. The designation is set back from the Silver Stream.

Overall, the proposed designation and attached conditions are consistent with the relevant objectives and policies of the 2GP.

## **9. RELEVANT OTHER MATTERS**

### **9.1 INTRODUCTION**

Other matters to consider include the provisions of the Kai Tahu ki Otago Natural Resources Management Plan ('**NRMP**', 2005) and 'Dunedin Towards 2050 – a Spatial Plan for Dunedin' (the '**Spatial Plan**', Sept 2012). These are discussed below.

### **9.2 KAI TAHU KI OTAGO – NATURAL RESOURCES MANAGEMENT PLAN**

The NRMP is the principal planning document for Kāi Tahu ki Otago (**KTKO**). It was developed to:

- Provide information, direction and a framework to achieve a greater understanding of the natural resource values, concerns and issues of KTKO;
- Provide a basis from which KTKO participation in the management of the natural, physical and historic resources of Otago is further developed; and
- Provide the basis, but not substitute, for consultation and outline the consultation expectations of KTKO.

The NRMP outlines the issues, objectives and policies for KTKO for the Otago Region. Chapter 5 of the NRMP sets out the generic issues, objectives and policies for the Otago region, while the objectives and policies for the Taieri catchments are set out in chapter 9. Of particular relevance are the objectives and policies relating to water- Wai Maori General Objectives 5.3.3:

- i. The spiritual and cultural significance of water to Kāi Tahu ki Otago is recognised in all water management.*
- ii. The waters of the Otago Catchment are healthy and support Kāi Tahu ki Otago customs.*
- iii. There is no discharge of human waste directly to water.*
- iv. Contaminants being discharged directly or indirectly to water are reduced.*
- v. Flow regimes and water quality standards are consistent with the cultural values of Kāi Tahu ki Otago and are implemented throughout the Otago Region and lower Waitaki Catchment.*
- vi. The unresolved issues surrounding water ownership are addressed.*

The general policies supporting these objectives can be found in section 5.3.4 of the NRMP, and include:





1. *To require an assessment of instream values for all activities affecting water.*
2. *To promote the cultural importance of water to Kāi Tahu ki Otago in all water management within the Otago Region and Lower Waitaki Catchment*
3. *To promote co-ordinated research into water-related issues that provides for Kāi Tahu ki Otago input.*
4. *To protect and restore the mauri of all water.*
5. *To encourage the use of the Cultural Health Index as a tool for monitoring waterways.*
6. *To oppose any further cross mixing of waters.*
7. *To promote to the Otago Regional Council and Environment Canterbury minimum flow levels, flow regimes, lake levels and lake operating levels for lakes and rivers that recognise and provide for Kāi Tahu ki Otago cultural values and the healthy functioning of associated ecosystems*

The proposed designation area is serviced by existing wastewater and stormwater disposal (although the stormwater system is being upgraded), to effectively manage stormwater and wastewater from the site. Furthermore, the designation has appropriate conditions relating to hardstand areas and stormwater. Any stormwater and wastewater disposal will be managed so that it does not result in adverse effects on waterways or groundwater.

Overall, the proposal is consistent with the objectives and policies of the NRMP, and Ōtākou have confirmed they have no interest in the designation in terms of mitigation of effects.

### 9.3 DCC SPATIAL PLAN

The Spatial Plan sets the strategic direction for Dunedin's growth and development for the next 30+ years. It outlines a broad set of principles, strategic directions, policies, and actions and visually illustrates how the City may develop in the future.

In terms of potential future development at the site, the Spatial Plan generally supports the proposed pool development and acknowledges the pressure on the existing facility:

*"The city faces a number of challenges when it comes to access. Increased demand for participation, a growing range of activities, and heightened expectations have put pressure on some facilities. For example, Moana Pool has had to turn away a number of different sporting codes due to insufficient capacity. Residential growth on the Taieri is placing pressure on the capacity of the Mosgiel Pool" (p.107)*

Key policies directing the future management and development of the Mosgiel-Taieri area are also in line with the potential future development at the proposed designation site:

*ESR 11(a) Encourage and promote the retention and establishment of essential services and facilities in townships (e.g. schools, dairies, petrol stations)*



The Spatial Plan lists a number of objectives and subsequent policies in Part 2: Strategic Directions, which support the intent of both the existing and future potential community and recreational activities at the site:

*Objective LIV 6. Dunedin citizens have access to, and actively participate, in sporting, recreational and leisure activities throughout the city:*

*Policy (a). Locate major community and recreation facilities (pools, libraries) close to existing population centres, within walking distance of residential areas, and along high frequency public transport routes.*

*Policy (b). Ensure existing residential areas have equitable access to good quality open space and basic recreational facilities, such as playgrounds.*

*Policy (c). Encourage new residential development to locate in areas of high accessibility to good quality open space and recreational facilities.*

It is considered that the objectives of the proposed designation are consistent with the directions, objectives and policies of the Spatial Plan.

## **10. CONSIDERATION OF ALTERNATIVES**

### **10.1 INTRODUCTION**

Under the RMA section 168A (3)(b), the requiring authority is required to give consideration to alternative sites, routes or methods of undertaking the work if the requiring authority does not have interest in the land or it is likely that the work will have significant adverse effects on the environment. Although DCC owns the land, and as demonstrated in section 6 of this report, the work does not result in significant adverse effects, alternatives have been investigated.

### **10.2 CONSIDERATION OF ALTERNATIVE METHODS**

There are three processes available to the DCC to obtain the necessary planning approval for the proposed Taieri Aquatic Facility and other large-scale developments on the site:

- designating the site to enable the proposed activity, buildings and structures;
- obtaining a resource consent for the proposed activity, buildings and structures; and
- varying the proposed 2GP to rezone the site 'Major Facilities Zone' (or similar).

Each of the above planning processes are discussed below and the preferred option, the designation approach, identified.



## 10.3 OPTION 1 - DESIGNATION

### 10.3.1 Overview

A designation is a form of ‘spot zoning’ over a site, area or route in a district plan. The ‘spot zoning’ authorises the requiring authority’s (in this case the requiring authority is the Dunedin City Council) work and activity on the site, area or route without the need for land use consent from the relevant territorial authority. A designation has a similar effect to a plan change establishing a permitted activity as it:

- identifies the land affected in the district plan;
- enables a requiring authority to undertake the works within the designated area without the need for a land use consent; and
- sets the parameters under which the activity can occur.

Designations are also similar to a comprehensive land use resource consent as they enable a requiring authority to undertake the works within the designated area (subject to any conditions applied to it).

A designation restricts anyone other than the requiring authority from carrying out work on the designated land that will prevent or hinder the project or work to which the designation relates, without first obtaining the requiring authority’s permission.

Designations have a number of advantages, including providing for activities that might otherwise be difficult to comprehensively provide for in a district plan. For example, designations are often used to provide for networks such as land transport, telecommunications and electricity transmission.

Designations can be used for public works which the requiring authority has financial responsibility for. Public work is defined in the RMA as:

*“has the same meaning as in the Public Works Act 1981, and includes any existing or proposed public reserve within the meaning of the Reserves Act 1977 and any national park purposes under the National Parks Act 1980:”*

Section 2 Public Works Act 1981 (1981 No 35) defines “public work” and “work” to mean:

*“(a) Every Government work or local work that the Crown or any local authority is authorised to conduct, undertake, establish, manage, operate, or maintain, and every use of land for any Government work or local work which the Crown or any local authority is authorised to construct, undertake, establish, operate, or maintain by or under this or any other Act; and include anything required directly or indirectly for any such Government work or local work or use:*

*“(b) Every Government work or local work constructed, undertaken, established, managed, operated, or maintained by any Education Authority within the meaning of the Education Act 1964 and every use of land for any Government*

*work or local work which such Education Authority constructs, undertakes, establishes, manages, operates, or maintains, and include anything required directly or indirectly for any such Government work or local work or use:*

*“(c) Any Government work or local work that is, or is required, for any university within the meaning of the Education Act 1989:”*

In this case, the public work would be the community and recreational use of the site, including the Taieri Aquatic Centre.

### **10.3.2 Discussion**

Designating the site is beneficial as any future developments on the site would not be subject to the rules of the District Plan. Rather it would be subject to the conditions of the designation, which are tailored to specifically provide for the range of activities the designation is provided for. That is, once designated, the aquatic centre (or other future developments) could be established. Further, future changes can be made to the building and activity provided the changes remain in line with the purpose of the designation and comply with the conditions of the designation without needing a resource consent. Rather, the outline plan process is used, which is not contestable and is not publicly notified but does require the Council to ensure adverse effects are suitably managed.

As the designation option creates a set of conditions that future development must comply with, it provides certainty of the type and scale of development that can take place on the site. This provides certainty to the public about what the land can be used for into the future. These conditions can also ensure that identified values will be protected and effects suitably managed.

## **10.4 OPTION 2 - RESOURCE CONSENT**

Another option for obtaining planning permission for future development on the site, such as the redevelopment of Taieri Aquatic Centre, is to obtain a resource consent.

It is noted that the provisions that apply to the site under the operative District Plan are more onerous than those of the proposed 2GP. Once the 2GP is operative, any development on the site will need to be assessed under this plan.<sup>3</sup>

Under the proposed 2GP, the site is zoned Recreation and the objectives, policies and rules enable activities such as the swimming pool redevelopment, including a restaurant ancillary to the swimming pool, as a permitted activity. In terms of buildings, any building greater than 350m<sup>2</sup> in area, and/or any wall longer than 20m is a restricted discretionary activity.

---

<sup>3</sup> While the 2GP rules cannot yet be relied upon as decisions have not yet been made on these rules, decisions are expected around mid-end of 2018. If it is likely that planning permission will not be sought until 2018, then it is expected that the 2GP will be largely operative and will apply to the site.

Other matters that would be addressed via the resource consent process would be car parking and access, and effects on the transportation network. It is noted that these matters will also be addressed via the designation option and the variation.

Overall, the Recreation zone is a very good fit for sporting and recreational activities such as the Taieri Aquatic Centre at the proposed site, and a consenting process would accordingly be expected to be relatively straight forward.

The main drawback of resource consent is that design has to be more advanced to secure it, it doesn't provide for future flexibility in terms of the pool, and also other uses of the wider site, and it doesn't provide for comprehensive planning for the wider site which can be implemented over time (i.e. via a masterplan).

## **10.5 OPTION 3 - VARIATION TO THE DISTRICT PLAN**

### **10.5.1 Overview**

The third option for obtaining planning approval for future developments at the site (such as the Taieri Aquatic Centre) is to change the underlying zone in the 2GP to a more favourable zone. A plan change to the Operative District Plan has not been considered given that decisions on the 2GP are expected to be released in November 2018, and at that time, the 2GP is expected to be largely operative (depending on appeals).

Rezoning the site to a zone that will specifically provide for future facilities and activities on the site (such as the Taieri Aquatic Centre) has been considered. Under the 2GP plan framework, the Major Facilities zone would be an appropriate zone for sporting, recreational or community facilities (much the same as the Major Facilities – Moana Pool zoning). If this rezoning option were pursued, a suite of objectives, policies and rules that enable such facilities at the subject site, and this site-specific zone could be included in the Major Facilities zone.

### **10.5.2 Discussion**

We consider the Recreation zone under the 2GP is reasonably appropriate for the current and future sporting, recreational and community uses of the site, and merit has not been identified in pursuing a plan change to change the zoning to a site-specific sub-zone within the Major Facilities zone. In addition to the rule framework, the objectives and policies of the Recreation zone are a good fit for the site's uses. This includes enabling objectives and policies that specifically provide for swimming pools managed by the DCC.

However, as noted above, the notified 2GP provisions remain in draft form until the Council releases decisions on the 2GP. If significant changes to these provisions occur through the decision, then the variation option could be re-visited.

A variation process requires an assessment of environmental effects to be carried out, similar to that required for a resource consent application, and given the timing of pending 2GP decisions, this method would take longer to implement.

## **10.6 PREFERRED METHOD**

The preferred option for managing the site is through designating the site (Option 1). It means any development would be subject to the conditions of the designation, which would be tailored to specifically provide for the activity. In addition, future changes can be made to the site and activities, provided the changes remain in line with the purpose of the designation and comply with the conditions of the designation without needing a resource consent. Rather, the outline plan process is used, which is not contestable and is not publicly notified. This option also provides certainty to the public on the scale and type of activity that can occur on the site.

## **10.7 CONSIDERATION OF ALTERNATIVE SITES**

The Memorial Park/Memorial Gardens/Peter Johnston Park site (the site) is currently used for a range of recreational and community activities, including the existing Mosgiel pool facility, sport fields and cricket. It is a longstanding and critical part of Mosgiel's recreation and community provision. Whilst various alternative sites for a new pool facility have been considered by the Trust, given the mix of current and proposed recreation and community activities on the site, including use by the existing Mosgiel Pool, a detailed assessment of alternative sites for the designation was not undertaken.

It is considered that a designation over the wider site for community and recreation purposes reflects this current use, brings the facilities together and provides the ability to enable and manage recreation and community needs and demands as they change over time. This includes providing for the redevelopment of the existing Mosgiel Pool at the site.

## **11. CONSULTATION**

### **11.1 APPROACH TO CONSULTATION**

Over the past twelve months the project team has worked closely with Dunedin City Council regulatory staff (i.e. Three Waters, Policy Planning and Transportation), Councillors and Taieri Community Trust members to develop the requirements for the designation, understand effects and put in place controls required to mitigate effects. Direct stakeholder engagement has occurred with iwi, NZTA, Otago Regional Council, site neighbours and sports field users to understand potential effects and risks and how these can be mitigated. A public drop-in day was held to give neighbours and other interested residents the opportunity to learn about the proposed designation and suggest changes or raise concerns.

The Notice of Requirement, including proposed conditions has taken on board all feedback received via this process. Where appropriate, changes have been made to the documents to reflect this feedback.

### **11.2 SPORTS FIELD USERS CONSULTATION SESSION WEDNESDAY 12 SEPTEMBER 2018, 6.30-8.00PM**

(Representatives of Mosgiel Football Club, Taieri Cricket Club, Taieri Athletics, Taieri Rugby Club)

Comments raised/issues discussed:

- Football Club
  - Lighting levels – 10 lux is too low. (explained 10 lux was measured at residential boundary)
  - Assessment of conditions of lighting poles
  - Lighting of PJ Park
- Rugby Club
  - Concern around number of permitted sponsorship signs on clubrooms. Currently more than 1 and larger than 1m<sup>2</sup>.
- Suggested looking at Seddon Park as a site for aquatic centre instead of proposed location. Considered less disruption and less issues;
- General acknowledgement that the designation will cater to the needs of the Sports field users;
- More concern around location of pool and how this will impact clubs' future plans (e.g. installation of lighting);
- Group agreed to put forward a collective submission on the designation.

### Response to issues raised

Many of the issues raised relate to the location of the future pool and how this might affect the various sporting codes' operations. These issues will continue to be worked through with the Clubs during the design phase for the aquatic centre.

In terms of lighting and signage, it is considered the district plan standards are appropriate to apply to the whole site. It is noted that should lighting or signage be required which is over and above that provided for via the designation, a resource consent could be sought.

## 11.3 NEIGHBOURS AND INTERESTED PARTIES CONSULTATION SESSION SATURDAY, 15 SEPTEMBER 2018, 10.00AM-12.30PM MOSGIEL LIBRARY

(Approximately 10 people, neighbours and interested members of the public) Refer **Appendix F** attached for information sheet and neighbour's letter.

Comments raised/issues discussed:

- Traffic safety issue with current pool – needs to be set back from road more.
- Consider more central location for pool and designation such as Sunnyvale or Fairfield that will service the wider area including Green Island, Brighton, Waldronville, etc.
- Concerns about potential loss of green space. "Community activities" is a vague undefined word that means just about anything.
- More green space and garden areas needed in the future.
- Neighbour concerns: lighting, setbacks, noise.
- Check ORC Flood Protection Line on plan.
- Memorial Gardens are an important community asset. It should be protected from future development.
- Support the pool – just build it.

### Response to issues raised

In general, those who attended the drop-in day were supportive of a new pool and also supportive or ambivalent towards the designation. Specific issues raised related to potential loss of Memorial Gardens. Staff assured attendees that there is no intention to locate the new pool within Memorial Gardens and any change to or update of the Gardens would occur as part of a careful, well planned process. The designation does not change the level of protection for the Gardens compared with the district plan zoning.

Direct neighbour affects were raised, such as setbacks and loss of privacy and/or sun. As a result, a condition has been proposed to set back all buildings 4.5m from all boundaries, in addition to height plane and noise controls will create further setbacks for larger buildings.



## 11.4 DIRECT NEIGHBOUR CONSULTATION

Members of the project team have met with and discussed the project over the phone with several neighbours to the site. Issues raised included discussing the likely location of new aquatic centre with particular focus on any potential loss of Memorial Gardens and direct effects on neighbours due to a large building being located close to the boundary. These issues have been addressed above.

## 11.5 STAKEHOLDER CONSULTATION

Meetings have been held with key DCC staff members and other agencies to discuss the proposed Notice of Requirement to designate the Mosgiel pool and associated community area for recreational purposes in the District Plan.

Meetings have been held with NZTA, Otago Regional Council flood hazard, DCC transportation, planning (both consenting and policy) and three waters staff in late February - early March 2018. Ongoing discussions have been underway since this time.

These meetings were useful in identifying key matters to address and consider in the development of the Notice of Requirement and the conditions associated with it. A brief summary of the matters discussed with these parties are outlined in **Appendix F** attached.

It is understood there are no outstanding issues with any of these parties.

## 12. PART 2 CONSIDERATIONS

Section 5 of the RMA sets out the purpose of the Act:

- 1) *The purpose of this Act is to promote the sustainable management of natural and physical resources.*
- 2) *In this Act, “sustainable management” means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety while—*
  - a) *Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
  - b) *Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
  - c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

As well as setting out the purpose and principles of the RMA, Part 2 identifies the purposes and principles of the Act, including matters of national importance to which effect must be given, other matters to which particular regard must be had, and Treaty of

Waitangi matters which must be taken into account. Many of the matters of national importance in section 6 or the other matters in section 7 are not relevant to this site; for instance, the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development and the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.

The proposed designation does not result in adverse effects on amenity values overall. The conditions of the designation serve to appropriately protect identified amenity values. The designation is an efficient use of resources, as it allows for the current and future provision, operation, maintenance and expansion of valuable community and recreational resources in the community. It provides for social, economic and cultural wellbeing.

### **13. CONCLUSION**

DCC, a requiring authority under section 166 of the RMA, proposes to designate the area comprising Peter Johnstone Park (Reid Avenue), Memorial Park (Gordon Road) and Mosgiel Pool (215 Gordon Road), Mosgiel, within the Dunedin City District Plan (District Plan) to provide for a range of recreation and community uses to reflect the existing uses of the land, along with future developments and changes.

The designation will cover these areas in order to provide flexibility for the efficient management of the area into the future, including the establishment of a new aquatic facility to replace the existing Mosgiel Pool. There will be parameters put in place via conditions of the designation to control built form, activities and to ensure aspects such as car parking are appropriately provided for the size and location of any developments on the site.

The objectives of the designation are:

- To operate, maintain, upgrade and expand the facilities within the Mosgiel Community and Recreational Area to provide for a range of sporting, cultural and community activities.
- To provide for, maintain and upgrade the facilities, services and amenities within the Mosgiel Community and Recreational Area in a manner that provides for the current and future needs and social and economic wellbeing of the Mosgiel and surrounding communities.
- To enable an efficient and flexible approach to the maintenance and development of the Mosgiel Community and Recreational Area, while also managing any actual or potential adverse effects of future development on the surrounding community.

It is considered that the proposed designation is reasonably necessary to achieve these objectives. All the sporting, recreational and community activities catered for at the site are a critical part of Mosgiel's community. Bringing all of these together under a designation, a

‘tailor-made’ planning framework, allows Council to enable and manage change on the site and provide for the current and future needs and social and economic wellbeing of the community.

The specialist reports prepared and submitted with this application, including assessments on landscape and visual effects, traffic, noise and infrastructure, conclude that with the conditions proposed, effects of future development on the site can be avoided, remedied or mitigated.

Overall, the designation ensures that the DCC can provide for any future works and services at the proposed site in a timely and efficient manner whilst appropriately managing effects on the environment via the raft of proposed conditions.



A



**APPENDIX A**

Certificates of Title



# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



  
R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** 296322  
**Land Registration District** Otago  
**Date Issued** 04 July 2006

### Prior References

OT383/32

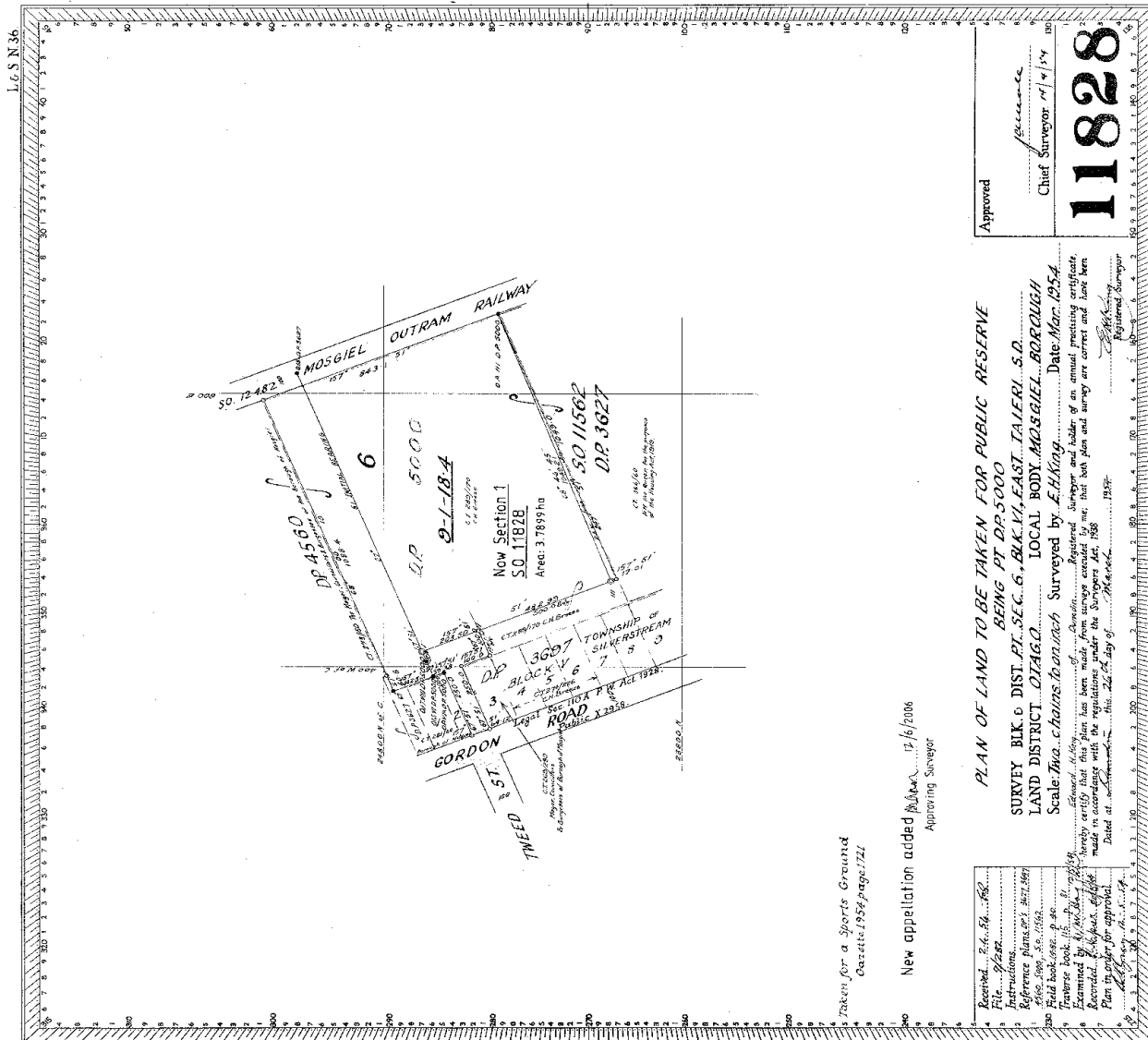
---

<b>Estate</b>	Fee Simple
<b>Area</b>	3.7899 hectares more or less
<b>Legal Description</b>	Section 1 Survey Office Plan 11828
<b>Purpose</b>	Pleasure grounds and sports grounds

**Proprietors**  
Dunedin City Council

---

### Interests





# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** 289571  
**Land Registration District** Otago  
**Date Issued** 29 May 2006

### Prior References

OT3C/610

---

<b>Estate</b>	Fee Simple
<b>Area</b>	3.2375 hectares more or less
<b>Legal Description</b>	Lot 1 Deposited Plan 9385
<b>Purpose</b>	Recreation reserve

### Proprietors

Dunedin City Council

---

### Interests

Subject to a right to drain sewage over part marked EF on DP 17459 specified in Easement Certificate 585221.1 - 2.11.1982 at 11:27 am

The easements specified in Easement Certificate 585221.1 are subject to Section 309 (1) (a) Local Government Act 1974

621533 Lease of part (424m2) edged red on diagram annexed thereto to Taieri Squash Rackets Club Incorporated Term 33 years commencing on 1st March 1983 with renewal clause - 11.9.1984 at 10.13 am

630832 Lease of part (354 m2) edged red on the diagram annexed thereto to Mosgiel Association Football Club Incorporated Term 33 years commencing on 1st October 1983 with renewal clause - 1.3.1985 at 10.13 am

Subject to a right to drain sewage over part marked E-F-G on DP 20912 created by Transfer 721997.4 - 15.2.1989 at 11:37 am

The easements created by Transfer 721997.4 are subject to Section 309 (1) (a) Local Government Act 1974

Subject to a right to drain sewage over part marked B-C on DP 22374 created by Transfer 801975.5 - 2.4.1992 at 9:25 am

The easements created by Transfer 801975.5 are subject to Section 309 (1) (a) Local Government Act 1974

880975 Variation of Lease 630832 - 28.4.1995 at 9.25 am

Subject to the Reserves Act 1977

Subject to a right to drain sewage over parts marked D & E on DP 459037 created by Easement Instrument 9352868.3 - 31.5.2013 at 11:47 am

The easement created by Easement Instrument 9352868.3 is subject to Section 243(a) Resource Management Act 1991

Identifier

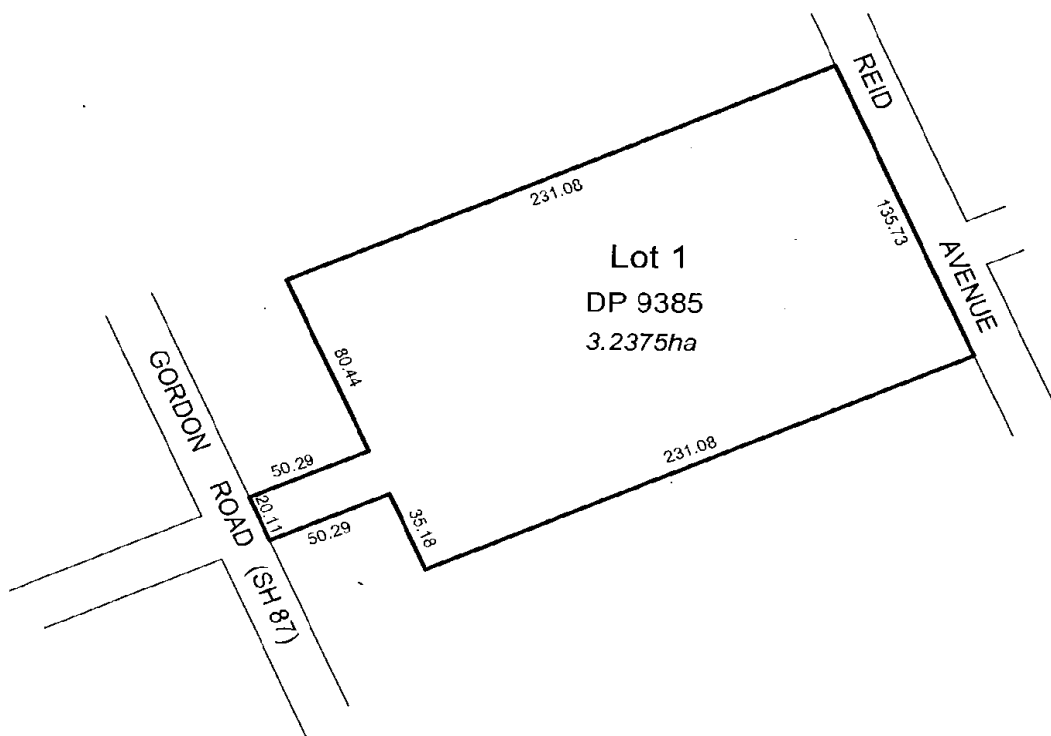
289571

Title Diagram 289571

Cpy - 01/01, Pgs - 001, 16/06/06, 16:45



DocID: 110769603







# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** 289572  
**Land Registration District** Otago  
**Date Issued** 29 May 2006

### Prior References

OT3C/610

---

<b>Estate</b>	Fee Simple
<b>Area</b>	2.7392 hectares more or less
<b>Legal Description</b>	Lot 2 Deposited Plan 9385
<b>Purpose</b>	Recreation reserve

### Proprietors

Dunedin City Council

---

### Interests

Subject to the Reserves Act 1977

Subject to a right to drain stormwater over part marked K on DP 423079 created by Easement Instrument 8293593.7 - 21.12.2009 at 1:24 pm

Subject to a right (in gross) to drain foul sewage over parts marked K and L on DP 432079 in favour of Dunedin City Council created by Easement Instrument 8293593.8 - 21.12.2009 at 1:24 pm

The easements created by Easement Instrument 8293593.8 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right to Drain Foul Sewage over parts marked G and H and a right to Drain Stormwater over part marked I on DP 435990 created by Easement Instrument 8925069.1 - 29.11.2011 at 11:58 am

Identifier

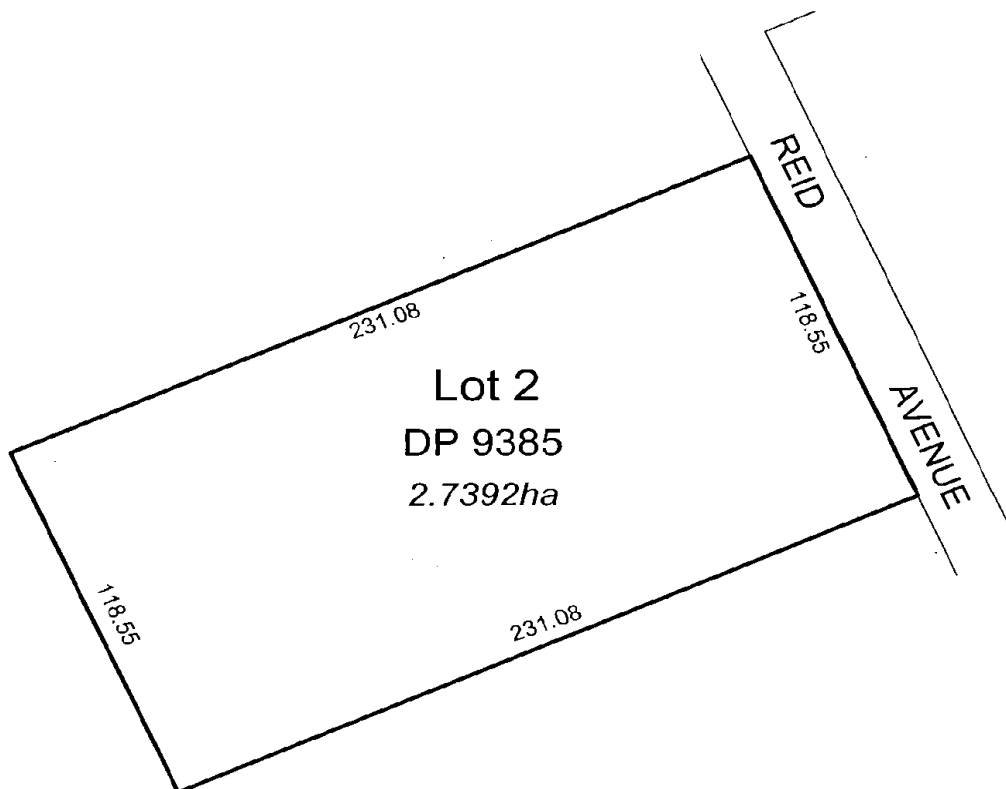
289572

**Title Diagram 289572**

Cpy - 01/01, Pgs - 001, 16/06/06, 16:26



DocID: 100033670





# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



  
R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** OT17D/61  
**Land Registration District** Otago  
**Date Issued** 03 June 1997

### Prior References

OT11B/1463

---

<b>Estate</b>	Fee Simple
<b>Area</b>	1.5552 hectares more or less
<b>Legal Description</b>	Lot 8 Deposited Plan 25666

### Proprietors

Dunedin City Council

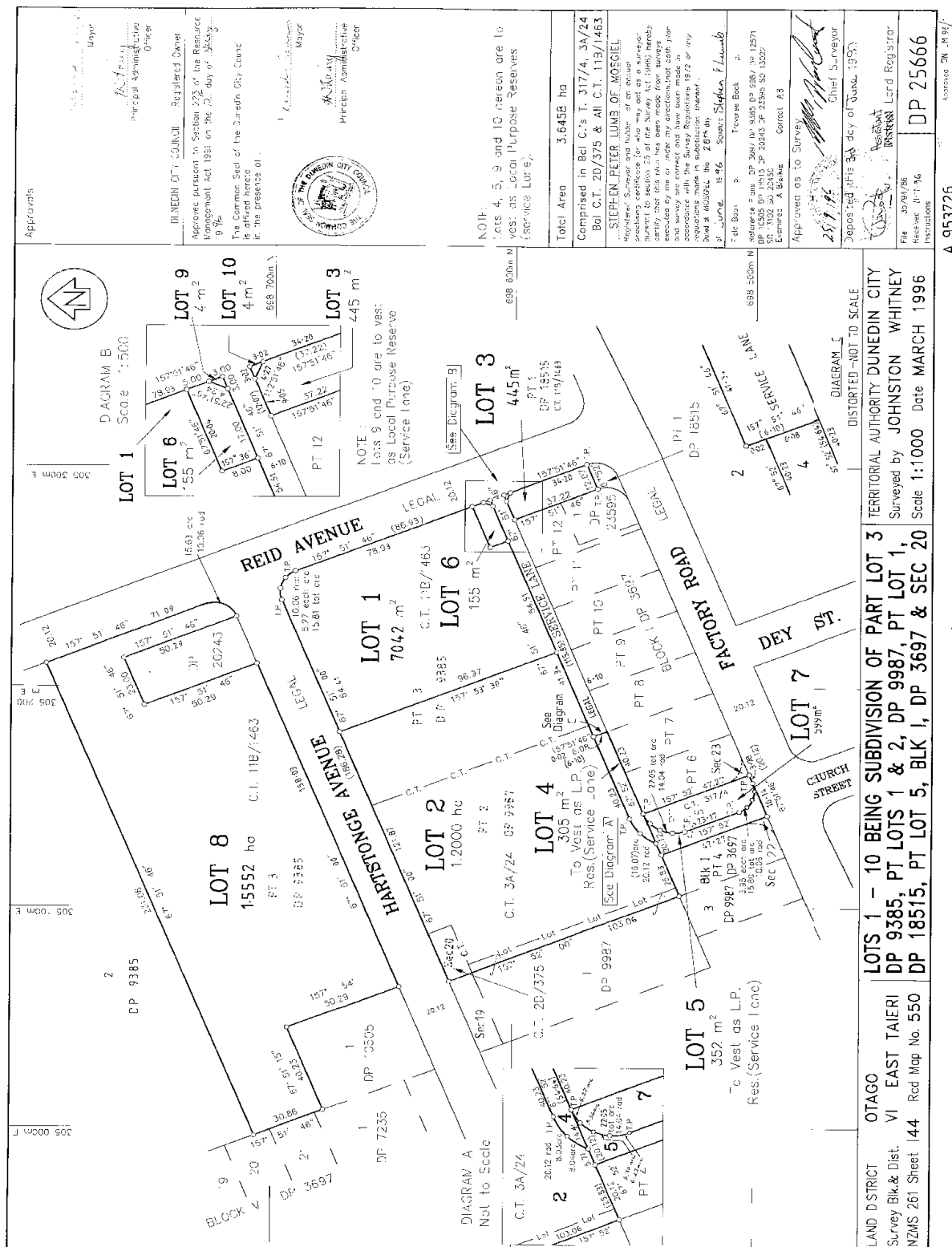
---

### Interests

Subject to Section 59 Land Act 1948

520795 Transfer creating the following easements in gross - 8.8.1979 at 2.38 pm

Type	Servient Tenement	Easement Area	Grantee	Statutory Restriction
Construct and operate a substation for the transmission of electrical energy	Lot 8 Deposited Plan 25666 - herein	Substation area Transfer 520795	Dunedin City Council	





# COMPUTER INTEREST REGISTER UNDER LAND TRANSFER ACT 1952



  
R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** 99822  
**Land Registration District** Otago  
**Date Registered** 01 October 1980 12:00 am

### Prior References

OT3A/968

---

<b>Estate</b>	Leasehold	<b>Instrument</b>	L 583311
<b>Area</b>	9.5916 hectares more or less	<b>Term</b>	33 years from the 1.10.1980 with right of renewal

**Legal Description** Part Lot 15 Deposited Plan 8961

### Proprietors

The Taieri Rugby Football Club Incorporated

---

### Interests

Appurtenant hereto is a right of way created by Lease 583311 - 24.9.1982 at 10:51 am

The right of way created by Lease 583311 is subject to the Council's condition of consent endorsed on the diagram in the lease.

893806.2 Variation - 19.10.1995 at 10.16 am

901089.2 Mortgage to Bank of New Zealand - 9.2.1996 at 10.39 am

5633153.1 Variation - 24.6.2003 at 9:00 am

Identifier

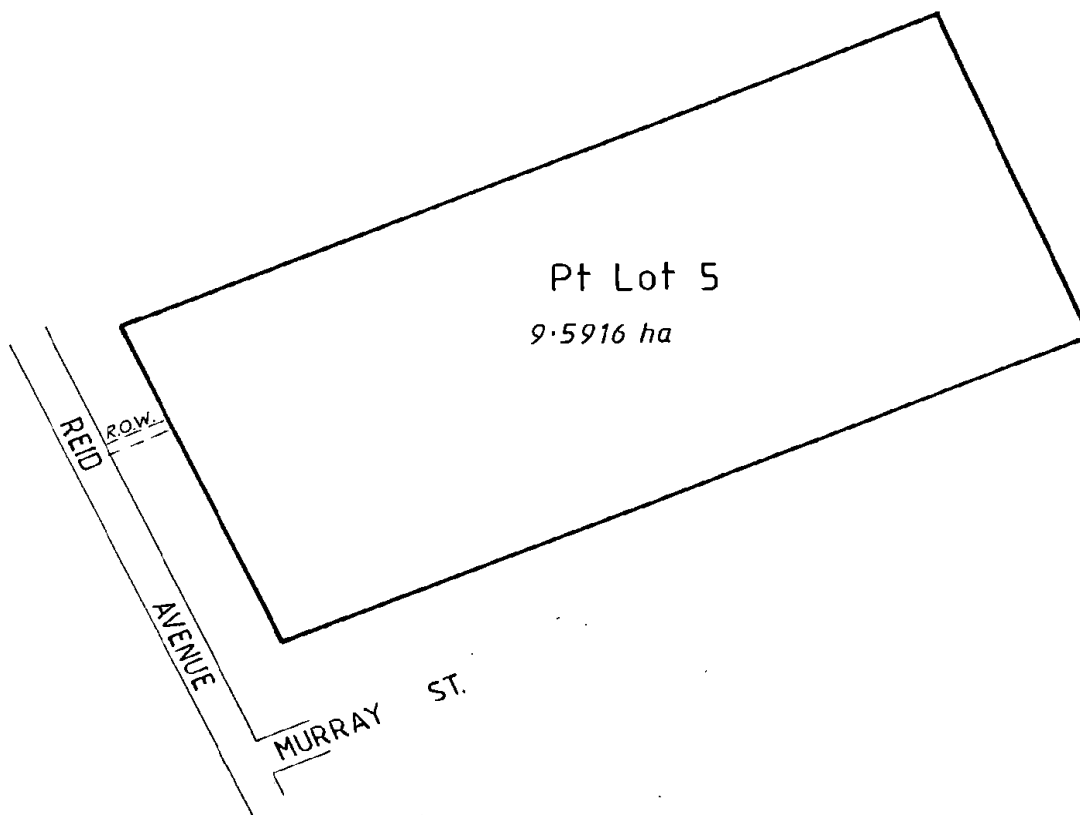
99822

Title Diagram Title Diagram

Cpy 01/01 Pgs 001, 14/07/03, 09 11



00000 1101000 1





# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** OT3A/968  
**Land Registration District** Otago  
**Date Issued** 31 July 1967

### Prior References

OT399/128

---

<b>Estate</b>	Fee Simple
<b>Area</b>	10.4858 hectares more or less
<b>Legal Description</b>	Part Lot 15 Deposited Plan 8961
<b>Purpose</b>	Recreation Reserve

### Proprietors

Dunedin City Council

---

<b>Estate</b>	Fee Simple
<b>Area</b>	234 square metres more or less
<b>Legal Description</b>	Section 25 Block VI East Taieri Survey District
<b>Purpose</b>	Local Purpose (site for a Scout Hall) Reserve

### Proprietors

Dunedin City Council

---

### Interests

583311 Lease Term 33 years from the 1st October 1980 CIR 99822 issued - 24.9.1982 at 10:51 am

Subject to a right of way over part shaded blue and marked R.O.W on the diagram annexed to Lease 583311 and created by the said Lease - 24.9.1982 at 10:51 am

The right of way created by Lease 583311 is subject to the Council's condition of consent endorsed on the diagram in the lease.

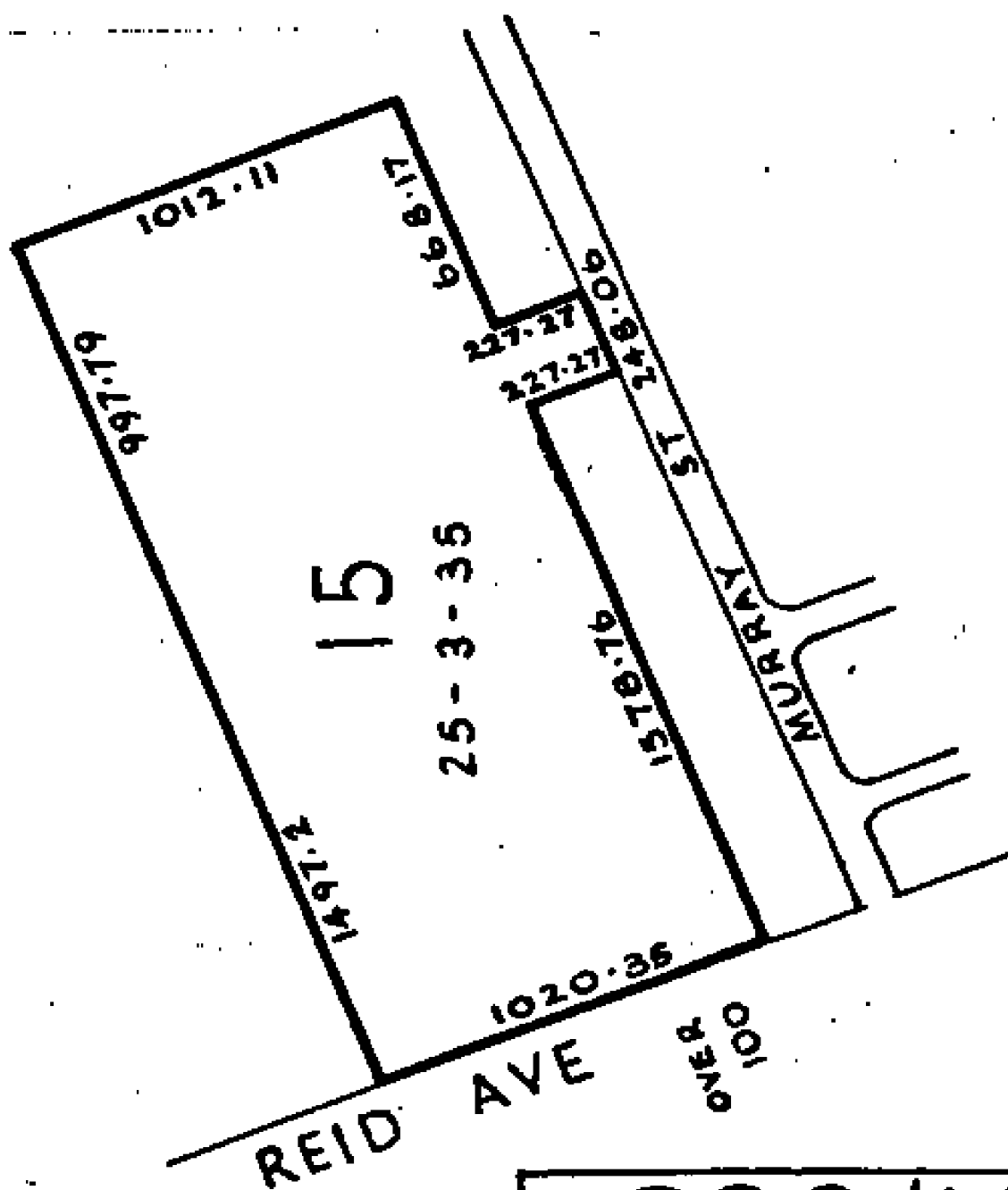
618106 Lease of part (92m2) to The Taieri Rugby Football Club Incorporated. Term 33 years from 1st October 1980 with a right of renewal - 12.7.1984 at 10.27 am

893806.2 Variation of Lease 583311 - 19.10.1995 at 10.16 am

5633153.1 Variation of Lease 583311 - 24.6.2003 at 9:00 am

Subject to the Reserves Act 1977





Scale: 1 inch = 10 chains

3A/968



# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



  
R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** OT281/68  
**Land Registration District** Otago  
**Date Issued** 19 January 1937

### Prior References

OT273/151 OT276/246

---

<b>Estate</b>	Fee Simple
<b>Area</b>	2023 square metres more or less
<b>Legal Description</b>	Lot 1 Block V Deposited Plan 3697 and Part Lot 2 Block V Deposited Plan 3697 and Part Section 6 Block VI East Taieri Survey District

### Proprietors

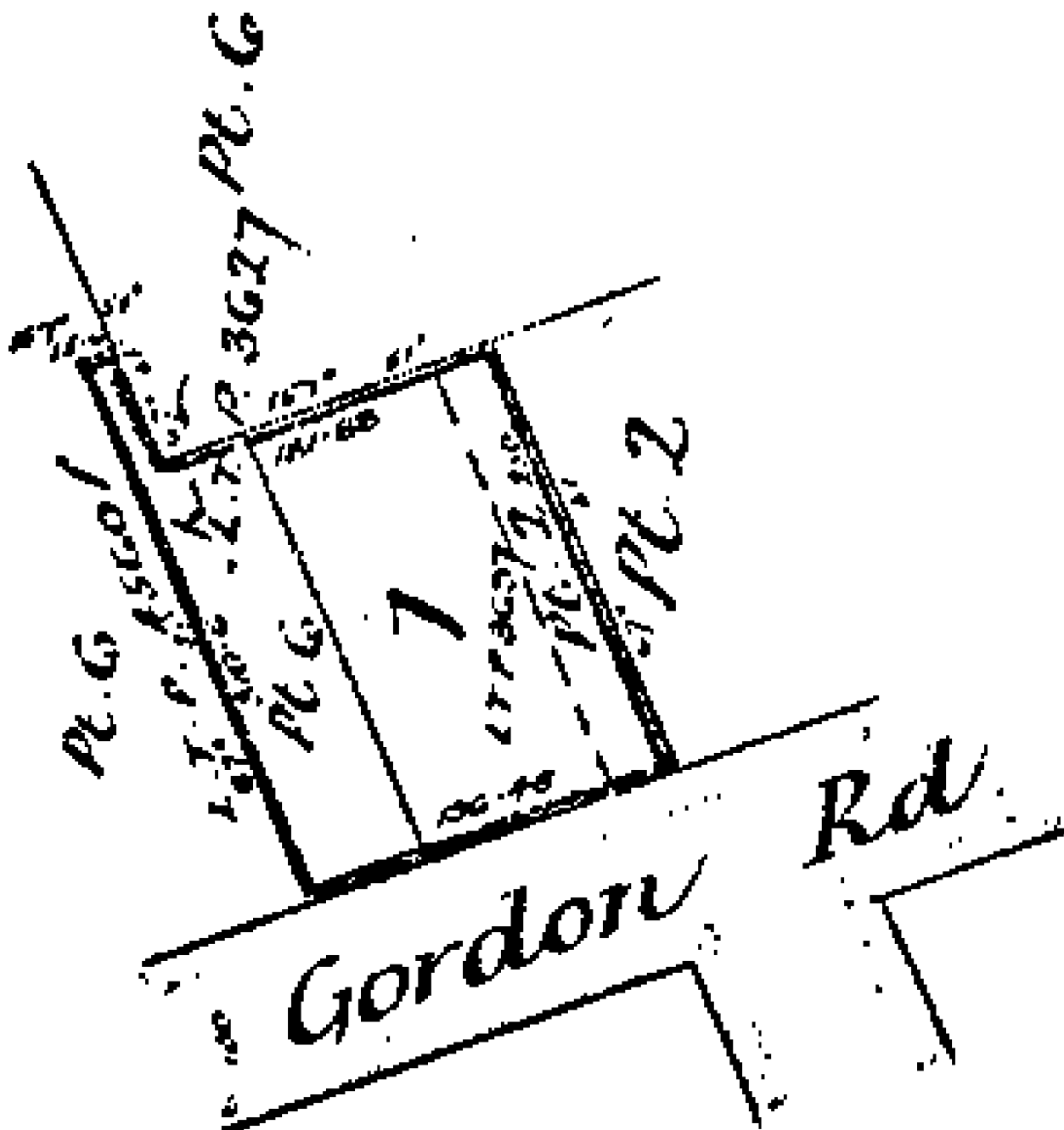
Mosgiel Borough Council

### Interests

---

Identifier

OT281/68





# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952



  
R. W. Muir  
Registrar-General  
of Land

## Search Copy

**Identifier** OT269/299  
**Land Registration District** Otago  
**Date Issued** 02 February 1935

### Prior References

OT261/271

---

<b>Estate</b>	Fee Simple
<b>Area</b>	1012 square metres more or less
<b>Legal Description</b>	Lot 3 Block V Deposited Plan 3697

### Proprietors

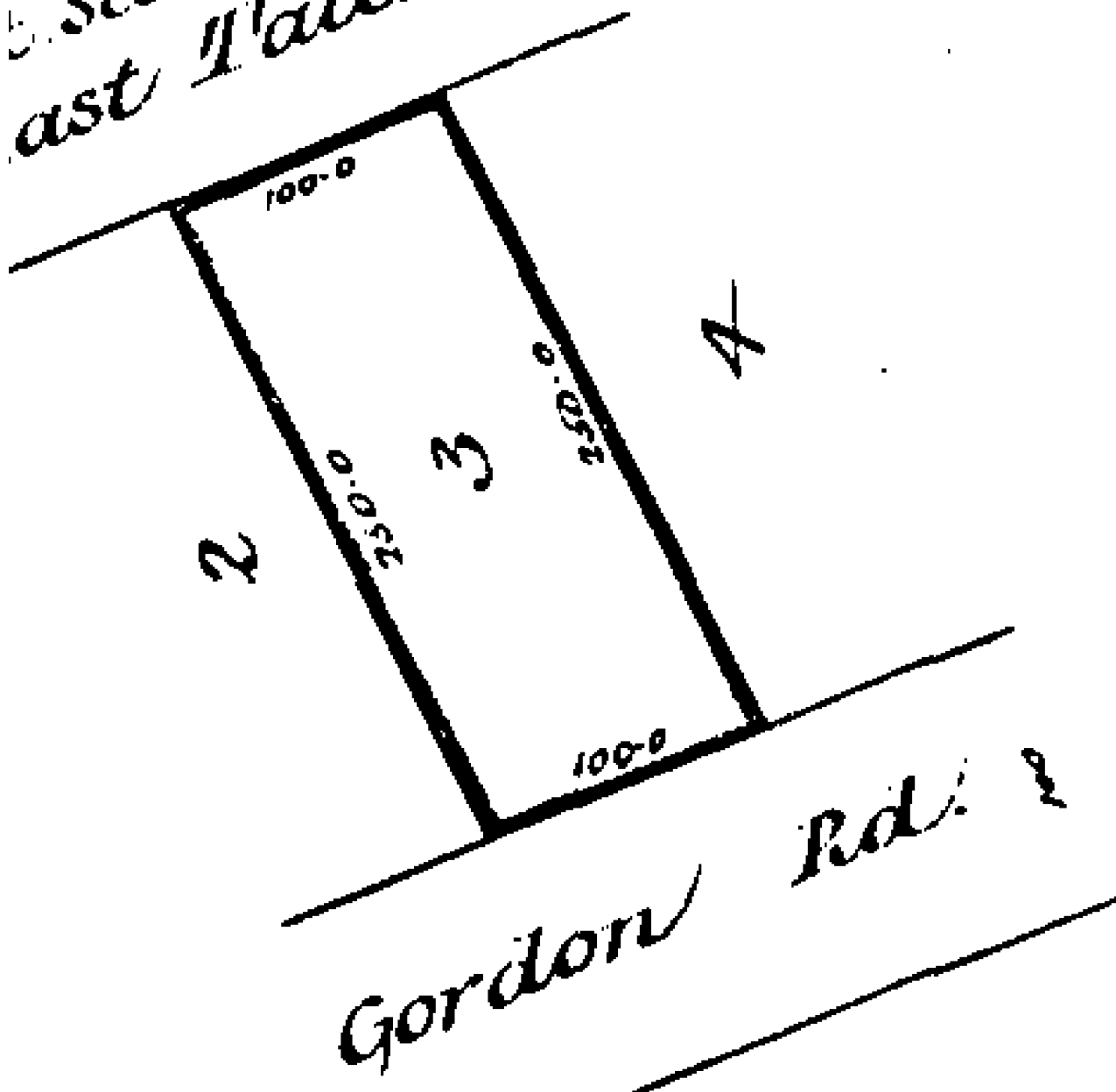
The Mosgiel Borough Council

---

### Interests

Fencing Agreement in Transfer 113598 - 2.2.1935

Sec 6 Block VI  
East Haveri Dist.





## **APPENDIX B**

Landscape and Visual Effects  
Assessment Report, Mike Moore

# Mosgiel Community and Recreational Area Designation

## Landscape and Visual Effects Assessment Report

20 June 2018



**Prepared by**

**MIKE MOORE**

*BSc, Dip LA, MRRP, ANZILA*

LANDSCAPE ARCHITECT

*Po box 5076, Dunedin*

*Tel (03)479 0833 . fax (03) 479 0834 . cell 0274 360 163*

*Email [mike@mmla.co.nz](mailto:mike@mmla.co.nz)*

## Introduction

Dunedin City Council proposes to designate Memorial and Peter Johnstone Parks on the northern side of Mosgiel for community and recreation purposes. These parks are already developed for these purposes and include the Mosgiel swimming pool, the Mosgiel Service Centre, the Memorial Park gardens, a caravan park, sports fields, clubrooms and playgrounds. The total area involved is approximately 21.19ha.

The designation proposed will provide for the continuation of the existing activities and will authorize the further development of community and recreational facilities. The purpose of this report is to assess the landscape and visual amenity values of the parks and to recommend designation parameters to ensure that these values are appropriately protected. The report will be structured as follows:

- Site and area character description
- Landscape and visual amenity values
- The proposed designation and recommended conditions to protect landscape and visual amenity values.
- Landscape and visual amenity effects assessment
- Statutory planning assessment
- Conclusion

## Site and Area Character Description

Peter Johnstone and Memorial Parks are adjacent areas of parkland located on the northern side of Mosgiel and bordering the Silver Stream. Memorial Park has frontages or access points to Gordon Road, Hartstonge Avenue and Reid Avenue, whilst Peter Johnstone Avenue has a short frontage to Murray Street. **Figure 1** illustrates their location and the key features of both parks as currently configured. The parks and the activities they host can be described as follows:



### Peter Johnstone Park

Peter Johnstone Park is separated from Memorial Park to the west by the extension to Reid Avenue and a large car parking area. The Taieri Rugby Football Clubrooms are adjacent to this car park, as is a smaller Scout hall. The park is a large (approximately 450 x 200m) rectangle of open, grassed playing fields, used for Rugby and touch. Mature Pine and Poplar trees line the low stop-bank on its northern side and there are a line of shelter trees either side of the Taieri RFC clubrooms but otherwise there is no planting and the park is defined only by the boundary fences of the surrounding residential properties. Poles for floodlighting and rugby goal posts are located on the fields.

A small leg-in section links the main park area to Murray Street on the south side and this area is developed as a childrens playground. Like the remainder of the park, this area too, is sparsely planted. The land abutting the park to the south and east is developed for housing and is zoned Residential 1 in both the Operative and Proposed District Plans.

Figures 2 - 5 illustrate the character of Peter Johnstone Park.

### Memorial Park

In terms of character, Memorial Park has two distinct parts. The southern end of the park borders Hartstonge Avenue and the commercial centre of Mosgiel. There is an existing designation over some of the park for the Dunedin City Council Mosgiel Service Centre and Public Library and associated car parking. Adjacent to this are the Memorial Park Gardens, an area of trees, lawns, paths, and various garden plantings including a rose garden. This area also hosts a large public playground, a skate park and barbeque / picnic facilities. This part of the park has frontage to both Harstonge and Reid Avenues, and the parkland and open space enhances the amenity of these streets. Near the corner of Hartstonge and Reid Avenues, the Wenita Forests Ltd office is located within the parkland and interrupts the flow of open space. A significant feature adjacent to Reid Avenue is a large open grassed swale for drainage purposes, crossed by a concrete pedestrian bridge. To the west, the park is bordered by Residential 2 land and

developed housing, The St Johns Mosgiel headquarters and Mosgiel Senior Citizens Club is located adjacent to the DCC Service Centre and also borders the park.

The Memorial Park Gardens are separated from the remainder of the park by the building housing the Taieri Cricket, Association Football, and Squash Clubs and the Taieri Athletics Club building, along with the adjacent car parking area. North of this stretches a large expanse of open, grassed parkland which is utilized for athletics and cricket in the summer and football in the winter. There are two wickets centrally located as well as long jump pits and concrete throwing rings for discus and shot put. The drainage swale discussed above on the Reid Avenue side, also extends into this area. At the northern end, the park abuts the Silver stream and there is a low stop-bank planted with trees. Adjacent to this on the western side is the Mosgiel Caravan Park.

The park has a short frontage to Gordon Road near the Silver Stream and it is in this area that the Mosgiel Swimming Pool and associated area of car parking is located. There is also an ORC pumping Station located in this vicinity. The remainder of the western boundary is bordered by houses on land zoned Residential 2. The main park entrance is off Gordon Road opposite Tyne Street. On the whole, this northern part of the park is sparsely planted and has a very different character to the Gardens at the southern end.

Figures 6 - 11 illustrate the character of Memorial Park

Overall, the layout and design of both parks reflect the rectilinear grid pattern layout of this part of Mosgiel in the orientation of their boundaries, buildings, car parks and many of the pathways. Even the Silver Stream adjacent, has been channelized to conform to this rectilinear layout.

## **Landscape values**

Memorial and Peter Johnstone Parks are within an environment that is highly modified by urban and rural development and as such, there are no natural character values of any significance. As a large, contiguous swathe of open space however, which is also linked with the adjacent Silver Stream (an important, albeit highly modified, natural element within the Mosgiel environment), these areas provide relief from and balance to, the surrounding urban environment through:

- A larger scale and sense of spaciousness, more open views toward the surrounding hills, and space for a variety of recreational activities.
- The dominance of natural elements (grass and trees) over built, including the mature trees and gardens within the Memorial Gardens.

The contribution of the parkland to the townscape of Mosgiel is lessened in significance somewhat however, due to the limited street frontages and screening by intervening built development. Parkland amenity value is also reduced by such features as:

- The presence of large sealed car parking areas, unrelieved by plantings
- The greater than necessary visual prominence of the buildings in some areas due to colour.
- The lack of unity in the boundary treatments, which are often unrelieved by planting to soften and screen.

In terms of recognized values, Peter Johnstone Park and the northern portion of Memorial Park are included within the Silver Stream Banks and Adjoining Parks Urban Landscape Conservation Area (ULCA) in the Operative Dunedin City District Plan. As described in the Townscape section, ULCA's are areas of open space and / or natural landscape character which contrast with the built environment and provide a landscape setting for urban areas. This overlay does not appear in the Proposed Dunedin City District Plan (2GP) but instead, the parks are zoned 'Recreation', a zoning which recognizes the contribution that areas of 'green space' can make to on-site, neighbourhood and surrounding residential amenity.

The 2Gp also shows that the Kokika o Te Matamata Wahi Tupuna overlay covers these parks (and most of Mosgiel). This overlay recognizes the cultural significance of this

area to Iwi as a once significant wetland and food source which was surrounded by Pa and as a main thoroughfare. The area is also significant for the legend of the taniwha Matamata who is said to have created the hollow in the Taieri Plain where Mosgiel is located (2GP).

Based on the above, it is my conclusion that the key landscape and visual amenity related values that the proposed designation should respect and contribute to are:

- (1) Strong open space linkages (both visual and physical) throughout the parkland and with the streets surrounding and the Silver Stream.
- (2) Strong contrast of the parkland with surrounding urban areas in terms of larger scale and the dominance of natural elements.
- (3) The amenity values associated with the gardens and trees in the Memorial Gardens.

**The proposed designation and recommended conditions to protect landscape and visual amenity values.**

The objectives of the designation are:

- To operate, maintain, upgrade and expand the facilities within the Mosgiel Community and Recreational Area to provide for a range of high quality sporting, cultural and community activities.
- To provide for, maintain and upgrade the facilities, services and amenities within the Mosgiel Community and Recreational Area in a manner that provides for the current and future needs and social and economic wellbeing of the Mosgiel and surrounding community.
- To enable an efficient and flexible approach to the maintenance and development of the Mosgiel Community and Recreational Area, while also

managing any actual or potential adverse effects of future development on the surrounding community.

It is proposed that the designation will generally provide for community and recreational facilities and activities, and will authorize the following activities:

- Community and recreational amenities and facilities including but not limited to:
  - An aquatic centre;
  - Mosgiel Service Centre;
  - Memorial Park and Gardens;
  - Peter Johnstone Park;
- Sporting, recreational and community activities;
- Food and beverage outlets ancillary to community or recreation facilities;
- Buildings and offices associated with club rooms, community facilities and services;
- Vehicle and pedestrian access to facilities;
- Car, cycle and coach parking areas for facilities;
- Directional signage, public art works and other public amenities such as toilets; and
- Landscaping, infrastructure, construction and earthwork activities associated with the above.

The aspects of this designation that could potentially give rise to effects on landscape and visual amenity are the provision for:

- new or extended buildings,
- new or extended car parks,
- new or extended roadways and pathways,
- signage,
- changes to landscaping including tree removal.

- lighting

The specific details of developments authorized by the designation will be addressed by the preparation of an outline plan submitted to Council prior to construction.

In order to appropriately protect or enhance landscape and visual amenity values, the following conditions are recommended:

Proposed Condition	Reasons
<p><b>1. Building height</b></p> <p>New buildings and extensions to existing buildings other than lighting towers, shall be a maximum height of 10m (excluding rooftop servicing equipment).</p> <p>New lighting towers shall be a maximum height of 30m</p>	<p>A maximum building height limit is required to provide an amenity bottom-line.</p> <p>The proposed 10m height limit provides for the foreseeable needs for community and recreational facility development.</p> <p>The highest existing building in the parks, the Memorial Park grandstand building, is approximately 9.5m high and the maximum height proposed is consistent with, and provides for, buildings of this (existing) scale.</p> <p>The 10m height proposed is not significantly greater than the 9m maximum building height standard for surrounding Residential zones and is consistent with the 10m maximum building height in the adjacent Rural zone.</p> <p>The scale of the parkland is such that buildings of up to 10m height can be accommodated without significant adverse effects on the existing landscape character.</p> <p>The proposed 30m maximum height for lighting towers provides for optimal current sports field lighting technology and for higher, but fewer lighting towers than exist in the area presently. Fewer, higher towers will result in less 'clutter' and enhanced amenity values generally.</p> <p>Lighting towers are typically slender and of low bulk. This combined with the building setback from boundaries provisions will protect the amenity of neighbours.</p>

<p><b>2. Building floor area (per building)</b></p> <p>The maximum floor area for any individual building (new or existing extended) shall be 3200m2.</p>	<p>A maximum floor area limit per building is required to provide an amenity bottom-line.</p> <p>The proposed 3200m2 floor area limit provides for the foreseeable needs for community and recreational facility development.</p> <p>The scale of the parkland is such that buildings of up to approximately 3200m2 (in combination with the proposed building height limit and proposed design and appearance standards) can be accommodated without significant adverse effects on spaciousness and the existing landscape character.</p>
<p><b>3. Combined building site coverage</b></p> <p>The maximum building site coverage within the designation area shall be 5.5%</p>	<p>A maximum combined building site coverage control is required to provide an amenity bottom-line.</p> <p>The existing building site coverage is approximately 3% and does not significantly adversely affect open / green space values. An additional 2.5% will provide for the foreseeable needs for community and recreational facility development but (in combination with other proposed amenity protection provisions) will not significantly adversely affect the existing spaciousness values and landscape values of the parkland.</p>
<p><b>4. Minimum building setbacks from boundaries and height in relation to boundaries</b></p> <p>4.1 The minimum building setbacks from road boundaries shall be 4.5m.</p> <p>The minimum building setback from all other boundaries shall be 2.0m.</p> <p>4.2 For all boundaries other than road boundaries, buildings (excluding lighting towers) must not protrude from a plane rising at an</p>	<p>Minimum building setbacks and height in relation to boundaries controls are required to provide an amenity bottom-line.</p> <p>The setbacks proposed are consistent with those notified in the Recreation zone and the Residential 1 zone in the 2GP and are in keeping with the existing character of the area.</p> <p>The 4.5m setback proposed from road boundaries will assist in protecting spaciousness values.</p> <p>The proposed 2.0m setback from other boundaries, in combination with the proposed height in relation to boundary controls will mitigate any adverse effects on spaciousness and shading. In combination, these controls</p>

<p>angle of 45 degrees measured from ground level at the boundary.</p> <p>For all boundaries other than road boundaries, lighting towers must not protrude through a plane rising at an angle of 75 degrees measured from ground level at the boundary.</p>	<p>are more restrictive than those notified in the 2GP for the Recreation and Residential zones – to recognize that buildings provided for under the designation could be higher and larger than permitted buildings in these zones. The more permissive height in relation to the boundary control proposed for lighting towers, recognizes that these structures are slender and of low bulk, and also that there are practical space constraints in relation to the sports fields. A setback is required however, to mitigate effects of visual dominance from an adjacent site and it is appropriate that this is related to the height of the structure.</p>
<p><b>5. Building design and appearance</b></p> <p>5.1 The maximum length of any new or extended existing building shall be 65m.</p> <p>5.2 Painted finishes for new or extended existing buildings (excluding lighting towers) shall not exceed Light Reflectance Values (LRV) of 35%.</p> <p>5.3 Service and storage areas associated with new or extended existing buildings are to be effectively screened by fencing and / or planting from adjacent roads and properties and from high use public areas within the parks.</p>	<p>Building design and appearance controls are required to provide an amenity bottom-line.</p> <p>The length of buildings is an important determinant of their apparent scale and degree of prominence. The combined length of the Memorial Park Grandstand / Squash Courts buildings is approximately 78m and is considered unduly prominent. A 65m maximum is proposed to provide for the foreseeable needs for community and recreational facility development but (in combination with other controls) will provide a reasonable limit to the apparent scale of buildings.</p> <p>Light reflectance values are an important determinant of the visual prominence of buildings. Mid and darker tones as proposed are more recessive and contrast less with parkland elements such as trees and grass. The exception for lighting towers recognizes that these are mainly seen against the sky making lighter tones more appropriate.</p> <p>Service and storage areas can contribute clutter and reduced amenity levels which can be effectively mitigated by screening.</p>
<p><b>6. Landscape treatment to car parking areas</b></p>	<p>Landscaping requirements for car park areas are required to provide an amenity bottom-line.</p>



<p>6.1 New or extended car parking areas are to be set back a minimum of 1.5m from all external boundaries and these areas are to be planted to mitigate adverse effects of the car parks from adjacent residential properties, including from light spill from vehicles.</p> <p>6.2 New or extended car parking areas are to have a minimum of 12% of the total area of the car park planted, including at least 1 tree, at least 3m high, per 120 m2 of the total car park area.</p>	<p>Car parks can detract from amenity values through the visual impact of large areas of sealed surfaces and clutter associated with parked vehicles. Vegetation, in particular trees, help to relieve and soften this effect.</p> <p>Planting areas and the plants themselves, need to be of appropriate scale and frequency to provide for the mitigating effect required.</p>
<p><b>7. Signage</b></p> <p>All signage is to comply with the provisions of the Recreation Zone in the 2GP.</p>	<p>Controls over signage are required to protect amenity values and it is considered that those outlined in Section 20.6.10 of the 2GP are appropriate to this area.</p>
<p><b>8. Tree protection</b></p> <p>Any trees that are removed through the development of community and recreational facilities are to be replaced.</p>	<p>The trees within these areas contribute positively to the amenity of the parks themselves and the wider townscape. Development of community and recreational facilities should not result in reduced tree cover and associated amenity in the long term.</p>
<p><b>9. Lighting</b></p> <p>All lighting is to comply with the provisions of the Recreation Zone in the 2GP.</p>	<p>Controls over lighting and in particular light spill are required to protect amenity values and it is considered that those outlined in Section 20.5.4 (and 9.3.5) of the 2GP are appropriate to this area.</p>

## **Landscape and visual amenity effects assessment**

Landscape effects describe the impact of development on the landscape elements, patterns, and processes, and its character. Their significance is determined with reference to the value and sensitivity of the landscape, and the scale and character of the proposal.

Visual effects describe the impact of the proposal on the views available to people and the impact of this on amenity values. Amenity values are defined in the RMA as '*those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*'. Visual effects are determined with reference to the sensitivity of viewers to change and the value placed on existing views, and the scale and character of the proposal.

My assessment of landscape and visual effects will adopt the following scales

### Nature of effect

- *Positive*
- *Neutral*
- *Adverse*

### Magnitude of effect

- *Very high*
- *High*
- *Moderate high*
- *Moderate*
- *Moderate - low*
- *Low*
- *Very low*

## **Landscape effects**

The designation provides for the continuation and further development of the activities and facilities that are already existing on the site presently and generally, the existing landscape character is unlikely to be significantly changed. Whilst this is the case at the overall scale, provision is made for an increase in the scale and presence of built form

and associated parking areas, and changes to the layout and to the proportion of land under sports field, amenity garden, community or recreational facility buildings etc could ensue. Whilst the designation needs to retain flexibility for development, the proposed amenity conditions provide safeguards that the open space / parkland values will be protected. This aside, it is acknowledged that development could result in the reduction of openness or loss of trees in some areas. Equally however, development of facilities has the potential to improve the landscape values e.g. through associated additional tree planting or the quality of building design.

In terms of the significance of changes to the landscape in this area, it is my assessment that in general, the values are mostly modest and that, considering the mitigation conditions proposed, any adverse effects on landscape character are likely to be of low significance or could be positive. The area of greatest landscape character sensitivity and value is the Memorial Park Gardens which has locally significant value derived from the presence and impact of mature trees and attractive gardens. Development which involved the loss of trees and garden space and scale would have adverse effects that could be at least moderate in this context.

### Visual amenity effects

People impacted by the effects of the proposed designation include:

- Users of the parkland and facilities for active recreation, and users of the community facilities.
- Users of the parkland, gardens and playgrounds, and adjacent Silver Stream walking track, for passive recreation.
- Users of the adjacent roads.
- Adjacent neighbours.

### *Users of the parkland and facilities for active recreation and users of the community facilities*

This group is unlikely to be particularly sensitive to the landscape / visual amenity values of the parkland, being more focused on their recreational activity itself or their purpose

for visiting the community facilities. As the designation will generally retain the existing character, I assess any adverse visual amenity effects on this group as low.

*Users of the parkland, gardens and playgrounds, and adjacent Silver Stream walking track for passive recreation.*

This group of users is likely to be relatively sensitive to change to the landscape because they probably visit the area at least in part, to enjoy the open space and parkland environment. The provision for increased built form, along with the associated potential for more parking areas and / or possible tree removal could give rise to adverse effects on the passive recreational amenity values but the proposed mitigation conditions will ensure that these effects are appropriately contained and / or rectified. In my assessment any adverse effects (excluding short term construction effects) will be low, and the existing character will be essentially conserved and possibly enhanced.

*Users of the adjacent roads*

As already discussed, the parkland has limited frontages to roads and this reduces its contribution to the Mosgiel townscape. There is the potential that future development under the designation could further screen views of the parkland from the roads and reduce the visual contribution of the green space to the townscape, but the proposed conditions are designed to limit and mitigate the impact of further built development. In my assessment, any adverse visual amenity effects associated with development provided for under the designation, will be low, and with sensitive design, the effects of development could be positive.

*Adjacent Neighbours*

Adjacent neighbours are another group likely to be sensitive to visual amenity effects as the area impacts their living environment. For most neighbours the parks are experienced currently as open green space. Those next to Memorial Park Gardens also benefit from the amenity provided by the mature trees.

The designation provides for further development of buildings and car parks, and could involve the removal of trees. This entails the potential for adverse amenity effects. The proposed conditions however, will mitigate adverse effects to a standard considered generally consistent with amenity standards in residential zones. Potential building scale (both height and footprint) is greater than that permitted in Residential or Recreation Zones but the setbacks proposed are greater to recognize this. Conditions are also proposed to mitigate any adverse effects associated with car parking, signage and lighting.

In my assessment, the designation entails potential for adverse effects on neighbours but these are appropriately mitigated by the proposed conditions and considering the amenity standards anticipated for Residential zones, adverse effects will be no more than low.

### **Statutory planning assessment**

Whilst designations are not bound by the provisions of District Plans and Regional Policy Statements, the objectives and policies of these documents provide general guidance as to the appropriateness of designation provisions. In this case the objectives and policies of the operative and proposed Dunedin City District Plans and the operative and proposed Otago Regional Policy Statements, are of relevance. Those that deal with landscape and visual amenity matters are outlined below, with brief comment provided:

#### Operative Dunedin City District Plan

In the Operative Dunedin City District Plan, the area is zoned both 'Residential 1' and 'Residential 2' and has an 'Urban Landscape Conservation Area' overlay.

#### Residential Section

Objective / Policy	Comment
Objective 8.2.1 Ensure that the adverse effects of activities on	Whilst the designation provides for buildings significantly larger than those provided for as

<p>amenity values and the character of residential areas are avoided, remedied or mitigated.</p> <p>Objective 8.2.6 Recognise the positive effects of recreational activities while ensuring that their adverse effects are avoided, remedied or mitigated.</p> <p>Policy 8.3.1 Maintain or enhance the amenity values and character of residential areas.</p> <p>Policy 8.3.11 Provide for recreational activities within Residential Zones while managing their adverse effects.</p>	<p>permitted activities in Residential zones, the suite of conditions proposed, in particular, those relating to maximum building height, setbacks from boundaries and height in relation to boundaries, will ensure that the amenity values associated with the character of residential areas are appropriately protected.</p>
--	--

### Townscape Section

Objective / Policy	Comment
<p>Objective 13.2.1 Ensure that the important values and characteristics of the natural features and areas which provide for the setting for the urban areas are protected.</p> <p>Policy 13.3.1 Protect and enhance the natural character of those areas identified as Urban Landscape Conservation Areas in the District Plan Maps through:</p> <ul style="list-style-type: none"> <li>• Protection of natural landforms and waterways.</li> <li>• Protection of trees and areas of bush</li> <li>• Control over the erection of buildings</li> </ul>	<p>The key feature of Memorial and Peter Johnstone Parks supporting their inclusion within the Silver Stream Banks and Adjoining Parks ULCA is their contiguous open space and direct linkage with the Silver Stream. Whilst natural character in these areas is now highly modified, the linked open parkland has urban landscape and amenity value. The designation provides for further development of buildings but safeguards the open space values through the proposed conditions, in particular, those relating to maximum building site coverage and maximum building floor area.</p>

and other development.	
------------------------	--

### Proposed Dunedin City District Plan

In the Proposed Dunedin City District Plan (2GP), the area is zoned 'Recreation'. Because the 2GP is at an early stage in the submission and decision making process, limited weight should be given to it.

Objective / Policy	Comment
<p>Objective 20.2.2</p> <p>Land use, development and subdivision activities: support the efficient and effective operation of the recreation area; maintain a high standard of on-site amenity for users of the recreation area; and maintain or enhance neighbourhood amenity and the amenity of any surrounding residential properties.</p>	<p>The designation including the proposed conditions provide an appropriate framework for the protection and enhancement of amenity values for users and neighbours.</p>
<p>Policy 20.2.2.1</p> <p>Require development to maintain or enhance on-site amenity for recreation area users, neighbourhood amenity, and the amenity of any surrounding residential properties by ensuring:</p> <ul style="list-style-type: none"> <li>• There are adequate areas free from buildings or hard surfacing;</li> <li>• The height, boundary setbacks, height in relation to boundary, and scale of buildings and structures is appropriate to the recreation area and in keeping with the scale of buildings in surrounding residential environments;</li> <li>• Service areas for campgrounds or</li> </ul>	<p>The designation provides for larger buildings than the proposed 2GP Recreation Zone provisions but includes conditions to protect the amenity values for reserve users and neighbours. These have been developed based on an assessment of the scale and character of both the parkland and the surrounding residential area. Conditions are proposed to limit combined building site coverage, which along with the variety of uses being catered for (including gardens, rugby, football and cricket grounds) will ensure that significant areas remain free of hard surfacing. Proposed conditions also control building height, scale and setbacks from boundaries. The 10m</p>

<p>restaurants ancillary to sport and recreation, are not visible from ground level from outside the site;</p> <ul style="list-style-type: none"> <li>• Communal outdoor gathering areas are designed and located to avoid overlooking and disturbing surrounding residential properties;</li> <li>• Parking areas are designed or located to minimize light spill from vehicles on surrounding residential properties; and</li> <li>• Outdoor storage is managed in a way that does not result in unreasonable visual amenity effects or nuisance effects.</li> </ul>	<p>maximum height provided for is similar to buildings existing in the area now, and only slightly higher than the maximum height provisions in the Residential and Recreation zones in the ODP and 2GP. Setbacks are consistent with those in the Recreation and Residential zones (ODP and 2GP) but the proposed height in relation to boundary condition is more restrictive to recognize that larger scale buildings could be built and to appropriately protect the amenity of neighbours. Conditions are also proposed to control adverse effects associated with parking, service and storage areas.</p>
<p>Policy 20.2.2.2</p> <p>Require boundary fences to be of a height and design that contributes positively to streetscape amenity and character of the neighbourhood and recreation area.</p>	<p>Boundary fencing is not controlled through the designation and is a matter to be agreed between the Council and the adjacent land owners.</p>
<p>Policy 20.2.2.3</p> <p>Require ancillary signs to be located and designed to maintain on-site amenity, and surrounding streetscape and residential amenity by:</p> <ul style="list-style-type: none"> <li>• Being of an appropriate size, design, and number to convey information about the name and nature of the club, organization. Or reserve, and not oversized or too numerous than what is necessary for that purpose; and</li> <li>• Limiting commercial sponsorship signs ancillary to sport and recreation to be temporary or enclosed within the site.</li> </ul>	<p>The proposed designation provides for signage to be controlled in accordance with the 2GP Recreation Zone provisions – which are considered appropriate to protect both on-site and neighbours amenity.</p>



<p>Policy 20.2.2.4</p> <p>Require forestry and tree planting to be set back an adequate distance to avoid significant effects from shading on residential buildings on adjacent properties.</p>	<p>Forestry is not provided for by the designation but tree planting for amenity enhancement purposes is. Setbacks to protect against adverse shading effects on neighbours are not considered necessary and any issues can be resolved with Council as the designation holder.</p>
<p>Policy 20.2.2.7</p> <p>Only allow campgrounds where any adverse effects, including from noise, dust or loss of privacy, on surrounding residential properties and other recreation area users, can be avoided or if avoidance is not possible, is adequately mitigated.</p>	<p>Campgrounds are not provided for in the designation. Any expansion of the existing caravan park facility would need to be consistent with the Recreation Zone provisions.</p>
<p>Policy 20.2.2.10</p> <p>Only allow new buildings or additions and alteration to buildings that will result in gross floor area greater than 350m<sup>2</sup> and / or has any wall longer than 20m where any adverse effects on on-site amenity, surrounding properties, and neighbourhood amenity, can be avoided, or if avoidance is not possible, adequately mitigated.</p>	<p>The purpose of the designation is to make provision for buildings of greater scale than provided for in the Recreation zone as a permitted activity. Conditions are proposed to provide an appropriate amenity protection framework.</p>
<p>Objective 20.2.3</p> <p>Earthworks necessary for permitted or approved land use and development are enabled, while avoiding, or adequately mitigating, any adverse effects on:</p> <ul style="list-style-type: none"> <li>• Visual amenity and character</li> <li>• The stability of land, buildings, and structures; and</li> <li>• Surrounding properties.</li> </ul> <p>Policy 20.2.3.3</p> <p>Only allow earthworks that exceed the scale</p>	<p>Earthworks required to operate, upgrade, maintain and expand facilities within the area are provided for in the designation. Given the flat character of the area, earthworks are unlikely to create any significant landscape or visual amenity effects.</p>

<p>thresholds (earthworks – large scale) and any associated retaining structures, where all of the following effects will be avoided, or, if avoidance is not possible, adequately mitigated:</p> <ul style="list-style-type: none"> <li>• Adverse effects on visual amenity and character;</li> <li>• Adverse effects on the amenity of surrounding properties, including from changes to drainage patterns ....</li> </ul>	
--	--

### Operative Otago Regional Policy Statement

Objective / Policy	Comment
<p>Objective 9.4.1</p> <p>To promote the sustainable management of Otago's built environment in order to:</p> <p>(a) Meet the present and reasonably foreseeable needs of Otago's people and communities; and</p> <p>(b) Provide for amenity values, and</p> <p>(c) Conserve and enhance environmental and landscape quality; and</p> <p>(d) Recognise and protect heritage values.</p>	<p>The designation includes conditions that will ensure an appropriate level of amenity protection both on-site and in terms of the wider neighbourhood.</p>

### Proposed Otago Regional Policy Statement

Objective / Policy	Comment
<p>Objective 4.5</p> <p>Urban growth and development is well</p>	<p>The proposed designation includes conditions that will ensure it integrates well with its urban</p>

designed, reflects local character and integrates effectively with adjoining urban and rural environments.	setting and protects amenity values.
--	--------------------------------------

## Conclusion

Dunedin City Council proposes to designate Memorial and Peter Johnstone Parks for community and recreation purposes. These parks are already developed for community and recreation purposes and are in an environment that is highly modified by urban development. Whilst natural landscape character values are low, the parks have amenity values associated with large areas of open green space and the relief and contrast from the urban environment that this provides.

The designation will provide for the operation, maintenance, upgrading and expansion of community and recreation facilities. The development of new or expanded facilities, involving buildings and car parks in particular, has the potential to give rise to adverse landscape and visual amenity effects. In recognition of this, a suite of conditions are proposed, dealing with building scale, site coverage, setbacks, and design and appearance. Conditions are also proposed addressing the effects of car parks, signage, and lighting, as well as tree protection.

In terms of landscape effects, the existing values of the parks are modest, and the areas are already developed for community and recreational activities. Further development of the area for these purposes will not fundamentally change its character and the proposed conditions will limit and mitigate the effects of further built development on the green open space values. Overall, any adverse landscape effects are assessed as being of low significance. Development involving sensitive (building and landscape) design and could also have positive effects.

As regards visual amenity effects, people likely to be most sensitive to change are passive recreational users and adjacent neighbours. It is considered that the mitigation

conditions proposed will appropriately protect amenity values for both these groups, with any adverse effects being of low significance.

Assessed against the provisions of the relevant statutory documents, it is my conclusion that landscape and visual amenity considerations will be appropriately addressed by the proposed designation and the associated conditions.

Mike Moore

Registered NZILA Landscape Architect





**Figure 1 : Location and Site Plan, Memorial and Peter Johnstone Parks, Mosgiel**





Figure 2 : Peter Johnstone Park looking south-westward



Figure 3 : Peter Johnstone Park looking eastward



Figure 4 : Peter Johnstone Park and playground looking northward from Murray Street





Figure 5 : Peter Johnstone Park carpark looking southward



Figure 6 : Memorial Park looking south-westward



Figure 7 : Memorial Park looking eastward





Figure 8 : Mosgiel Pool



Figure 9 : Memorial Park Gardens looking southward





Figure 10 : Memorial Park Gardens looking westward



Figure 11 : Mosgiel Service Centre and Memorial Park Playground from Hartstonge Avenue





## **APPENDIX C**

Transportation Assessment,  
Carriageway Consulting

# **Proposed Community and Recreation Designation, Mosgiel**

---

## **Transportation Assessment**

---





## Table of Contents

<b>Main Report</b>		<b>Page</b>
<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Site Overview</b>	<b>2</b>
	2.1 Location	2
	2.2 Road Hierarchy	3
<b>3</b>	<b>Current Transportation Networks</b>	<b>4</b>
	3.1 Road Network	4
	3.2 Non-Car Modes of Travel	9
	3.3 Future Changes	10
<b>4</b>	<b>Current Transportation Patterns</b>	<b>11</b>
	4.1 Traffic Flows	11
	4.2 Non-Car Modes of Travel	11
	4.3 Road Safety	12
<b>5</b>	<b>Existing and Proposed Designation</b>	<b>14</b>
	5.1 Existing Development	14
	5.2 Proposed Designation	14
<b>6</b>	<b>Traffic Generation and Distribution</b>	<b>16</b>
	6.1 Traffic Generation	16
	6.2 Trip Distribution	18
<b>7</b>	<b>Effects on the Transportation Networks</b>	<b>20</b>
	7.1 Rooding Network Capacity	20
	7.2 Non-Car Modes of Travel	20
	7.3 Form of the Access Intersection(s)	21
	7.3 Road Safety	21
<b>8</b>	<b>District Plan Matters</b>	<b>22</b>
<b>9</b>	<b>Conclusions</b>	<b>24</b>



## Photographs

1	Typical Cross-Section of Gordon Road	4
2	Northern Access onto Gordon Road	5
3	Southern Access onto Gordon Road	5
4	Typical Cross-Section of Hartstonge Avenue	6
5	Gordon Road / Hartstonge Avenue Intersection	6
6	Typical Cross-Section of Reid Avenue	7
7	Northern End of Reid Avenue and Car Park	7
8	Hartstonge Avenue / Reid Avenue Intersection	8
9	Typical Cross-Section of Factory Road	8
10	Factory Road / Reid Avenue Intersection	9
11	Gordon Road / Factory Road Intersection (Image copyright Google Streetview)	9
12	Footpath Through Car Parking Area	10

## Figures

1	General Location of Designation Site	2
2	Aerial Photograph of Designation Site and Environs	2
3	Area of Mosgiel within 200m of a Bus Stop	12
4	Location and Nature of Crashes, 2013 to 2018	13

## Tables

1	Traffic Generation and Distribution of Potential Aquatic Centre (Rounded Up)	18
2	Anticipated Maximum Increases in Traffic Flows in Peak Hour (Rounded Up)	20

CCL file reference	14445 ta final.docx
Status	Final
Issued	27 September 2018



## 1. Introduction

- 1.1. Dunedin City Council proposes to designate the existing recreation / sporting site in Mosgiel. There are already a variety of activities which take place on the site, but the Council wishes to have flexibility in the ability to expand and extend these in future, including upgrading the community swimming pool.
- 1.2. The objectives of the designation are:
  - *“To operate, maintain, upgrade and expand the facilities within the Mosgiel Community and Recreational Area to provide for a range of sporting, cultural and community activities.*
  - *To provide for, maintain and upgrade the facilities, services and amenities within the Mosgiel Community and Recreational Area in a manner that provides for the current and future needs and social and economic wellbeing of the Mosgiel and surrounding community.*
  - *To enable an efficient and flexible approach to the maintenance and development of the Mosgiel Community and Recreational Area, while also managing any actual or potential adverse effects of future development on the surrounding community.”*
- 1.3. This Transportation Assessment sets out a detailed analysis of the transportation issues associated with the proposal including changes in travel patterns that are likely to arise. Where potential adverse effects are identified, ways in which these can be addressed are set out.
- 1.4. This report is cognisant of the guidance specified in the New Zealand Transport Agency’s ‘*Integrated Transport Assessment Guidelines*’ and although travel by private motor vehicle is addressed within this report, in accordance with best practice the importance of other transport modes is also recognised. Consequently, travel by walking, cycling and public transport is also considered.

## 2. Site Overview

### 2.1. Location

2.1.1. The site is located towards the north of the Mosgiel township, around 12km west of Dunedin city centre. It is bounded by housing to the west and south, although there are accesses onto Gordon Road (State Highway 87) and Murray Street respectively. The western and central part of the site has frontage onto Hartstonge Avenue and Reid Avenue towards the south. Towards the north, the site is bounded by the Silver Stream watercourse.

2.1.2. The location of the site in the context of the local area is shown in Figure 1 and in more detail in Figure 2. The site is zoned as Residential 1 in the Dunedin City District Plan (*"District Plan"*).

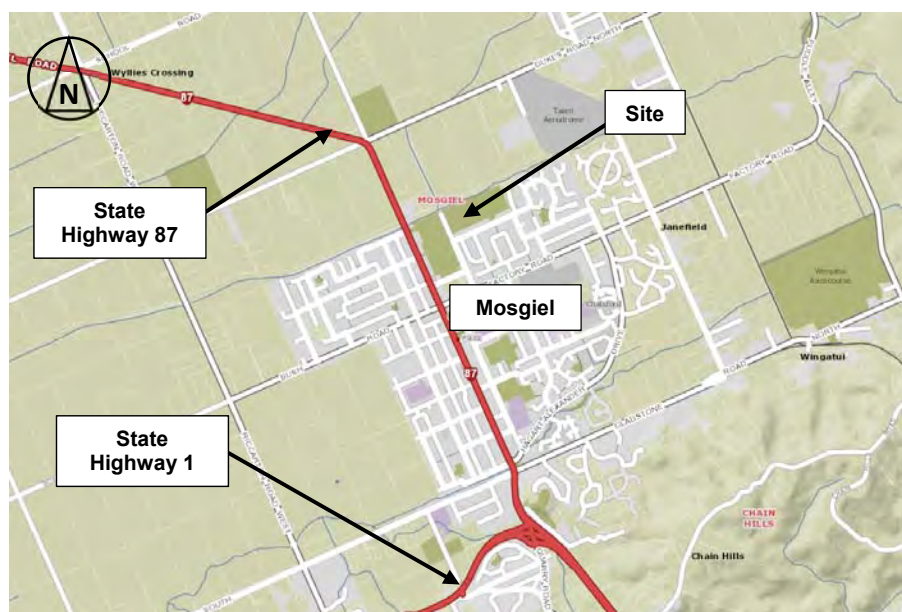


Figure 1: General Location of Designation Site



Figure 2: Aerial Photograph of Designation Site and Environs



## 2.2. Road Hierarchy

- 2.2.1. The District Plan classifies Gordon Road as a National Road, indicating “*the greatest level of movement with a minimum access function*” and connecting major localities with areas beyond Dunedin (District Plan, Method 20.4.2). It is also part of the City Council’s Strategic Cycle Network.
- 2.2.2. Factory Road is a District Road, providing a “*connection between the regional roads and connect major rural, suburban, commercial and industrial areas*” (District Plan, Method 20.4.2).
- 2.2.3. All other roads are Local Roads, whose primary function is “*to provide access to properties, rather than to act as through-route*” (District Plan, Method 20.4.2).





### 3. Current Transportation Networks

#### 3.1. Road Network

- 3.1.1. Gordon Road forms part of State Highway 87. To the west of the site, it has a flat and straight alignment, and provides one traffic lane in each direction of 3.5m width, plus a parking lane on either side of 2.5m width. It is subject to a 50km/h speed limit. Although it is a state highway, the pattern of land use means that there are numerous residences and commercial developments on each side of the highway, most of which have private driveways. Consequently, the highway also provides an important property access function.



**Photograph 1: Typical Cross-Section of Gordon Road**

- 3.1.2. The designation site gains access onto Gordon Road in two locations. One location is towards the northwest of the site, where there is an access just south of (but on the opposite side of the road to) Eden Street, and this serves a car park with around 30 spaces. It is understood that this part of the site is presently occupied by the community pool. The access is formed as a standard vehicle crossing carrying two-way traffic flows.
- 3.1.3. The sight distance towards the north is limited by the presence of the bridge across the Silver Stream watercourse and the associated change in grade (as the highway rises to cross the bridge deck) and bridge safety barriers. Measured at 3.5m from the closest edge of the traffic lane (that is, not from the closest edge of the parking lane) then the sight distance is 125m. Sight distances to the south are in excess of 200m.



**Photograph 2: Northern Access onto Gordon Road**

- 3.1.4. The second location where access is gained is directly opposite Tyne Street. This serves a large sealed area which is used for car parking (associated with the existing recreational activities on the site) but which is unmarked. This access provided one traffic lane for entry and one for exit, but the lanes are separated by a landscaped central median. There is also a footpath on the northern side of the access, which continues into the site.
- 3.1.5. The sight distances towards the north and south at this access are in excess of 200m, measured at 3.5m from the closest edge of the traffic lane (that is, not from the closest edge of the parking lane).



**Photograph 3: Southern Access onto Gordon Road**

- 3.1.6. On the southern side of the site, Hartstonge Avenue has a flat and straight alignment, and provides one traffic lane in each direction, plus a parking lane on either side. It is subject to a 50km/h speed limit. There are a variety of commercial uses which front the road on the southern side, including a supermarket.





**Photograph 4: Typical Cross-Section of Hartstonge Avenue**

3.1.7. At its western end, Hartstonge Avenue meets Gordon Road at a priority ('give-way') intersection where vehicles on the latter retain priority. An auxiliary lane is provided for vehicles turning out of Hartstonge Avenue, such that a vehicle turning left is able to queue side-by-side with a vehicle turning right, over a distance of around 14m. Although there are no auxiliary turning lanes for vehicles turning right or left from Gordon Road, the northbound parking lane terminates for a distance of 30m upstream and downstream of the intersection, with this area marked as a second northbound traffic lane. Thus vehicles turning right into Hartstonge Avenue do not obstruct through traffic.



**Photograph 5: Gordon Road / Hartstonge Avenue Intersection**

3.1.8. Towards the centre of the site, on the southern side, Reid Avenue has a flat and straight alignment, and provides one traffic lane in each direction. Parking is permitted on each side of the road, although the carriageway width (9m) means that vehicles cannot be parked directly opposite one another.



**Photograph 6: Typical Cross-Section of Reid Avenue**

- 3.1.9. At its northern end, Reid Avenue terminates in a large car parking area (associated with the existing recreational activities on the site) but which is unmarked. There is a speed hump on the immediate approach to the car park.



**Photograph 7: Northern End of Reid Avenue and Car Park**

- 3.1.10. Just south of this car park, Murray Street joins Reid Avenue from the east. This has a flat and straight alignment, and has a carriageway of 9m width, with parking permitted on both sides. Murray Street serves largely residential properties, the bulk of which have private driveways onto the road.
- 3.1.11. The Hartstonge Avenue / Reid Avenue intersection is priority (give-way) controlled and traffic on Reid Avenue retains the right-of-way. There are no auxiliary turning lanes provided at the intersection.





**Photograph 8: Hartstonge Avenue / Reid Avenue Intersection**

3.1.12. Further to the south, Reid Avenue terminates at Factory Road. Factory Road has a flat and straight alignment, and provides one traffic lane in each direction, with a parking lane on each side.



**Photograph 9: Typical Cross-Section of Factory Road**

3.1.13. The Factory Road / Reid Avenue intersection is priority (give-way) controlled, with traffic on Factory Road retaining the right-of-way. There are no auxiliary turning lanes provided at the intersection, although there is a narrow median created by the taper for a pedestrian refuge which can be used by vehicles turning right into Reid Avenue.



**Photograph 10: Factory Road / Reid Avenue Intersection**

- 3.1.14. Factory Road meets Gordon Road at a signalised intersection, with Factory Road also forming the western approach. Each leg of the intersection has auxiliary lanes, such that there are two approach lanes on Factory Road and three approach lanes on Gordon Avenue.



**Photograph 11: Gordon Road / Factory Road Intersection (Image copyright Google Streetview)**

### **3.2. *Non-Car Modes of Travel***

- 3.2.1. As this is an urban environment, there is excellent provision for pedestrians in the area. Gordon Road, Factory Road, Hartstonge Avenue and Reid Avenue (south of Hartstonge Avenue) have footpaths on both sides, with Reid Avenue (north of Hartstonge Avenue) having a footpath on its eastern side only. There is a zebra crossing provided towards the western end of Hartstonge Avenue and on Gordon Road just south of Hartstonge Avenue, and the Gordon Road / Factory Road signalised intersection has pedestrian crossing phases across each approach.
- 3.2.2. The southernmost entrance into the designation site from Gordon Road has a footpath provided, which continues through the car park.



**Photograph 12: Footpath Through Car Parking Area**

3.2.3. Factory Road has on-road cycle lanes on each side. However there is no other infrastructure provided for cyclists in the immediate area.

3.2.4. There are bus stops on several of the roads adjacent to the site:

- Gordon Road (northbound): Just south of Eden Street;
- Hartstonge Avenue (eastbound): 65m west of Reid Avenue; and
- Murray Street (eastbound and westbound): 60m east of Reid Avenue.

3.2.5. Most stops are marked with a flag and post, but the stop on Hartstonge Avenue is also equipped with a shelter.

### **3.3. *Future Changes***

3.3.1. There are no proposals in any relevant strategic documents to change the transportation networks in the vicinity of the site.





## 4. Current Transportation Patterns

### 4.1. Traffic Flows

- 4.1.1. The New Zealand Transport Agency (**NZTA**) carries out regular traffic counts on the state highway, which shows that in 2017 Gordon Road carried 13,625 vehicles per day (Average Annual Daily Traffic). Further analysis of the collected data shows a weekday morning peak hour of 1,080 vehicles (two-way) with an evening peak hour of 1,304 vehicles (two-way).
- 4.1.2. However this traffic counter is located towards the south of Mosgiel, meaning that volumes recorded are not necessarily representative of those adjacent to the site, given that there is a considerable amount of residential development within Mosgiel that will use the southern part of Gordon Road but not the northern part. Consequently a weekday evening peak period survey was carried out on Gordon Road adjacent to the southernmost site entrance, during May 2018. This showed a weekday evening peak hour of 650 vehicles (two-way) on the highway, almost exactly half of the recorded volume at the traffic counter.
- 4.1.3. Dunedin City Council also carries out traffic surveys on the district roads in the region. This shows Factory Road carries 7,250 vehicles (two-way) per day, with Hartstonge Avenue carrying around 4,900 vehicles per day (two-way). It is considered that both of these will be influenced by the commercial activities in the area, such that volumes will be greater closer to Gordon Road.
- 4.1.4. Reid Avenue carries around 2,750 vehicles per day (two-way). Again this will be influenced by the pattern of development, and it can be expected that volumes are lower towards the northern end of the road. Murray Street carries 1,280 vehicles (two-way).
- 4.1.5. Within an urbanised area, peak hour volumes are around 10% of the daily flows (as is confirmed by the traffic survey on Gordon Road). Consequently the peak volumes on the district roads are expected to be:
  - Factory Road: 725 vehicles (two-way);
  - Hartstonge Avenue: 490 vehicles (two-way);
  - Reid Avenue: 275 vehicles (two-way); and
  - Murray Street: 130 vehicles (two-way).
- 4.1.6. The Austroads Guide to Traffic Management Part 3 (*'Traffic Studies and Analysis'*) sets out a method by which the level of service of a road can be found. This indicates that at peak times, Gordon Road, Factory Road and Hartstonge Avenue all provide Level of Service C with Reid Avenue and Murray Street providing Level of Service B. These are all within the zone of stable flow, and are not uncommon for an urban road network in the peak periods.

### 4.2. Non-Car Modes of Travel

- 4.2.1. Informal site observations indicate that there is a relatively high level of pedestrian activity in the vicinity of the site, as would be expected given the existing recreational use of the site and the urbanised area. However no cyclists were observed during site visits.
- 4.2.2. With regard to bus services, the Mosgiel East service (number 80) operates clockwise via Gordon Road northbound, Hartstonge Avenue, Reid Avenue and Murray Street (returning south via High Street). The Mosgiel West service (number 81) operates clockwise via Gordon



Road northbound and Eden Street (returning south via Argyle Street and Bruce Street). Both of these services directly pass the site, running every 40 minutes.

- 4.2.3. Allowing for a 200m walk to the bus route, these two services means that the majority of Mosgiel is within a viable travel distance of the site by public transport:

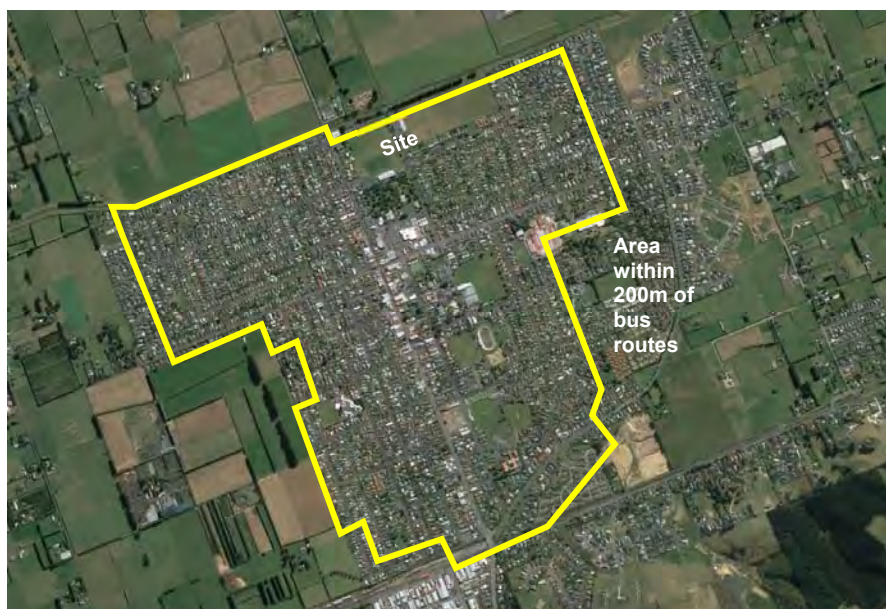


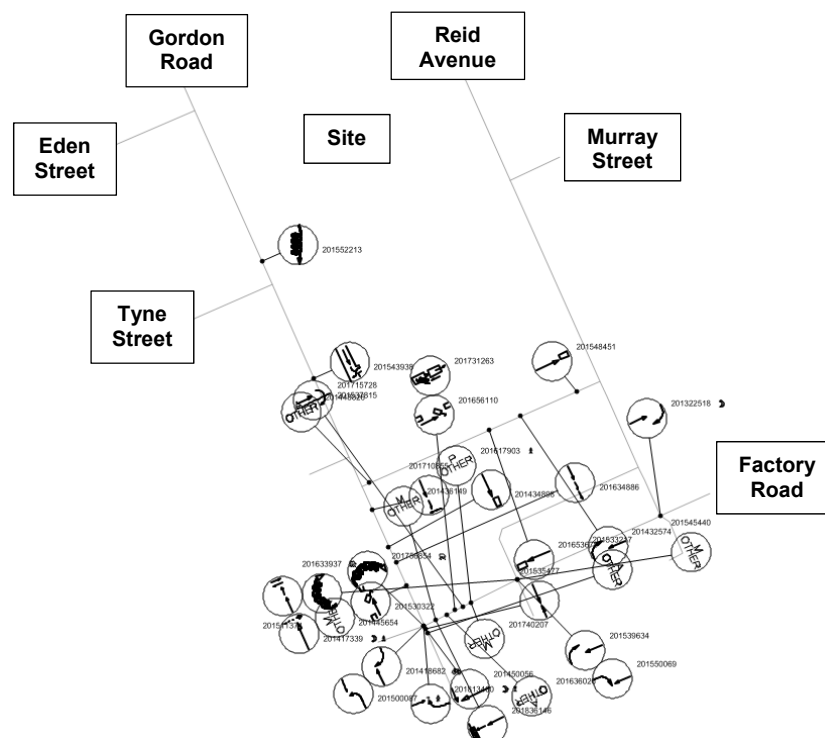
Figure 3: Area of Mosgiel within 200m of a Bus Stop

### 4.3. Road Safety

- 4.3.1. The NZTA Crash Analysis System has been used to establish the location and nature of the recorded traffic crashes in the vicinity of the designation site. All reported crashes between 2013 and 2017 were identified, plus the partial record for 2018, at the following locations:

- Gordon Road, Silver Stream bridge to Factory Road;
- Factory Road, Gordon Road to Reid Avenue;
- Hartstonge Avenue; and
- Reid Avenue.

- 4.3.2. The analysis showed that 43 crashes had been recorded:



**Figure 4: Location and Nature of Crashes, 2013 to 2018**

- 4.3.3. Three crashes were recorded in private property adjacent to the site. These have not been considered further.
- 4.3.4. A total of seven crashes occurred at the Gordon Road / Factory Road intersection, associated with turning vehicles and nose-to-tail crashes within the queues on each approach. However one crash resulted in fatal injuries, and this involved a mobility scooter which was crossing the western approach which was struck by a vehicle turning from south to west.
- 4.3.5. A further 11 crashes occurred elsewhere on Gordon Road. Nine of these occurred between Factory Road and Hartstonge Avenue, particularly clustered towards Factory Road, and typically involved pedestrians stepping into traffic, and parking/unparking movements. Two crashes occurred further north, one to the north of Hartstonge Avenue which involved a southbound vehicle running into a trailer towed by the vehicle in front, and one just north of Tyne Street where a driver suffered a medical incident and left the road.
- 4.3.6. Seven crashes occurred on Hartstonge Avenue, which typically involved vehicles turning to/from driveways and parking/unparking.
- 4.3.7. No crashes have been recorded on the majority of Reid Avenue, but one crash occurred at the Factory Road / Reid Avenue intersection. This involved a southbound vehicle on Reid Avenue that failed to give-way and struck an eastbound vehicle on Factory Road.
- 4.3.8. The remaining 14 crashes occurred on Factory Road. Five of these occurred at the Factory Road / Church Street intersection and involved turning vehicles and nose-to-tail crashes in the queues of vehicles on Church Street. The remaining nine crashes occurred between Gordon Road and Church Street and involved vehicles parking/unparking and turning to/from driveways on the road.
- 4.3.9. The pattern of crashes in the area is commensurate with the urbanised nature of Mosgiel, and does not indicate any significant road safety deficiencies on the roading network.

## 5. Existing Development and Proposed Designation

### 5.1. Existing Development

5.1.1. The site presently accommodates the variety of recreational and community uses, including:

- Mosgiel Pool: This is open 7 days a week, for seven months each year (between September to March);
- Mosgiel caravan park: which typically has 20 caravans;
- Peter Johnstone Park: which accommodates:
  - five full-size rugby pitches plus 5 junior pitches;
  - club rooms (which are available for hire by external parties); and
  - a scout hall;
- The Memorial Park: which includes:
  - Two cricket pitches;
  - An athletics track;
  - Clubrooms for the athletics team (note that these are private and not available for hire);
  - Six soccer pitches (including 2 junior pitches);
  - Skate ramps;
  - Basketball courts;
  - A grandstand for viewing sports;
  - A gymnasium;
  - A squash club; and
  - A badminton court.
- Mosgiel Service Centre: This comprises a public library and service centre
- Mosgiel Public Gardens: This includes gardens, public toilets and a playground.

### 5.2. Proposed Designation

5.2.1. The purpose of the designation is to enable:

- Community and recreational amenities and facilities including, but not limited to:
  - An aquatic centre;
  - Mosgiel Service Centre;
  - Memorial Park and Gardens;
  - Peter Johnstone Park;
- Sporting, recreational and community activities;
- Food and beverage outlets ancillary to community or recreation facilities;
- Buildings and offices associated with club rooms, community facilities and services;
- Vehicle and pedestrian access to facilities;
- Car, cycle and coach parking areas for facilities;
- Directional signage, public art works and other public amenities such as toilets; and
- Landscaping, infrastructure, construction and earthwork activities associated with the above.

5.2.2. The activities at the designation site are expected to largely stay as they are at present, with the exception of the aquatic centre. It is also possible that the existing facilities will be more intensively used, although this could occur under the existing consents.

5.2.3. There are currently three vehicle accesses to the site and all of these are likely to remain in use. Access to the aquatic centre could be from any of the three, depending on its final location.



From a transportation perspective, the location of the aquatic centre is an important issue because it will have effects on the route that patrons use to travel to the site. This is discussed further below.

- 5.2.4. In addition it is understood that walking routes will be provided into the site from Gordon Road (north) and Murray Street.
- 5.2.5. Appropriate additional car parking will be provided for new development, such as the aquatic centre. It is also likely that the existing car parking areas within the site will be optimised through marking the spaces, and initial assessments show that 170 spaces can be provided in the area to the north of Reid Avenue and with 98 spaces in the area served by the southernmost access onto Gordon Road.





## 6. Traffic Generation and Distribution

### 6.1. Traffic Generation<sup>1</sup>

- 6.1.1. The proposal is unusual in that for the most part, uses are not expected to change compared to the existing activities which already occur. Consequently, any traffic effects which arise from the existing activities form part of the receiving environment and the proposed designation will not change these.
- 6.1.2. Hence any traffic-related effects of the designation arise from the changes in activity that could arise under the designation. These are:
- The relocation of the pool, and its conversion from operating for seven months to a year-round facility; and
  - The inclusion of a new junior soccer pitch;
- 6.1.3. Generally, recreation-type events have a benign effect on the adjacent roading networks. This is because they typically occur outside the weekday peak hours, and there are relatively few traffic movements for the area occupied. In this instance then, given that the site already provides 16 soccer/rugby pitches, the inclusion of an additional pitch is unlikely to give rise to any significant traffic generation in the peak periods.
- 6.1.4. Consequently, the greatest increase in the traffic generation of the site is likely to arise from the aquatic centre. Information has been received which shows that the existing facility attracted a peak of 11,600 visitors during March 2018, but overall, the average usage was in the order of 6,000 visitors per month. This would suggest an average usage over the course of a year of around 72,000 visits to the new facility assuming no new patrons were attracted.
- 6.1.5. By way of comparison, Moana pool in Dunedin had 595,000 visits per year and the population of Dunedin is 124,800 people. This equates to 4.8 visits to the pool per head of population per annum. Applying this same ratio to Mosgiel and surrounding area (population 29,100) suggests that around 139,700 visits can be expected at the new facility each year.
- 6.1.6. To ensure a robust assessment, the surrounding population of 29,100 and an anticipated rate of 6 visits per person per annum has been used, which equates to 174,600 visits to the pool each year.
- 6.1.7. Data collected from an aquatic centre in Taupo<sup>2</sup> has been used to disaggregate the expected number of visits at Mosgiel. This information showed that for an annual attendance of 240,500 people, in an average week:
- Weekday 4pm to 5pm: 83 vehicles were generated;
  - Weekday 5pm to 6pm: 95 vehicles were generated;
  - Weekday 6pm to 7pm: 87 vehicles were generated;

<sup>1</sup> The traffic generation of the site has been based upon a generic aquatic centre being developed with associated swimming classes. In the event that the aquatic centre was to be used by a large or highly popular swimming club, the traffic generation could differ from these calculations, based upon the times and sizes of the classes and/or training sessions implemented by the club. Since there can be no certainty around these, they cannot be taken into account.

<sup>2</sup> Reported in the Transportation Assessment for the Queenstown Lakes aquatic centre resource consent application



- Saturday 9am to 10am: 91 vehicles were generated;
- Saturday 1pm to 2pm: 95 vehicles were generated.

6.1.8. The assumed patronage for the potential aquatic centre is 73% of that at Taupo, and thus it is reasonable to expect that the traffic generation will therefore be 37% lower. However traffic generation rates are typically based on the 85<sup>th</sup> percentile volumes rather than the average volumes, and accordingly a factor of 50% has therefore been applied to convert from the mean to the 85<sup>th</sup> percentile value:

- Weekday 4pm to 5pm: 30 vehicles entering, 30 vehicles exiting;
- Weekday 5pm to 6pm: 33 vehicles entering, 36 vehicles exiting;
- Weekday 6pm to 7pm: 33 vehicles entering, 30 vehicles exiting;
- Saturday 9am to 10am: 44 vehicles entering, 22 vehicles exiting; and
- Saturday 1pm to 2pm: 24 vehicles entering, 45 vehicles exiting.

6.1.9. This means that during the weekday peak hour, the facility can be expected generate 60 to 70 vehicle movements, with the busiest period on a Saturday having a similar traffic generation.

6.1.10. This data makes allowance for one swimming class to arrive or depart in each hour. In the event that classes were held which overlapped one another, it is possible that there would be one arrival and one departure per hour. If an allowance is made for 25 children per class which 2 children arriving per car, then this would increase the volumes set out above by an additional 13 vehicle movements (two-way).

6.1.11. There may also be service vehicles associated with the aquatic centre, but the number of vehicles will be very low and therefore is not critical to the overall assessment of traffic-related effects.

6.1.12. As noted above, in addition to the existing recreation and community uses, the Objectives and Policies for the designation permit "*sporting, recreational and community activities*". However the size, frequency and timing of these have not been specified, meaning that an accurate assessment of the traffic generation cannot be undertaken. It is understood that the largest event currently held at the site is the annual Weetbix 'Tryathlon'.

6.1.13. It can reasonably be concluded however that while small events may be common, large events will be relatively infrequent. As such, irrespective of the designation they would be assessed as changing the normal operating conditions on the road network, and hence they would be required to operate under a Traffic Management Plan, which will be required to be approved by the road controlling authorities (which in this case would be the Council, and potentially also NZTA). As part of this, an assessment is required of the amount of traffic generation and ways in which it can be accommodated on the road network.

6.1.14. Smaller events may occur more frequently, and may not be deemed to change the normal operating conditions on the road network. However it is common that such events take place during the weekend and outside the peak periods on the roading network.

6.1.15. Any food and beverage within the site will be ancillary to the primary purposes of community and recreational facilities (such as a café within the aquatic centre, or food trucks at a community fair). As such, food and beverage outlets will not generate any additional traffic, as patrons will already be within the site for another purpose.



## 6.2. Trip Distribution

6.2.1. It is expected that the distribution of vehicles will reflect the distribution of the population of Mosgiel. Consequently, it is considered that:

- If the aquatic centre is located as per the existing community pool, then:
  - 20% of the traffic will travel west (Eden Street / Tyne Street);
  - 40% of the traffic will travel south on Gordon Road before turning east onto Hartstonge Avenue or Factory Road;
  - The remaining traffic will travel further south on Gordon Road before turning east or west using the network of district roads.
- If the aquatic centre is located adjacent to the Reid Avenue / Murray Street intersection, then:
  - 20% of the traffic will travel east (Murray Street);
  - 20% of the traffic will travel south on Reid Avenue before turning east onto Factory Road;
  - 20% of the traffic will travel south on Reid Avenue before turning west on Hartstonge Avenue;
  - The remaining traffic will travel south on Reid Avenue before turning south on Gordon Road or west on Bush Road and using the network of district roads.
- If the aquatic centre is located adjacent to the southern access onto Gordon Road, then:
  - 20% of the traffic will travel west (Eden Street / Tyne Street);
  - 20% of the traffic will travel south on Gordon Road before turning east onto Hartstonge Avenue or Factory Road;
  - The remaining traffic will travel further south on Gordon Road before turning east or west using the network of district roads.

6.2.2. Thus the aquatic centre can be expected to generate the following additional vehicle movements on each approach in the peak hour:

Route	Location of Aquatic Centre		
	As per the existing community pool	Adjacent to the Reid Avenue / Murray Street intersection	Adjacent to the southern access onto Gordon Road
Gordon Road (north of Factory Road)	80	20	80
Gordon Road (south of Factory Road)	40	40	40
Reid Avenue (north of Hartstonge Avenue)	<10	80	<10
Reid Avenue (south of Hartstonge Avenue)	<10	60	<10
Hartstonge Avenue	20	20	20
Factory Road (east of Reid Avenue)	20	20	20
Factory Road (west of Reid Avenue)	20	40	20
Murray Street	<10	20	<10

**Table 1: Traffic Generation and Distribution of Potential Aquatic Centre (Rounded Up), in the Peak Hour**



- 6.2.3. In respect of any service vehicles associated with the aquatic centre, these may approach or depart from any direction but as noted above, the number of vehicles will be very low and so the distribution is not critical to the overall assessment of traffic-related effects.





## 7. Effects on the Transportation Networks

### 7.1. Roading Network Capacity

- 7.1.1. The increases in traffic flows arising from the designation in the peak hour have been identified based on the data above. To ensure that the assessment is robust, the highest volume in each case has been used.

Road	Peak Hour Traffic Volumes (Two-way)			Percentage Change
	Existing	Maximum Increase	Anticipated Maximum	
Gordon Road (north of Factory Road)	650	80	730	12.3%
Gordon Road (south of Factory Road)	1,300	40	1,340	3.1%
Reid Avenue (north of Hartstonge Avenue)	275	80	355	29.1%
Reid Avenue (south of Hartstonge Avenue)	275	60	335	21.8%
Hartstonge Avenue	490	20	510	4.1%
Factory Road (east of Reid Avenue)	725	20	745	2.8%
Factory Road (west of Reid Avenue)	725	40	765	5.5%
Murray Street	130	20	150	15.4%

**Table 2: Anticipated Maximum Increases in Traffic Flows in Peak Hour (Rounded Up)**

- 7.1.2. Traffic volumes on the road network typically vary by around 5% each day due to a variety of factors, such as people travelling at different times, and different needs to travel on different days. It can be seen that the greatest increases are typically below 5%, which is within this normal variation.
- 7.1.3. The greatest increase would arise on Reid Avenue, if this was to be used to serve the aquatic centre. The increase is such that the Level of Service would change from B to C. However this remain within the zone of stable flow, and is not uncommon for an urban road network in the peak periods. Murray Street would remain at Level of Service B, even with the highest increase in traffic flow (which equates to just one additional vehicle movement every 3 minutes).
- 7.1.4. In addition, if the aquatic centre was to be located with frontage onto Gordon Road, the forecast traffic flows are largely already being generated on each of the affected roads during the September-March period each year. Thus any 'effects' relate solely to potential for extending this seven-month period to a year-round activity, plus any additional traffic attracted due to the nature of the new facility. It could reasonably be expected that if there are any capacity-related effects associated with the potential aquatic centre then they will already be occurring within this period.

### 7.2. Non-Car Modes of Travel

- 7.2.1. The capacity of the pedestrian network in the area is highly unlikely to be exceeded as a result of any additional travel to and from the site. While there may be some increase in cycling, the numbers will be insufficient to give rise to the need for any additional cycling infrastructure.



- 7.2.2. The site is already well-served by public transport and it is unlikely that demand will increase to such an extent that additional services are required.

### **7.3. Form of the Access Intersection(s)**

- 7.3.1. The Austroads Guide to Traffic Management Part 6 (*'Intersections, Interchanges and Crossings'*) sets out warrants for auxiliary turning lanes at intersections<sup>3</sup>. Although the site accesses would not be defined as 'intersections', an initial assessment has been carried out of the potential requirement for auxiliary turning lanes.
- 7.3.2. Based on the maximum volume of 650 vehicles per hour on Gordon Road, an auxiliary lane is required when more than 12 vehicles turn right into the site. This is likely to be achieved solely by the potential aquatic centre, and it is highly likely that it is already achieved by the existing uses on the site. Therefore it is considered that any access onto Gordon Road should have either a right-turn lane provided, or some other means implemented by which turning vehicles can be separated from through traffic.
- 7.3.3. The prevailing 275 vehicles per hour on Reid Avenue mean that auxiliary lane are required when there are more than 75 turning vehicles turning right or left. It is not considered that this is likely to be achieved.

### **7.4. Road Safety**

- 7.4.1. The accident history in the vicinity of the site does not indicate that there are any particular features or factors that could be exacerbated by the proposed designation.
- 7.4.2. On-site measurements of the two existing accesses onto Gordon Road show that there is only one restriction, which is towards the north at the northern access where the sight distance is limited to 125m due to the presence of the bridge across Silver Stream. However this distance exceeds that required for a 50km/h speed limit under the NZTA Planning Policy Manual. As a result, there is no reason to anticipate that an intensification of traffic at either site access will result in adverse safety effects arising (subject to the form of the access being appropriate, as set out above).

---

<sup>3</sup> Figure 2.26, page 49



## 8. District Plan Matters

- 8.1. The District Plan sets out a number of transportation-related rules, and it is understood that despite the designation, it is intended to require any development on the site to comply with those rules.
- 8.2. Based on the information available at present, it is expected that any development within the designated site will be able to comply in full with the District Plan transportation-related rules, and therefore it is not expected that any additional rules or exemptions will be required other than in respect of the car parking.
- 8.3. The proposed designation conditions make specific reference to a parking ratio for the aquatic centre. As a general principle, car parking for any activity is set at a level which accommodates the likely demand but not the absolute maximum demand. In this regard though, one difficulty with an aquatic centre is that the parking demand is generally low for much of the time but at busy times, it can be substantially greater. Consequently setting the parking level at, say, the 85<sup>th</sup> or 90<sup>th</sup> percentile level means that the car park will have large amounts of vacant spaces for much of the time but will be too small during the busier times. As a result, the extent to which parking demand should be accommodated within the car park (as opposed to off-site locations) is a matter of policy.
- 8.4. This range of parking ratios is evident within other relevant (NZ) documents:
- Christchurch City District Plan / Nelson District Plan: 1 space per 10sqm of pool area for patrons plus 1 spaces per 200sqm of pool area for staff;
  - Proposed Queenstown Lakes District Plan: 1 space per 15sqm of pool area for patrons plus 1 spaces per 200sqm of pool area for staff; and
  - New Plymouth District Plan: 1.5 spaces per 10sqm of swimming pool area.
- 8.5. For a notional swimming pool of 625sqm (8 lanes, 25m length), within a building of 1,200sqm GFA, these parking ratios result in a range of 45 to 94 spaces being required.
- 8.6. The situation is not clarified by assessing a sample of overseas literature:
- City of Monash (Australia): 5.6 spaces per 100sqm of site, hence 67 spaces required;
  - Wealdon District Council (UK): 1 space per 10 sqm of pool area plus 1 space per 3 staff normally present, hence around 66 spaces being required; and
  - Parking Standards for Northern Ireland: 1 space per 5 sqm of pool area plus 1 space per 3 staff normally present, hence around 128 spaces being required.
- 8.7. Information provided shows that the aquatic centre in Rolleston draws from a population of 44,600 and has 201 parking spaces. Factoring this for the population of 29,100 at Mosgiel indicates that 131 spaces would be appropriate.
- 8.8. Data presented for the Queenstown Lakes aquatic centre<sup>4</sup> showed that for an expected annual patronage of 174,500 people, the absolute busiest day could be expected to have a parking demand of 91 spaces with the 85<sup>th</sup> percentile parking demand being 74 spaces. This level of demand is commensurate with the Mosgiel facility and therefore a similar level of demand can be expected.

---

<sup>4</sup> Reported in the Transportation Assessment for the Queenstown Lakes aquatic centre resource consent application



- 8.9. Overall then, there is a large range in the parking requirements for an aquatic centre (in this case, equivalent to a range of 45 to 131 parking spaces). Taking into account the average and median values, a parking ratio of 1.2 spaces per 10sqm of pool area is considered appropriate. It is considered that this may be the most practical parking ratio to adopt within the designation, as it is easily measured and assessed.
- 8.10. However it is likely that the range of parking ratios reflects the differences in the number of visits made to the facility. Accordingly, it would seem reasonable to relate the parking provision to the capacity of the building (on the expectation that the building is designed to reflect its likely level of use). Further, other buildings associated with the activities on the site could be established over time (unrelated to the aquatic centre) and for which the parking generation of the aquatic centre is not relevant.
- 8.11. Of the expected population catchment of 29,100, around 12,000 live within Mosgiel itself and therefore could use public transport to travel to the site, or could walk or cycle. The remaining 17,100 people would not have this option and would instead be likely to travel by car, taxi or coach.
- 8.12. Surveys carried out for sporting fixtures show an average vehicle occupancy of between 2.5 and 3.5 people per vehicle. This is reflected in surveys of vehicle occupancy at other events, which typically show an occupancy of 2.5 to 3.0 people per vehicle. Consequently, it is considered that a parking ratio of 1 space to every 3 people that the building is designed for is appropriate.



## 9. Conclusions

- 9.1. This report has identified, evaluated and assessed the various transport and access elements of a proposed community and recreation designation for a site towards the northern edge of Mosgiel. The site is already being used for community and recreation purposes, and in this regard, the existing uses of the site are expected to continue. The likely changes arising from the designation are the potential for a new aquatic centre to be established and for a range of community and cultural activities to take place. The existing facilities on the site might also be upgraded over time.
- 9.2. Based on the assessment set out above, the traffic generated by the establishment of an aquatic centre can be accommodated on the adjacent roading network without capacity or efficiency issues arising. Existing levels of service will largely be maintained on the roads that are potentially subject to an increase in traffic, and even when there is a change in the level of service, this remains within the zone of stable flow.
- 9.3. The crash history in the vicinity of the site does not indicate that there would be any adverse safety effects from the proposal, even allowing for the additional traffic movements that will be generated.
- 9.4. The capacity of the pedestrian network in the area is highly unlikely to be exceeded as a result of any additional travel to and from the site. The number of cyclists and public transport users are unlikely to be sufficient to require the improvement of any existing infrastructure of services.
- 9.5. No details are available regarding the potential community and cultural activities which may take place at the site (such as their size, timing or frequency), and thus their traffic generation cannot be calculated. However large events will change the normal operating conditions on the road network, and hence they would be required to operate under a Traffic Management Plan, which will be required to be approved by the Council (and potentially also NZTA). As part of this, an assessment is required of the amount of traffic generation and ways in which it can be accommodated on the road network.
  - 9.5.1. Smaller events may occur more frequently, but it is common that these take place during the weekend and outside the peak periods on the roading network, meaning that they will not have adverse effects on road efficiency or safety.
- 9.6. At this stage, the site layout is not expected to require any non-compliances with the transportation requirements of the District Plan and thus no additional rules or exemptions from rules are proposed, other than in respect of the parking spaces required. In this regard, there is a wide range of data for aquatic centres but the proposal makes allowance for 1 space for every 3 people that the building is designed for, which is considered appropriate.
- 9.7. Based on the prevailing traffic flows, any access onto Gordon Road will require a right-turn auxiliary lane, and there may be merit in including comments to this effect within the designation conditions.
- 9.8. Overall, and subject to the preceding comments, the proposed designation can be supported from a traffic and transportation perspective and it is considered that there are no traffic and transportation reasons why the designation could not be confirmed.



**CARRIAGEWAY**  
**CONSULTING**

traffic engineering | transport planning

A. PO Box 29623, Christchurch, 8540 P. 03 377 7010 E. [office@carriageway.co.nz](mailto:office@carriageway.co.nz)



## APPENDIX D

Noise Assessment, Marshall Day  
Acoustics







Project: **MOSGIEL POOL DESIGNATION**

Prepared for: **Dunedin City Council  
C/o Mitchell Daysh  
PO Box 489  
Dunedin 9054**

Attention: **Louise Taylor**

Report No.: **Rp 001 R03 20180237**

#### Disclaimer

Reports produced by Marshall Day Acoustics Limited are based on a specific scope, conditions and limitations, as agreed between Marshall Day Acoustics and the Client. Information and/or report(s) prepared by Marshall Day Acoustics may not be suitable for uses other than the specific project. No parties other than the Client should use any information and/or report(s) without first conferring with Marshall Day Acoustics.

The advice given herein is for acoustic purposes only. Relevant authorities and experts should be consulted with regard to compliance with regulations or requirements governing areas other than acoustics.

#### Copyright

The concepts and information contained in this document are the property of Marshall Day Acoustics Limited. Use or copying of this document in whole or in part without the written permission of Marshall Day Acoustics constitutes an infringement of copyright. Information shall not be assigned to a third party without prior consent.

#### Document Control

Status:	Rev:	Comments	Date:	Author:	Reviewer:
DRAFT			13 July 2018	Rob Hay	
Approved	R01	Includes internal review	17 July 2018	Rob Hay	Jon Farren
Approved	R02	Consider client comments	20 July 2018	Rob Hay	Jon Farren
Approved	R03	Minor correction	11 October 2018	Rob Hay	Jon Farren

## TABLE OF CONTENTS

1.0	INTRODUCTION .....	4
2.0	SITE DESCRIPTION & ACTIVITIES.....	4
3.0	DISTRICT PLAN & OTHER GUIDANCE .....	5
3.1	Operative Dunedin District Plan .....	5
3.2	Dunedin 2GP .....	7
3.3	World Health Organisation .....	8
3.4	NZS 6802: 2008.....	9
4.0	NOISE SOURCES .....	9
4.1	Field Sports Player & Spectator Noise.....	9
4.2	Spontaneous play .....	10
4.3	Typical building activity .....	10
4.4	Functions .....	10
4.5	Vehicle Traffic.....	10
4.6	Mechanical Plant .....	11
5.0	PROPOSED DESIGNATION CONDITIONS.....	11
6.0	ASSESSMENT OF NOISE EFFECTS.....	12
7.0	RECOMMENDATIONS .....	13
8.0	CONCLUSIONS.....	13

### APPENDIX A GLOSSARY OF TERMINOLOGY

### APPENDIX B NOISE CONTROL FENCE INDICATIVE DESIGNS

## 1.0 INTRODUCTION

Marshall Day Acoustics (MDA) has been engaged by Dunedin City Council (DCC) to undertake an assessment of noise effects related to the designation of the Mosgiel Community and Recreational Area. The designation will allow for the operation, maintenance, upgrade and expansion the facilities to provide for a range of sporting, cultural and community activities. The designation purpose, described in greater detail by others, provides a full description of the activities covered by the designation. Key elements of relevance to our noise assessment include:

- An aquatic centre;
- Mosgiel Service Centre;
- Memorial Park and Gardens;
- Peter Johnstone Park;
- Sporting, recreational and community activities within the facilities listed above;
- Food and beverage outlets ancillary to community or recreation facilities;
- Buildings and offices associated with club rooms, community facilities and services; and
- Vehicle access and parking associated with recreation facilities.

A glossary of acoustical terms and relevant New Zealand Standards is provided in Appendix A.

## 2.0 SITE DESCRIPTION & ACTIVITIES

Key features of the existing site are Memorial Park and Gardens, the Mosgiel Pool, Peter Johnstone Park, club rooms and facilities associated with both parks and a Council Service Centre. The location and existing layout of the site is provided in Figure 1.

**Figure 1: Site locality & layout.**



The site is surrounded by urban Mosgiel, with the bulk of the east, south and west site boundaries adjacent to residential zones. To the immediate south of the Memorial Gardens, across Hartstonge Avenue, there is a shopping precinct consisting primarily of a supermarket and big box retail with associated car parks. To the north, across a waterway and reserve strip, lies rural zoned land, while further to the Northeast is Taieri Aerodrome and various industrial zoned sites.

Zoning of the site and surrounding areas under both the Operative and 2GP Dunedin District Plans is discussed below in Section 3.0.

In addition to the designation of the site we understand that DCC proposes to build a new aquatic centre. Various design scenarios have been considered for the site, each with the pool and other facilities in different locations. These scenarios have informed our analysis and recommendations.

Noise emissions from the site can be divided in to following broad categories:

- Player and spectator noise associated with organised or spontaneous play on sports fields and playgrounds;
- Vehicle noise on site internal roads and within car parks;
- Noise breakout from within buildings on the site; and
- Mechanical plant associated with the buildings.

### 3.0 DISTRICT PLAN & OTHER GUIDANCE

Because the Dunedin District Plan is currently under review we have assessed the proposal under both the Operative Plan and the proposed 2GP. We have also considered other commonly used guidance for acceptability of noise effects such as those provided by the World Health Organisation and New Zealand Standard NZS 6802:2008 "*Acoustics - Environmental Noise*".

#### 3.1 Operative Dunedin District Plan

A portion of DCC Operative Plan map 28 is shown in Figure 2 below.

The site is largely zoned Residential 1, apart from a small strip along the north side of Hartstonge Avenue, which is zoned Residential 2. Two designations already exist within the site and can be seen in Figure 2. The first is D615, the Mosgiel Service Centre, within the Residential 2 Zone mentioned above. The other is D706, near the northwest corner of the site, which is a water treatment plant (aeration chamber). Other features of note are the supermarket and big box retail, zoned Large Scale Retail (LSR) and the Taieri Aerodrome approach fans to the immediate north of the site marked in dotted red lines. The site lies beneath the Dunedin Airport northeast and southeast approach and departure slopes found in Map 72 (not shown).

The site is also shown on DCC Operative Plan noise map 62 (Figure 3). Nearby dwellings, either directly adjoining or across roads from the site, fall within one of two noise zones. Those within the yellow/brown coloured area have noise limits summarised as:

- Daytime<sup>1</sup> 50 dB L<sub>A10</sub>
- Shoulder period<sup>2</sup> 45 dB L<sub>A10</sub>
- Night-time<sup>3</sup> 35 dB L<sub>A10</sub> and 75 dB L<sub>Amax</sub>

While those within the blue coloured area have noise limits summarised as:

---

<sup>1</sup> 0800 to 1800 daily

<sup>2</sup> 0700 to 0800 and 1800 to 2100 Monday to Friday and between 1800 to 2100 Saturday

<sup>3</sup> 2100 to 0700 the following day and includes 24 hours Sundays and statutory holidays



- Daytime 50 dB  $L_{A10}$
- Shoulder period 45 dB  $L_{A10}$
- Night-time 40 dB  $L_{A10}$  and 75 dB  $L_{Amax}$

Figure 2: DCC Operative Plan Map 28 (part)

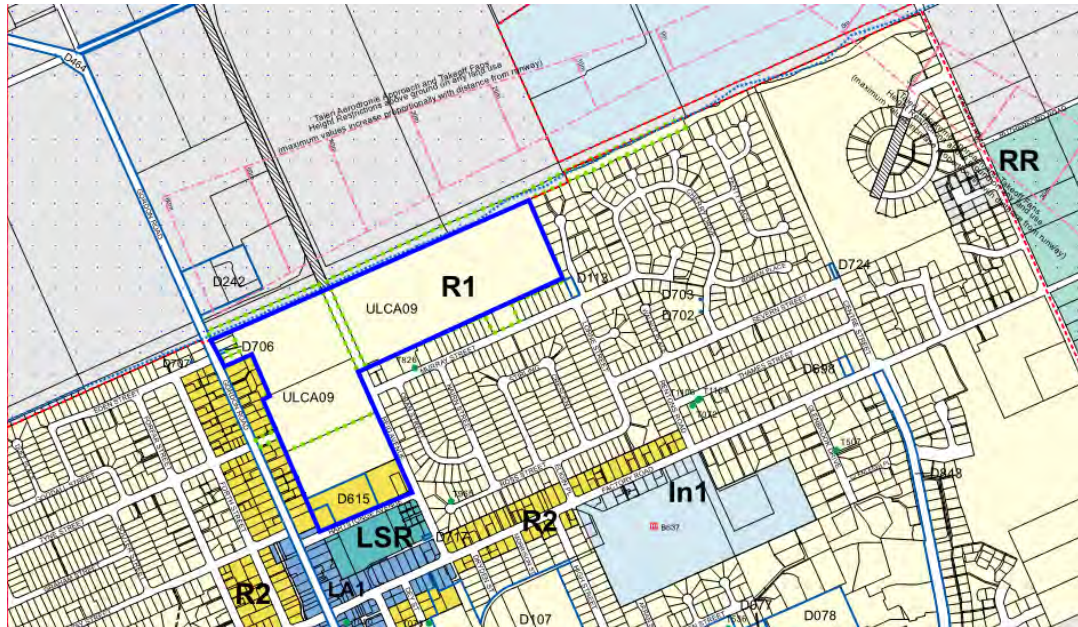


Figure 3: DCC Operative Plan Noise Map 62 (part).



These noise limits are conservative in several respects. The daytime limit is set at the lower end of typical limits found within New Zealand District Plans. The presence of a morning and evening shoulder period with a reduced noise limit is atypical of most District Plans in New Zealand, which would still regard these times as daytime. The blue noise area as a typical high-amenity night-time noise limit, whereas the yellow/brown noise area has an atypically low night-time noise limit. Finally, the inclusion of Sunday and statutory holidays within the already low night-time noise limits is now regarded as unusually restrictive.

While residential activity noise is exempt from these noise rules, the Operative District Plan does not appear to have any exemption for noise from recreation activities of this scale. As such, noise from all sources on site, including spectators and players, must comply with the noise limits in order to be a permitted activity.

### 3.2 Dunedin 2GP

A portion of DCC proposed 2GP map for the site and surrounds is shown in Figure 4 below.

The site is zoned Recreation with residential zones now described as General Residential 1 and General Residential 2. The formerly zone previously described as Large Scale Retail (LSR) is now Commercial and Mixed Use Principal Centre. Taieri Aerodrome and Dunedin Airport approach and departure slopes remain unchanged (Figure 5 below).

Noise limits for all Residential and Recreation Zones are given in 2GP Rule 9.3.6 and can be summarised as:

- Daytime<sup>4</sup> 50 dB  $L_{Aeq}$  (15 min)
- Shoulder period<sup>5</sup> 45 dB  $L_{Aeq}$  (15 min)
- Night-time<sup>6</sup> 40 dB  $L_{Aeq}$  (15 min) and 70 dB  $L_{AFmax}$

**Figure 4: DCC 2GP Plan Map for Site and Locality**



Noise limits for all Commercial and Mixed Use Zones can be summarised as:

- All day<sup>7</sup> 60 dB  $L_{Aeq}$  (15 min) and 85 dB  $L_{AFmax}$

<sup>4</sup> 0700 to 1900 daily

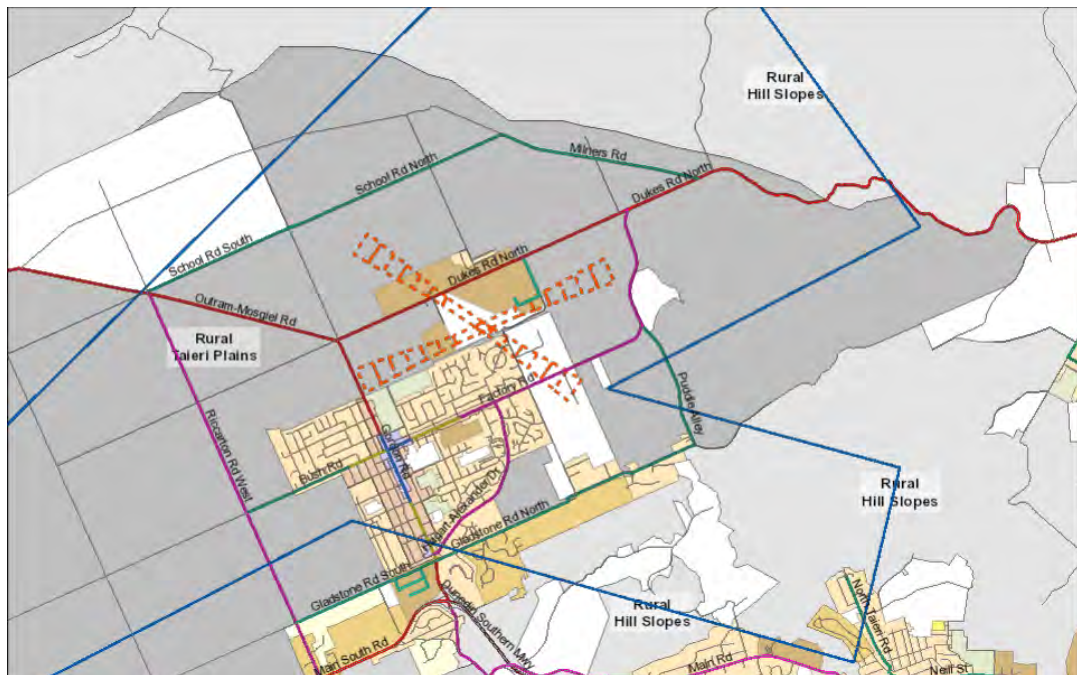
<sup>5</sup> 1900 to 2200 daily

<sup>6</sup> 2200 to 0700 daily

<sup>7</sup> Commercial and Mixed-use zone  $L_{AFmax}$  noise limit applies only from 2200 to 0700



Figure 5: Taieri Aerodrome and Dunedin Airport approach and departure slopes



The DCC 2GP allows several exceptions from these noise rules, including item 6 (g) and (h), which state:

- (g) sport and recreation<sup>8</sup> not involving the use of motor vehicles, amplified sound, or firearms
- (h) vehicles operating on public roads or trains on rail lines (including at railway yards, railway sidings or stations and level crossing warning devices)

Noise levels are to be measured at the boundary of the receiving property (or the notional boundary of a noise sensitive activity in a rural zone), except where it is not possible to measure noise levels at the boundary when noise levels will be measured at the closest practical point within the boundary.

Activities that are not exempt, and which exceed these performance standards by less than 5 dB  $L_{Aeq}(15 \text{ min})$  are discretionary activities, while activities that contravene performance standards by 5 dB  $L_{Aeq}(15 \text{ min})$  or more are non-complying activities.

### 3.3 World Health Organisation

World Health Organisation (WHO) Guideline Values for Community Noise (Berglund and Lindvall, 1999) provide guidelines for environmental noise exposure. For community or environmental noise, the critical health effects (those effects which occur at the lowest exposure levels) are sleep disturbance and annoyance.

As presented in Table 1, these Guideline Values are the exposure levels that represent the onset of the effect for the general population. That is, at these noise levels, critical health effects only begin to appear in a small number of vulnerable or sensitive groups.

<sup>8</sup> The use of land and buildings for organised sport, recreation activities, events, and sports education. This definition includes ancillary office facilities, meeting rooms, and ticket sales activities, but does not include vehicles or functions using hired spaces within club rooms.

**Table 1: WHO Guideline Values for the critical health effects of community or environmental noise**

Specific Environment	Critical health effect(s)	dB L <sub>Aeq</sub>	Time base (hours)	dB L <sub>AFmax</sub>
Outdoor living area	Serious annoyance, daytime & evening	55	16	-
	Moderate annoyance, daytime & evening	50	16	-
Outside bedrooms	Sleep disturbance, window open (outdoor values) night-time	45	8	60

### 3.4 NZS 6802: 2008

New Zealand Standard NZS 6802:2008 “Acoustics - Environmental Noise” refers to the following guideline upper limits for sound exposure at or within the boundary of any residential land:

- Daytime: 55 dB L<sub>Aeq</sub> (15 min)
- Night-time: 45 dB L<sub>Aeq</sub> (15 min) and 75 dB L<sub>AFmax</sub>

NZS6802 defines the night-time period as the hours between 2200 – 0700 hrs.

## 4.0 NOISE SOURCES

We have considered the following sources of noise from within the site:

- Players and spectators taking part in organised field sports or training;
- Spontaneous play on both sports field and children’s playgrounds;
- Activity within buildings such as sports clubs, pool, service centre etc, during their normal operation, that breaks out of the building;
- Functions within buildings such as sports clubs (birthdays, large scale club functions etc), that generate noise which breaks out of the building. These events are defined by the presence of live or recorded music, possibly with the sale or availability of alcohol, and often occurring at night;
- Vehicle traffic within the site associated with the full range of activities described above; and
- Mechanical plant associated with buildings on the site.

We understand that lights are available on Peter Johnstone Park but not Memorial Park. No public address (PA) system is permanently installed at either park.

### 4.1 Field Sports Player & Spectator Noise

It is important to recognise that noise generated by both players and spectators is uncontrollable in any practical regulatory sense. The level of noise generated from moment to moment, and indeed the average noise level from one game to the next, can vary significantly. In our view it is more important to recognise the potential for such recreational noise and to provide adequate mitigation to control adverse noise effects. Local communities can then balance the value of having large areas of well-kept park land at hand that for much of the week generates little noise.

We understand that both Memorial Park and Peter Johnstone Park are long standing community facilities. No significant changes to playing ground layout are planned because of this development, although there is potential for minor change in playing field layout on Memorial Park.

For Peter Johnstone Park, the typical setback from any of the five marked playing fields to residential boundary varies from 45 to 55 metres. We consider it likely that a typical inter-club game of field sports (including say 60 spectators) will result in noise levels of around 45 dB L<sub>Aeq</sub> and 55 dB L<sub>Amax</sub> at nearest residential boundaries and for large crowds (600 people) up to 60 dB L<sub>Aeq</sub> and 70 dB L<sub>Amax</sub>. We



have based our estimated noise levels on calculations performed for Nga Puna Wai (Christchurch City District) and the Rolleston Recreation precinct (Selwyn District).

As lights are provided at Peter Johnstone Park it is possible to have field sports practice conducted in the evening and night-time. There is limited potential for the operative District Plan night-time noise standards to be exceeded from time to time.

At Memorial Park the existing setbacks between playing fields and residential boundaries are somewhat less (typically 10 – 30 m). We note that the layout of the park is rather tight, which will restrict the ability for any significant crowd size to accumulate. While there is potential for player and spectator noise to exceed the operative District Plan daytime noise performance standard at times, this is a pre-existing situation that will not change significantly because of the redevelopment scenarios presented. We note that no lights are provided to this area and that potential for night-time noise disturbance for organised field sports or practice is therefore limited.

#### **4.2 Spontaneous play**

Spontaneous play may occur at any time, anywhere within the Playground, Memorial Gardens or the playing field areas (when not in use for scheduled sports). As with organised community sports the noise generation will be highly variable, although in our opinion generally lower in noise level, except when conducted close to a residential boundary. Such play is characteristic of residential neighbourhoods, especially where recreational facilities are provided for this purpose. We have not attempted to predict a noise level for such play.

#### **4.3 Typical building activity**

There are several existing sports clubrooms and community facilities present in the two parks. Depending upon the development scenario selected, some of these may remain as they are or may be rebuilt in new locations. Typical use of these facilities is for viewing sporting events, provision of changing facilities, after match socialising, administrative meetings or community meetings.

We consider it unlikely that any of these activities will result in noise greater than the operative District Plan night-time noise standard. We note that where any new building is to be constructed, the design should ensure that the range of uses envisioned have been considered and appropriate design decisions made.

#### **4.4 Functions**

In a limited number of cases it is possible that club rooms may be hired out to host functions such as a prize giving or other community events. Typically, these would involve amplified music and may also include supply of alcohol.

We consider this appropriate provided that the designation include a condition requiring compliance with the applicable District Plan noise limits. Where a new building is planned, the potential for such events should be considered during the design process and adequate sound insulation provided.

#### **4.5 Vehicle Traffic**

A traffic assessment has been undertaken by Mr Carr of Carriageway Consulting. Carriageway have provided the existing traffic flows in the area to capture the weekday evening peak period (Table 2).

As no major changes are proposed to sports field layout and activity, or to major facilities other than the aquatic centre, changes to traffic number and access location will be driven the aquatic centre redevelopment and final location. We have therefore considered only aquatic centre traffic flows with respect to noise.

**Table 2: Existing traffic flows**

Location counted	Two-way flow (vph)
Gordon Road, near Tyne Street	650
Reid Avenue	275
Factory Road	725
Hartstonge Avenue	490
Murray Street	130

*vph Vehicles per hour*

Carriageway have based their analysis on the redeveloped aquatic centre receiving approximately 70,000 visits per year. Their assessment of change in traffic flows can be summarised as:

- No change in peak hour traffic flow when pool is located with an access off Gordon Road;
- Locating the pool access off Reid Avenue will result in increased peak hour traffic (+10 to +40 vph) on all roads except Gordon Road (-50 vph); and
- During cooler months of the year (April through August), peak hour traffic on Gordon Road would increase by around 50 vehicles per hour.

In any event, no scenario results in noise during peak hour at any given point on the road network changing by more than 1 dB (up or down). A change in noise of this magnitude is not perceptible.

#### 4.6 Mechanical Plant

Mechanical plant is required for heating/cooling, provision of fresh air, extract air and, in the case of the aquatic centre, purification and heating of pool water. There are well understood and proven means for controlling and mitigating noise from mechanical plant that are equally applicable to both existing buildings on site and any new buildings or facilities that may be added. Such means include:

- Selection of appropriate equipment;
- Following good design principles and selecting the location of installations appropriately;
- Providing for screening of outdoor units or vents from noise sensitive receivers;
- Use of acoustic attenuators, louvres or other engineering means to reduce noise; and
- The use of building management systems to turn off or reduce the operating speed of fans as appropriate at night.

We suggest that the designation include a condition requiring all mechanical plant on site to comply with the appropriate District Plan noise standards.

#### 5.0 PROPOSED DESIGNATION CONDITIONS

In undertaking this assessment, we have reviewed draft versions of the proposed designation conditions that have been developed by Dunedin City Council. These conditions provide for minimum setbacks from residential boundaries for buildings and car parks; and the provision of noise control fences (Appendix B) under certain circumstances. We discuss noise generation based on playing field setbacks in Section 4.1. We consider these a satisfactory minimum frame work and note that the proposed overarching requirement is non-recreational noise complies with the applicable District Plan noise limit. Accordingly, we have suggested default setbacks (5 m) for car parks from residential boundaries unless noise control fencing is also provided; and for buildings (2 m), with the condition that any new buildings should have the need for enhanced sound insulation and mechanical plant noise considered.

These matters are emphasised in our recommendations below and form and underpinning assumption in our assessment of effects discussion.

## **6.0 ASSESSMENT OF NOISE EFFECTS**

The application site is a long established facility providing a wide array of recreational and community facilities. While largely sited in a residential context, the site (and the surrounding residential area) adjoins Rural and Commercial zoned land, with Industrial zoned land at greater distance. In addition, the site is adjacent to a community aerodrome and under the approach and departure route for Dunedin Airport. While likely to be reasonably quiet in the evenings and at night, the area can be expected to be moderately noisy during the daytime, with significant peaks of noise associated with aircraft and rail transport links.

It is against this context that we consider the likely noise effects that may arise from recreational facilities within the designation area.

We favour the approach taken by the proposed 2GP District Plan to make certain activities associated with recreation exempt from the District Plan noise standards.

For much of the time (i.e. normal evening and weekend use), noise levels received at nearby dwellings will not be likely to exceed the operative District Plan permitted activity standard of 50 dB  $L_{A10}$  (daytime) and 45 dB  $L_{A10}$  (evenings). This is commensurate with the most stringent guidance described in Section 3.0. Where noise levels exceed the daytime noise standard, such as may occur for games of note or where multiple games are being played concurrently, this will be for defined and relatively brief periods related to seasonal field sports activities; and then only at times. Actual levels of noise received will be lower at other times.

If noise from the hire of facilities for functions is required to comply with the applicable District Plan noise performance standards, we are satisfied that there will be no significant adverse noise effects.

Similarly, where fixed plant operates at night, we are satisfied that there will be no significant adverse noise effects if this achieves the applicable night-time noise standard (we suggest the 2GP proposal of 40 dB  $L_{Aeq}$ ).

Overall, we consider that any adverse noise effects arising from the operation of recreational and community activities within the designation will be minimal.

## **7.0 RECOMMENDATIONS**

To control and mitigate potentially adverse effects arising from functions and mechanical plant within the designation, we recommend:

- A condition that noise from functions complies with the applicable District Plan noise limits;
- A condition of consent requiring all mechanical plant to cumulatively comply with the applicable District Plan noise limits.
- A condition requiring noise control fencing should any car park be established within 5 m of a residential site. The car park is to be designed such that the front of a car is to be at least 1 m from the fence.
- That any organisation providing facilities for function hire have a noise management plan (NMP), approved by Dunedin City Council, that covers such matters as:
  - Management of facility user expectations;
  - Controls around hours of use;
  - Ensuring music and crowd noise does not exceed consented limits;
  - Ensuring that no glass or other hard materials is dumped outdoors at night;
  - Traffic control (where applicable);
  - Any other matters considered relevant;
  - Complaints and community relationships; and
  - Regular reviews of the NMP.

## **8.0 CONCLUSIONS**

We consider that the proposed 2GP District Plan provides an appropriate treatment of noise arising from recreational and associated activities. The noise performance standards of the 2GP District Plan are appropriate for the protection of a high standard of residential amenity during both the daytime and night-time.

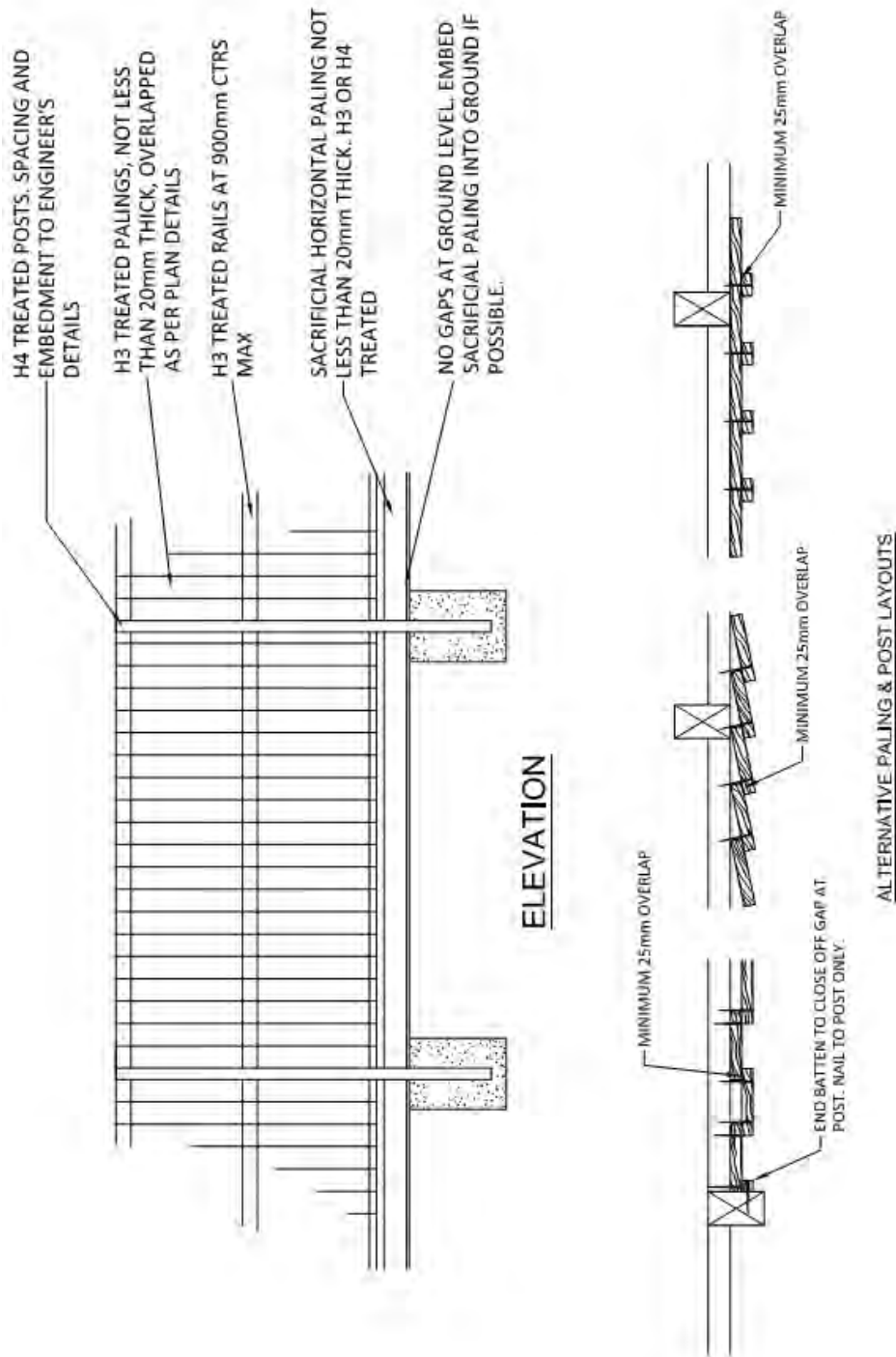
In general, the designation of Memorial park and Peter Johnstone Park will not result in any change to the noise environment. The potential future redevelopment of the aquatic centre and its final location will result in localised changes to the noise environment, but these will generally be imperceptible.

Provided that the 2GP Noise standards, or something very similar, are applied to non-exempt activities under the 2GP District Plan (such as functions and mechanical plant), we consider that any noise effects arising from potential future activities permitted by the proposed designation, including the redevelopment/relocation of the aquatic centre will be acceptable.

## APPENDIX A GLOSSARY OF TERMINOLOGY

<b>Ambient</b>	The ambient noise level is the noise level measured in the absence of the intrusive noise or the noise requiring control. Ambient noise levels are frequently measured to determine the situation prior to the addition of a new noise source.
<b>Special Audible Characteristics</b>	Distinctive characteristics of a sound which are likely to subjectively cause adverse community response at lower levels than a sound without such characteristics. Examples are tonality (e.g. a hum or a whine) and impulsiveness (e.g. bangs or thumps).
<b>SPL or <math>L_p</math></b>	<u>Sound Pressure Level</u> A logarithmic ratio of a sound pressure measured at distance, relative to the threshold of hearing (20 $\mu$ Pa RMS) and expressed in decibels.
<b>dBA</b>	The sound level expressed as a logarithmic ratio of sound pressure (P) relative to a reference pressure of $P_r=20 \mu\text{Pa}$ i.e. $\text{dB} = 20 \times \log(P/P_r)$ , which has its frequency characteristics modified by a filter (A-weighted) so as to more closely approximate the frequency bias of the human ear.
<b><math>L_{Aeq}(t)</math></b>	The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level.  The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b><math>L_{A10}(t)</math></b>	The A-weighted noise level equalled or exceeded for 10% of the measurement period. This is commonly referred to as the average maximum noise level.  The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
<b><math>L_{Amax}</math></b>	The A-weighted maximum noise level. The highest noise level which occurs during the measurement period.
<b>SEL or <math>L_{AE}</math></b>	<u>Sound Exposure Level</u> The sound level of one second duration which has the same amount of energy as the actual noise event measured.  Usually used to measure the sound energy of a particular event, such as a train pass-by or an aircraft flyover
<b>NZS 6801:1991</b>	New Zealand Standard NZS 6801:1991 " <i>Measurement of Sound</i> "
<b>NZS 6801:2008</b>	New Zealand Standard NZS 6801:2008 " <i>Acoustics – Measurement of environmental sound</i> "
<b>NZS 6802:1991</b>	New Zealand Standard NZS 6802:1991 " <i>Assessment of Environmental Sound</i> ".
<b>NZS 6802:2008</b>	New Zealand Standard NZS 6802:2008 " <i>Acoustics – Environmental Noise</i> "
<b>NZS 6803:1999</b>	New Zealand Standard NZS 6803: 1999 " <i>Acoustics - Construction Noise</i> "
<b>Sound Insulation</b>	When sound hits a surface, some of the sound energy travels through the material. 'Sound insulation' refers to ability of a material to stop sound travelling through it.

**APPENDIX B NOISE CONTROL FENCE INDICATIVE DESIGNS**



<p><b>MARSHALL DAY</b> Acoustics</p>	<p>ACOUSTIC TIMBER FENCE</p>	<p>MIDA-ENV-4-FEN-004 REVISION: B</p>
--	------------------------------	---







## **APPENDIX E**

Infrastructure Review,  
GHD





# Mitchell Daysh

## Mosgiel Recreation Area Designation Infrastructure Review

June 2018



# Table of contents

1.	Introduction.....	2
2.	Mosgiel Recreation Area Designation Water Supply .....	2
2.1	Current demands .....	2
2.2	Future Demand .....	2
2.3	Water Supply .....	3
2.4	Supply layout .....	3
3.	Wastewater .....	4
3.1	Current demands .....	4
3.2	Wastewater Volumes .....	5
3.3	Wastewater quality.....	5
3.4	Wastewater Infrastructure Layout.....	5
4.	Stormwater .....	6
5.	Flood Risk .....	9
6.	Power infrastructure .....	9
7.	Summary.....	10
8.	Scope and limitations .....	11

# Figure index

Figure 1 Water Supply Infrastructure .....	3
Figure 2 Wastewater Infrastructure .....	5
Figure 3 Stormwater Network.....	6
Figure 4 Pump Station Catchments .....	7
Figure 5 Electrical Infrastructure .....	9

# 1. Introduction

An application is currently being prepared by Mitchell Daysh, on behalf of Dunedin City Council for designation of the recreational area in Mosgiel, including Memorial Park and Peter Johnstone Park. The designation is to allow future upgrade works including the development of a new pool facility. This report provides supporting information for the application and reviews the utilities in the area to assess the level of service, capacity and the impact that proposed development/upgrades may have on the services.

## 2. Mosgiel Recreation Area Designation Water Supply

### 2.1 Current demands

The major water demands within the designation area is generated by the following activities:

- The Mosgiel Pool
- The sports club rooms
- The Mosgiel Caravan Park

Discussions with Dunedin City Council (DCC) parks management contractors confirmed that there is currently no irrigation of the playing fields during the summer but consideration is being given to the establishment of new cricket pitches that would include irrigation of the wicket area.

Other facilities within the designation area include the Memorial Park grandstand and associated halls and the club rooms on Reid Avenue. Water demands for these are associated with catering and ablution facilities. While there is regular usage of these facilities, demands for the day to day usage are expected to be relatively low (approximately 4 m<sup>3</sup>/day assuming usage by 100 people). Peak demands will be associated with large sporting events and functions and will be more intermittent. These events are predominantly outside the morning and evening peak demand periods and no issues with supply have been identified.

The Mosgiel Caravan Park is located adjacent to the existing pool. The caravan park will have a similar demand to typical residential areas however demand is relatively consistent throughout the year with no irrigation during the peak summer period.

### 2.2 Future Demand

There has not been a detailed assessment of the water demands for the proposed Mosgiel Pool, however, network modelling undertaken by DCC using demand figures, based on 75% of the maximum monthly water usage for Moana pool over the last 15 years, showed that there were no issues with headloss or low pressure within the network. This is considered a very conservative assessment equating to an increase of 850% over the existing pool facility. While the new facility is expected to result in an increase in patronage, an increase in peak water demand in the order of 300% is considered more realistic.

There are no proposed major upgrades or increase in club room or function facilities at the site that will generate a significant increase in use from current demands. There are no plans to increase the size of the Caravan Park, however its location may change.

The development of new irrigated cricket pitches at Memorial Park would increase water demand during the summer period. This would coincide with the peak demand period and could further stress the supply system depending on the watering regime. While it is difficult to assess the potential increase in demand, options to mitigate additional stress on the supply system would be:

- Automating irrigation so that it occurs during the lower demand periods of the day.
- To utilise the existing groundwater bore on Gordon Road (adjacent the existing pool) as an irrigation supply source.

Use of the existing bores for irrigation would require new pipework from the bore to the irrigation area as this would be an unsecure supply. However, as there is currently no irrigation network within the playing fields, supply lines would need to be installed even if the potable supply system was used.

The proposed upgrades and redevelopment covered by the designation will be generally consistent with the current use at the site. The new pool facility will result in increased water demand, however this can be met by the current network without the need for upgrades. The increased demand may cause additional stress to the supply system when irrigation demand is high, however demand increases associated with increased patronage of the pool facility can be partially offset by the use of modern water efficient facilities. Demand associated with pool usage is also outside the typical peak demand periods.

## 2.3 Water Supply

The Wingatui Reservoir that supplies the water supply network for Mosgiel was, until recently, supplied by a number of wells in the area. Recent concerns over the security of water supplies in New Zealand resulted in a review of the water source and the reservoir is now supplied by Mount Grand Water Treatment Plant.

DCC has indicated that the water supply system for the Mosgiel area is periodically stressed during the drier summer periods with domestic irrigation causing a significant increase over typical daily demands.

## 2.4 Supply layout

The current supply network is shown in Figure 1 below. As there are supply mains of 100-150 mm dia running around the perimeter and through the site, servicing will not restrict where the pool could be located. However, the water line running through Memorial Park, between Murray Street and Tyne Street, is in a service corridor that also includes a 375 mm wastewater gravity line and the 500 mm dia wastewater rising main. It is recommended that the proposed location of the new pool avoids close proximity or a conflict with this corridor as relocation of the services would involve significant expense.



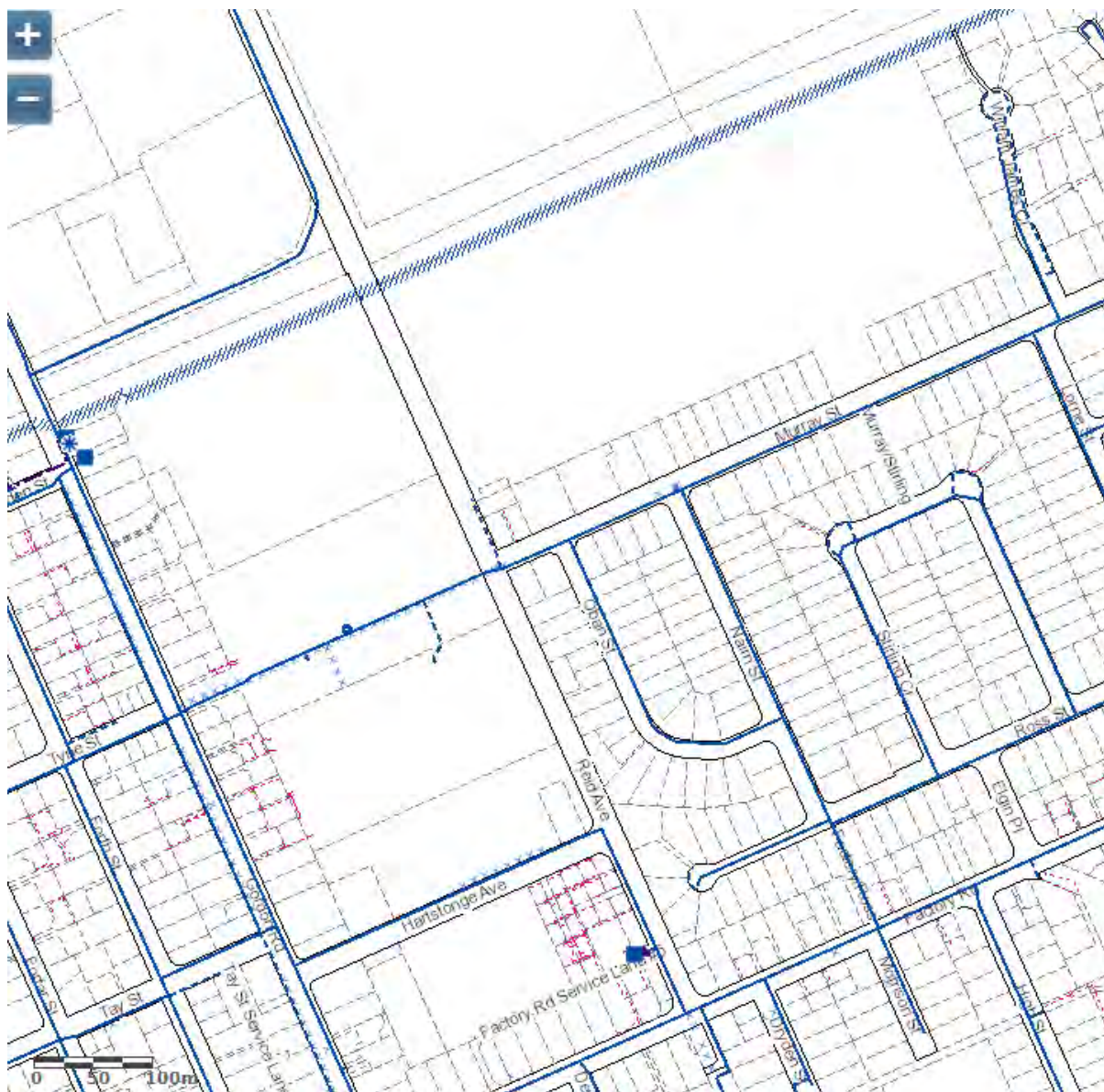


Figure 1 Water Supply Infrastructure

## 3. Wastewater

### 3.1 Current demands

Discussions with DCC have confirmed that the Mosgiel gravity network is aging and has capacity issues in the downstream section of the network, near the pump station, where surcharging of manholes can occur. The capacity issues are associated with ground and surface water ingress rather than residential wastewater volumes, with surcharging of the system and overflows to Silver Stream occurring following periods of prolonged or heavy rainfall. Mosgiel does not currently meet the expected level of service for a 1 in 10 year rainfall event.

Council has an ongoing maintenance programme for the upgrade of the network to reduce ingress of ground and surface water and increase capacity. The 375 mm dia wastewater line which passes through the designation area from Murray Street to Tyne Street was lined as part of this maintenance programme in 2013.

### 3.2 Wastewater Volumes

Increased wastewater volumes generated from future development at the site will be predominantly related to the increased patronage of the new pool facility and the operation of the pool all year round, rather than just the summer period as currently occurs.

Assuming patronage based on 300% of current pool facility peak demand, increased wastewater volumes during the winter period could be in the order of 75 m<sup>3</sup>/day (1.4 l/sec assuming a 15hr day). While the wastewater network has capacity during normal operation, additional inflows to the system during periods of high rainfall would increase the volume and frequency of overflows to Silver Stream and the risk of surcharge. It is noted that the recreation area is currently zoned Residential 1. Typical discharges from a Residential 1 zone of similar are to the proposed designation would be significantly greater than those indicated for the proposed development.

Part of the general pool operation regime is the periodic backwashing of the pool filter system with waste discharged to the wastewater system. The back washing from municipal pools generates relatively high flows (for a short period) during the procedure and it is common practice to capture/store these backwash flows and control discharge rates to avoid overloading of the local wastewater network. It would be expected that the design for the pool development would include for storage of the total backwash volume which would then be discharged to the wastewater system over a prolonged period at a reduced rate that the system can accommodate. This discharge rate would be agreed with Council.

Full drain down of pools can be required but is not part of a normal operations and maintenance regime and is typically only required during major maintenance. Any drain down requirement would need to discharge to the wastewater system, however this would be notified well in advance and the details of the process including flow rates and period of discharge agreed with Council. This will not differ significantly from the procedures expected to be in place for the current pool operation.

### 3.3 Wastewater quality

The wastewater discharges from pool facilities are predominantly associated with showers and toilets for patrons, staff facilities and food preparation if a cafeteria is included. While there will be some discharge of chlorinated water, this will generally be associated with the backwash process and the free available chlorine (FAC) in the wastewater will be low. While it is expected that DCC will require a tradewaste discharge consent of the pool complex, the low FAC combined with the low rate of discharge and the dilution with wastewater from the pool complex and within the networks dilution will ensure that there is no adverse effect on the wastewater treatment system.

### 3.4 Wastewater Infrastructure Layout

The Mosgiel wastewater system consists of a gravity network discharging to a pump station at Carlyle Road at the western end of the town. Wastewater is then pumped from this site to Green Island treatment Plant via a 500 mm dia rising main.

The layout of the wastewater infrastructure is shown in Figure 2 below. The network layout will provide little restriction on the location of the proposed swimming pool. The exception to this is the wastewater lines running through Memorial Park between Murray Street and Tyne Street. As indicated above, it is recommended that the proposed location of the new pool avoids close proximity or a conflict with the service corridor, which contains water and wastewater lines, as relocation would involve significant expense.





Figure 2 Wastewater Infrastructure

## 4. Stormwater

Stormwater management in Mosgiel is provided by a reticulated network discharging to Silver Stream. Discharge to Silver Stream is achieved by pumping when water levels in the stream prevent a gravity discharge.



Figure 3 Stormwater Network

Stormwater from the area to the south and east of the Hartstonge and Reid Avenues flows via a large grassed swale and a 750 mm dia stormwater main running along Reid Avenue to Reid Avenue Pump Station.

The carpark and grandstand areas in Memorial park are drained via a piped network that flows in a westerly direction through to Gordon Road and down to the discharge point at Carlyle Road pump station. The catchment area for Reid Ave SW Pump Station and Carlyle Road SW Pump Station is shown in Figure 4 below.



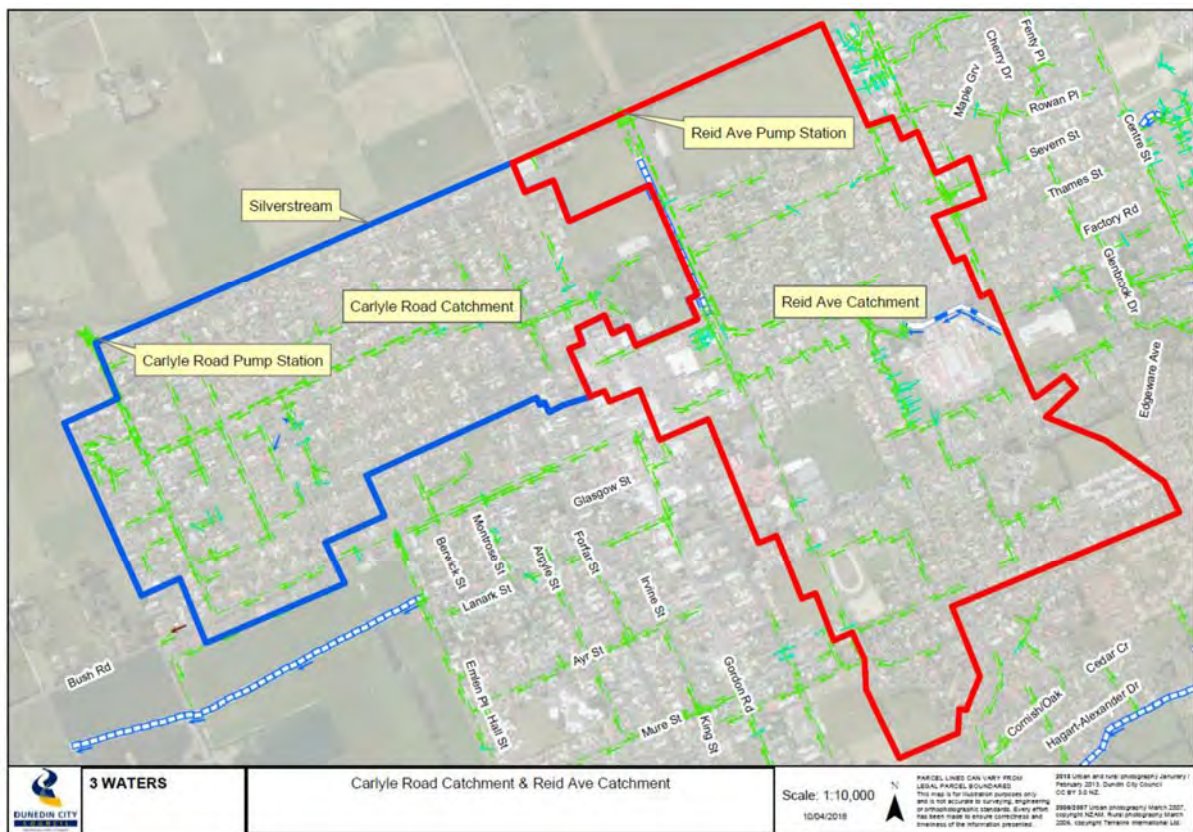


Figure 4 Pump Station Catchments

At present the stormwater system is under capacity and modelling of the 10 year ARI (average return interval) indicates flooding impacting residential floor levels in a number of properties in the Nairn and Oban Street area, flooding across Reid Avenue and overland flows in a westerly direction threatening low lying properties on Gordon Street.

An upgrade is about to commence to increase pump capacity at the Reid Avenue pump station from 2.2 m<sup>3</sup>/s to 6.5 m<sup>3</sup>/s along with proposal to increase the capacity of the swale flowing to the pump station. This upgrade is targetted at achieving the design 10% AEP level of service. It will significantly reduce flood risk in the area although some flooding during extreme events will still occur.

At present, the majority of the designation area consists of relatively level grassed playing fields and significant proportion of the rainfall on this area will infiltrate to ground. Construction of a new pool, along with parking facilities, will result in an increase in impervious surfacing increasing run off and the associated risk of drainage issues and flooding in the area. The modelling assessment for design of the Reid Avenue pumpstation upgrade has included an increase in impervious surfacing within the catchment. It is assumed that this includes the recreation area and a small percentage increase in impervious surfacing can be accommodated. If this is not the case, pool design and location will need to consider stormwater management. Potential management options available include:

- Minimising impervious area by utilising existing parking areas.
- Provision of pumped stormwater system discharging directly Silver Stream during larger rainfall events (this may require a discharge consent from ORC)
- Offsetting of the increase in impervious surfacing by restoring the existing pool site to pervious surfacing.

- On site attenuation could also be considered however this problematic given levels at the site and would either require significant expense or an area of land that would be inundated on a regular basis limiting recreational use.

## 5. Flood Risk

Fluvial flood risk to Mosgiel and the designation area is associated with flood flows in the adjacent Silver Stream. Stopbanks along the southern bank of the stream provide protection for the designation area and majority of the town for events up to the 50 -100 year ARI.

The design of the stopbanking system in the vicinity Mosgiel includes a lower stopbank on the north side of Silver Stream so that during extreme events overflow to adjacent farmland occurs before flows get to a level that would overtop the stopbank protecting the township. Any development at the site covered by the proposed designation will have a less than minor effect on volumes and flood levels in Silver Stream and flood risk to the adjacent farmland and properties downstream.

## 6. Power infrastructure

Major power infrastructure in the vicinity of the proposed designation includes a distribution substation on Gordon Street on the northern side of the Silver Stream channel and high voltage (11 kV) cables along Gordon Street. Power Infrastructure within the designation area includes an 11 kV cable running along the Silver Stream flood embankment to the Reid Avenue Pump Station and an 11 kV cable running diagonally across the Memorial Park playing fields to a kiosk transformer on the western side of Reid Avenue. Both cables are in-ground cables which are typically buried at a depth of 900 mm. Power services are shown in Figure 5 below





Figure 5 Electrical Infrastructure

The 11 kV cable servicing the Reid Avenue pump station runs along the stopbank. While the exact alignment of the cable has not been confirmed on site, it is unlikely that any significant upgrades /development covered by the designation would occur in this area due to the potential impact on the stopbank and the need for access for maintenance and potential future upgrades.

The 11 kV cable running across Memorial Park, while not impacting on general park operations, would need to be considered as part of any park upgrades involving excavation. Works such as the installation of pipework for irrigation will need to include positive identification of the cable for any works within the immediate vicinity of the cable but are unlikely to require relocation of the cable.

Relocation of the pool to a site that conflicts with the existing cable alignment will require relocation of the cable. While it is not possible to confirm cost implications without a confirmed location, an indicative cost for relocation of the pool to the south east corner of Memorial Park, assuming relaying of 140 m of cable is required, would be in the order of \$65k.

## 7. Summary

### *Water Supply*

The new pool facility and development covered by the designation will result in increased water demand, however this can be met by the current network without the need for upgrades.

Stress on the water supply system associated with establishment of irrigation for the cricket pitches can be managed by programming irrigation during off peak period or the groundwater bores at Gordon street could be used as a supply source as the irrigation would not need to be from apotable supply.

### **Wastewater**

The wastewater network has capacity to accommodate the increased flows associated with the pool during normal operation.

It is noted that the existing system does experience peaks in flow during wet weather. Until this is addressed, the associated frequency of overflows to Silver Stream and the risk of surcharge in the lower sections associated stormwater and groundwater ingress will increase slightly with the additional flows from the new development.

The nature of the wastewater discharges will have no significant effect on the downstream wastewater treatment system.

### **Stormwater**

While the current stormwater system is currently under capacity, there are upgrades currently in construction. The upgrade design is assumed to include an allowance for some increase in impervious surfacing within the designation area. If this is not the case, or a greater allowance is required, the provision of pumped stormwater system discharging directly Silver Stream would mitigate any adverse effects.

### **Flooding**

Any development at the site covered by the proposed designation will have a less than minor effect on volumes and flood levels in Silver Stream and flood risk to the adjacent farmland and properties downstream.

### **Power**

There are 11kV cables running alongside and through designation area the site. Therefore there will be no significant issues associated with servicing the site, however relocation of the part of the cable running through the site may be required depending on the selected location of the pool development.

## **8. Scope and limitations**

This report: has been prepared by GHD for Mitchell Daysh in support of work for Dunedin City Council (DCC) and may only be used and relied on by Mitchell Daysh and DCC for the purpose agreed between GHD and the Mitchell Daysh as set out in section 1 of this report.

GHD otherwise disclaims responsibility to any person other than Mitchell Daysh arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Mitchell Daysh, DCC and others (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

GHD has not been involved in the preparation of the designation application document and has had no contribution to, or review of this document other than in the provision of this report. GHD shall not be liable to any person for any error in, omission from, or false or misleading statement in, any other part of the application document.



GHD

Level 3  
138 Victoria Street

Christchurch



T: 64 3 378 0900 F: E: chcmail@ghd.com

© GHD 2018

This document is and shall remain the property of GHD. The document may only be used for the purpose for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

[https://projects.ghd.com/oc/NewZealand/mosgielrecreationare/Delivery/Documents/Infrastructure Report.docx](https://projects.ghd.com/oc/NewZealand/mosgielrecreationare/Delivery/Documents/Infrastructure%20Report.docx)

Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	A. Ingles	M. Dasler		M. Dasler		19/06/18

[www.ghd.com](http://www.ghd.com)





## **APPENDIX F**

Consultation Material

## **CONSULTATION**

### **NEW ZEALAND TRANSPORTATION AGENCY**

#### **Key Matters identified**

- Gordon Road – 10,000vpd.
- Potential site access issues around the proposed pool area – current issues with turning right onto Gordon Road when exiting the existing pool facility, this could worsen with increased numbers (sight distances a concern).
- Should consider possibly removing entry and exit ability for the pool site and limiting it to an entry only/exit only type access onto Gordon Road, utilising the access point opposite Tyne Street (noting this intersection has room for improvements if necessary).
- NZTA pleased that Carriageway Consulting were briefed to undertake transportation assessment to determine effects on Gordon Road (i.e. draft report provided to NZTA prior to lodgement).
- Car parking could be an issue around service centre if pool was to be located in that vicinity.
- Agreed to designation conditions requiring consideration of access upgrades and consultation with NZTA prior to finalisation of aquatic centre design.

### **OTAGO REGIONAL COUNCIL – HAZARDS**

#### **Key Matters identified**

- Site is within a flood hazard area, therefore does have a flood risk in large events when the flood bank would over top at eastern end, and flow west towards the pool site.
- Adjacent to Silverstream which is designated by ORC for the Lower Taieri Flood Protection Scheme.
- Requirement to set back buildings and earthworks/planting from flood bank – i.e. outside the ORC designation (ORC in agreement with proposed designation condition in this regard).
- Minimum floor areas are set in the proposed district plan - *Dunedin City Council – Minimum Floor Levels for Flood Vulnerable Areas* (GHD, March 2015).
- Confirmed no concerns with proposed designation subject to the proposed conditions.

## **DUNEDIN CITY COUNCIL – PLANNING, TRANSPORTATION, THREE WATERS**

### **Key Matters Identified**

- Planning/Policy
  - Consider effects on residential neighbours around Murray St, Reid Ave etc, especially if access arrangements might change.
  - Gordon Road best access for new pool in general terms.
- Transportation
  - Transportation assessment required.
  - Ensure carparking is considered –suggested that GFA best measure.
  - Agrees flexibility is important in terms of developments going forward.
  - Ensure a change in traffic flows from Moana Pool to Mosgiel Pool by some users is considered, given improvements will enable year round opening and swimming lessons etc (assumed).
  - Ensure provision is made for cycle access and storage, and good pedestrian access.
- Stormwater
  - Pump station at Reid Rd end of field – DCC is looking to upgrade this and not yet sure of the exact location/extent. It will assist with existing flood risk on the site. Keep project team advised of this.
- Water Supply
  - A bore is available but not recommended to use for pool – cost prohibitive to run from a power perspective (not currently being used by Council).
  - No issue with connecting to DCC reticulated supply.
- Wastewater Disposal
  - No issue with connection to DCC system.

12 September 2018

**PUBLIC INFORMATION SESSION: COMMUNITY AND RECREATION DESIGNATION  
MOSGIEL**

The Dunedin City Council's financial contribution to the Mosgiel Pool project has been confirmed as part of the 10-year plan 2018-28, and planning of the project is progressing.

As part of the project, we propose to designate Memorial Park, Memorial Gardens and Peter Johnstone Park for community and recreation purposes in the DCC's district plan. The purpose of this designation is to assist with future improvements of the area's parks and recreational and community activities, including the new pool.

To find out more about the designation process, we'd like to invite you to an information session at the Mosgiel Library on Saturday, 15 September, from 10am to 12.30pm.

You will be able to talk with DCC and Mosgiel-Taieri Community Board representatives at this session to find out more about the designation, why we are doing it and how you can have your say when the formal submission process starts.

We look forward to seeing you on Saturday. If you can't make it to the information session and would like to know more about how the designation process will work, please call us on 03 477 4000.

Your sincerely,



**Robert West**  
**Group Manager, Parks and Recreation**





Dunedin City Council

# Mosgiel Community and Recreation Designation

The Dunedin City Council's financial contribution to the Mosgiel Pool project has been confirmed as part of the 10 year plan 2018-28, and planning of the project is progressing.

As the first step, we propose to designate Memorial Park, Memorial Gardens and Peter Johnstone Park for community and recreation purposes in the DCC's district plan. The purpose of this designation is to assist with future improvements of the area's parks and community and recreational activities, including the new Mosgiel pool.

## What is a designation?

A designation allows certain activities to occur in that area without further planning approval, as long as the development meets the conditions of the designation.

The plan below shows the area covered by the proposed Mosgiel community and recreation designation. It includes Memorial Park, Memorial Gardens and Peter Johnstone Park.





## **Why are we doing it?**

The proposed designation will ensure we can:

- operate, maintain, upgrade and expand facilities in the area to provide for a range of sporting, cultural and community activities
- provide for, maintain and upgrade facilities, services and amenities to meet the local community's needs and support social and economic wellbeing
- maintain and develop the area efficiently and flexibly while managing any impact on the surrounding community.

## **What activities and facilities will be allowed in the designation area?**

The proposed designation will allow for a range of sporting, recreational and community activities and facilities in the area, including:

- food and drink outlets in the facilities
- buildings and offices associated with club rooms, community facilities and services
- vehicle/pedestrian access and car, cycle and bus parking for facilities
- signs, public art and public amenities
- associated landscaping, infrastructure, construction and earthworks.

The current sportsgrounds, gardens, playground, library and pool can all continue to operate under the proposed designation.

## **How will future development or projects be managed?**

Under the conditions of the designation, any proposed activities or projects must protect or enhance the area's green spaces. The proposed conditions cover:

- traffic management, car parking and access
- noise, stormwater and flood mitigation
- the look and design of any new buildings, including how much of the site can be used for buildings
- lighting, signage and noise
- landscaping, planting and tree protection.

## **Have your say**

We're preparing an application (notice of requirement) for the designation, which will be lodged with the DCC Planning department by the end of September, after consultation with stakeholders and neighbours. We will notify the public of the notice of requirement on the DCC website and in local newspapers.

You can make a submission through the DCC website. If you make a submission, you can choose to speak to your submission at a Council hearing, chaired by an independent Commissioner.

The Council will then decide whether to confirm the designation (with or without changes and conditions).



## **APPENDIX G**

Proposed Designation Conditions

## **PROPOSED CONDITIONS**

In order to appropriately protect or enhance landscape and visual amenity values, the following conditions are proposed:

### **1. Building height**

- a. New buildings and extensions to existing buildings shall be a maximum height of 10m, excluding for servicing equipment on a roof.
- b. New lighting towers shall be a maximum height of 30m.

### **2. Building floor area (per building)**

- a. The maximum floor area for any individual building (new or existing extended) shall be 3200m<sup>2</sup>.

### **3. Combined building site coverage**

- a. The maximum building site coverage within the designation area shall be 5.5%.

### **4. Minimum building setbacks from boundaries and height in relation to boundaries**

- a. The minimum building setback from Council drains shall be 1.5m.
- b. The minimum building setbacks from boundaries shall be 4.5m.

[Note that buildings designed to cater for functions, large numbers of people and/or mechanical plant are likely to need additional setbacks to achieve required noise standards – see below].

- c. For all boundaries other than road boundaries, buildings (excluding lighting towers) must not protrude from a plane rising at an angle of 45 degrees measured from ground level at the boundary.
- d. For all boundaries other than road boundaries, lighting towers must not protrude through a plane rising at an angle of 75 degrees measured from ground level at the boundary. [note this results in an 8.4m setback for a 30m lighting tower].

### **5. Building design and appearance**

- a. The maximum length of any new or extended existing building shall be 65m, however any building façade greater than 20m in length shall have glazing or other architectural feature to break up the solid appearance of the building.
- b. Painted finishes for new or extended existing buildings shall not exceed Light Reflectance Values (LRV) of 35%.

- c. Service and storage areas associated with new or extended existing buildings are to be effectively screened by fencing and / or planting from adjacent roads and properties and from high use public areas within the parks.

## **6. Landscape treatment to car parking areas**

- a. New or extended car parking areas are to be set back a minimum of 1.5m from all external boundaries and these areas are to be planted to mitigate adverse effects of the car parks from adjacent residential properties, including from light spill from vehicles.
- b. New or extended car parking areas are to have a minimum of 12% of the total area of the car park planted, including at least 1 tree, at least 3m high, per 120 m<sup>2</sup> of the total car park area.

## **7. Signage**

- a. All ancillary signs, except commercial sponsorship signs must only display the name, and logo of the relevant land use activity or organisation, locational, directional or informative information relevant to the area.
- b. Signs attached to buildings:
  - i. any signs displaying the club/s name on clubrooms must not exceed a maximum total area of 5m<sup>2</sup> per building face;
  - ii. the maximum number of permanent commercial sponsorship signs is one sign for the naming rights sponsor of the sport and recreation activity (club), with a maximum area of 3m<sup>2</sup>, except: for clubs that operate in an enclosed area that is only open to members, apart from during events, there is no maximum number of commercial sponsorship signs, provided those signs are not visible from outside of the enclosed area;
  - iii. other signs must not exceed a total maximum area of 1m<sup>2</sup> per building face;
  - iv. signs must remain entirely within the visual profile of the building or structure; and
  - v. signs must not project higher than the lowest point of the roof, except as mounted flat against a parapet or gable end.
- c. Freestanding signs
  - i. must not exceed a maximum total area of all display faces of 3m<sup>2</sup>; and each display face must not exceed 1.5m<sup>2</sup> in area;
  - ii. must not exceed a maximum height above ground level of 4m; and
  - iii. must be positioned within the site boundaries and located so they do not obstruct any parking, loading or access areas.
- d. Portable freestanding signs:

- i. Commercial sponsorship signs erected for matches, competitions, or events must not be displayed for more than one day before the competition/event, and must be removed within one day of completion of the competition/event.
- ii. Any other portable signs must not exceed one sign per activity, and 0.9m in height and 0.6m in width.
- iii. Signs must be positioned within site boundaries.

**8. Tree protection**

- a. Any trees that are removed through the development of community and recreational facilities are to be replaced.
- b. No new trees shall be planted within 1.5m of Council drains.

**9. Lighting**

1. Light spill measured at the boundary of a residential zone or any site used for residential purposes must not exceed the following limits:

Time		Limit
a	7am – 10pm	10 Lux
b	10pm – 7am	3 Lux

- c. This standard does not apply to light spill from the headlights of motor vehicles.

**10. Car parking and Access Requirements**

- a. 1 carpark to every 3 people a new building will be designed for.
- b. Should a new building greater than 500m<sup>2</sup> in area be established consideration shall be given to whether upgrade or reconfiguration of the vehicle access into the site is necessary to manage increased traffic flows and the outcomes of this consideration be included in the outline plan for the works.
- c. Prior to the design of the aquatic centre being finalised and an outline plan lodged with Council, consultation shall be undertaken with the New Zealand Transportation Agency to identify the most effective, efficient and safe access to SH87.

**11. Otago Regional Council Lower Taieri Flood Protection Scheme Designation**

- a. No buildings shall be located within Otago Regional Council's Designation D217 (Lower Taieri Flood Protection Scheme).

**12. Noise**

- a. Comply with proposed district plan rules (note some activities exempt – night time rules to apply for buildings with mechanical plant and/or to be used for functions).



b. Carparks:

Noise control fencing shall be provided should any new carpark be established within 5m of the boundary with a residential site, and the carpark shall be designed such that the front of the car shall be at least 1m from a noise control boundary fence.

c. Noise control fence:

Noise control fence to be minimum 1.8m above car park surface. It shall be constructed from a durable material of at least 10kg/m<sup>2</sup> free from cracks, gaps and holes.

d. Buildings:

Suitable noise insulation for buildings and plant shall be utilised to ensure noise generated onto adjacent residential properties achieves district plan night time noise levels.

[This means buildings that will never need to have functions considered, mech plant can 'use' the whole allowance. Where functions may be a frequent or important ad hoc service offered by the building, mech plant should be designed to be District Plan night-time minus 10dB to avoid cumulative effects.]

**13. Stormwater**

- a. For any increase in hard stand (excluding buildings) of more than 2.1% of the designated site or 4,500m<sup>2</sup>, a stormwater assessment is required to determine whether a site-specific stormwater solution is necessary (with potential for direct flow to Silverstream via pump).
- b. As part of such an assessment, consideration shall be given to whether stormwater detention via wetlands/greenspace is appropriate.

**14. Minimum floor levels**

- a. In Hazard 3 (flood) overlay zone, new buildings to be used for sensitive activities must have a floor level that is equal to or greater than the floor level shown on the Flood Minimum Floor Level Map, or if not shown on that map, at least 500mm above ground level.
- b. Buildings that do not have people regularly present (for example, garages, carports, and sheds) are exempt from the above performance standard for minimum floor levels.

**15. Earthworks**

- a. For earthworks exceeding 1000m<sup>3</sup> of excavation or fill, appropriate sediment control measures will be submitted to Council for certification prior to earthworks being

undertaken on site. These shall be in accordance with appropriate guidelines such as Environment Canterbury Erosion and Sediment Control Toolbox or similar.

## **16. Accidental Discovery**

If the consent holder:

- a. discovers koiwi tangata (human skeletal remains), waahi taoka (resources of importance), waahi tapu (places or features of special significance) or other Maori artefact material, the consent holder should, without delay:
  - i. notify the Consent Authority, Tangata whenua and Heritage New Zealand and in the case of skeletal remains, the New Zealand Police.
  - ii. stop work within the immediate vicinity of the discovery to allow a site inspection by Heritage New Zealand and the appropriate runanga and their advisors, who shall determine whether the discovery is likely to be extensive, if a thorough site investigation is required, and whether an Archaeological Authority is required.

Any koiwi tangata discovered should be handled and removed by tribal elders responsible for the tikanga (custom) appropriate to its removal or preservation.

Site work should recommence following consultation with the Consent Authority, Heritage New Zealand, Tangata whenua, and in the case of skeletal remains, the New Zealand Police, provided that any relevant statutory permissions have been obtained.

- b. discovers any feature or archaeological material that predates 1900, or heritage material, or disturbs a previously unidentified archaeological or heritage site, the consent holder should without delay:
  - i. stop work within the immediate vicinity of the discovery or disturbance; and
  - ii. advise the Consent Authority, Heritage New Zealand, and in the case of Maori features or materials, the Tangata whenua, and if required, should make an application for an Archaeological Authority pursuant to the Historic Places Act 1993; and
  - iii. arrange for a suitably qualified archaeologist to undertake a survey of the site.

Site work should recommence following consultation with the Consent Authority.