

Riverstone Holdings Limited

Fiordland Link Experience

Recreation Users Management Plan

3 November 2011

TABLE OF CONTENTS

	Page
1. INTRODUCTION	1
2. OBJECTIVES	2
3. METHODS.....	3
4. CONSTRUCTION OBLIGATIONS	7
5. OPERATIONAL OBLIGATIONS	8

DRAFT

1. INTRODUCTION

The monorail route is largely confined to the Mavora Lakes and Te Anau Basin Landscape Units as defined by DoC's Mainland Southland-West Otago Conservation Management Strategy 1998-2008 (the 'CMS'). The route also includes a small part of Fiordland National Park at Te Anau Downs.

Six existing recreation sites are potentially affected by the monorail construction:

1. Part of Kiwi Burn Track from the Kiwi Burn confluence with Maroroa River to Kiwi Burn Hut
2. Whitestone River to Retford Stream.
3. Intersection of Army Hut 4WD access.
4. Snowdon Forest hunting area.
5. Lake Mistletoe
6. Snowdon Forest area, particularly Snowdon Peak and southern Dunton Range.

2. OBJECTIVES

The objectives of this management plan are to:

- minimise the actual or potential effects from construction activities on recreational users in the vicinity of the route;
- minimise any actual or potential effects on recreational users during the operation of the monorail and associated facilities.

The key factors in achieving this relate to the timing, sequencing and location of the construction and ensuring that the alternative tracks and hut proposed as mitigations are completed and available before construction in these areas commences.

DRAFT

3. METHODS

Mitigations for the effects of the construction and operation of the monorail and associated facilities on the recreation users of the area are given in Greenaway & Associates 2009. These include:

- Locate and design facilities at the Alternative Kiwi Burn terminus location, being sensitive to existing users – e.g. car parking arrangements
- Develop a 4WD underpass at the intersection of the monorail and Army Hut vehicle access
- Redevelopment of existing recreation facilities (parts of the Kiwi Burn 'round trip' track, and parts of the Whitestone to Retford Stream route if necessary) to retain existing walking, tramping and hunting values. This potentially involves realigning the Kiwi Burn loop track so as to limit the mixing of trampers and cyclists and the monorail as far as practical
- Upgrade existing recreation facilities (Lake Mistletoe and the existing Kiwi Burn Hut for mountain biking use)
- Establish a new Hut accessible from the realigned Kiwi Burn loop track
- Realign the Army Hut walk.

In order to manage direct effects on users in the vicinity of construction activities these steps outlined above will need to be completed before construction of the monorail finishes.

It will also be necessary to minimise effects of construction for users such as hunters who are not restricted to the established infrastructure of tracks and huts for their recreation. Methods to achieve this will include signage (including at the Mavora camp ground), noise control, sedimentation control, rehabilitation and construction management as specified in the health and safety, noise, erosion and sediment control, terrestrial ecology and construction plans respectively.

At present no construction can be planned until a concession is granted for access to the land administered by DoC and resource consents are granted by the regional and district council to construct and operate the monorail. As detailed planning progresses the above mitigations will be timetabled into the construction programme and specific methods will be developed to achieve the objectives of this plan.

3.1 AVOIDING OVERLAY AT KIWI BURN

The Kiwi Burn terminus is to be located downstream of the Mararoa Swing Bridge, and a new bridge will be constructed to take the monorail across the river. Refer to the figure attached as **Appendix A**. It is likely that the Kiwi Burn construction depot will be located adjacent to or downstream of the Kiwi Burn terminus within an existing marginal strip area, or alternatively on adjacent farm land.

3.2 DEVELOP A 4WD UNDERPASS FOR ACCESS TO ARMY HUT

This requires that the monorail have sufficient height clearance for at least a short distance in the Upukerora River valley to allow for 4WD vehicles to pass underneath the beam.

This constraint will form part of the engineering and construction brief and a suitable site will be chosen when the route is finalised. Depending on the final route chosen for the monorail it is possible that the existing 4WD track will remain where it is and the monorail route will be constructed over it at an appropriate height. The height will be determined after consultation with 4WD users and the Department of Conservation.

A suitable 4WD track will be required before the monorail construction is completed in the Upukerora – Army Hut area.

3.3 REDEVELOP EXISTING WALKWAYS

In order to retain existing walking, tramping and hunting values the Kiwi Burn loop track will be realigned (if necessary) so as to limit the mixing of trampers and cyclists with the monorail as far as practical. The positioning of the Kiwi Burn terminus downstream from the commencement of the loop track (which is at the Mararoa swing bridge) goes a long way to achieve this separation. A new hut will also be constructed for trampers.

It is also proposed to realign parts of the Whitestone to Retford Stream track (if necessary to achieve separation from the monorail). The final location and timetable for construction of these tracks will be decided in consultation with DoC once the monorail route is finalised during the detailed design phase of the project.

These walkways and the new hut will be in place before construction is completed at the Kiwi Burn and Whitestone areas.

3.4 UPGRADE EXISTING FACILITIES AT LAKE MISTLETOE AND KIWIBURN HUT

The facilities at Lake Mistletoe are likely to receive increased use as a result of the increased number of visitors who have either disembarked from the monorail or have arrived by bike and are seeking a short local walk before continuing on their journey. If required the walkway and other facilities will be upgraded in consultation with the Department of Conservation and according to the Department's standards for their expected level of use.

The existing Kiwi Burn hut will be left in situ and upgraded if required for the use of cyclists travelling along the bike track. The level of upgrade, if any, will be determined by reference to existing Department of Conservation standards for huts of that type.

Neither of these upgrades will be required until shortly before the monorail and cycle track are completed and operational.

3.5 ESTABLISH A NEW KIWI BURN HUT

The key requirement for a new location for the Kiwi Burn Hit is that the hut be accessible from the realigned Kiwi Burn loop track. The hut may be built on site or prefabricated and transferred to the site depending on construction constraints of the final design. This will be determined during the detailed design phase of the project.

The hut will be in place before construction is completed at Kiwi Burn.

3.6 REALIGN THE ARMY HUT WALK

The realignment of the Army Hut walk is necessary to separate trampers and other users from the monorail in a similar way to that required at Kiwi Burn.

One proposed alternative route for this track is shown in Figure 1.



Figure 1: Proposed Alternative route for the Army Hut track (shown in yellow).

A suitable alternative track will be required before construction of the portion of the monorail from the Livingstone Valley to the Upukerora is completed.

4. CONSTRUCTION OBLIGATIONS

- Develop possible alternative tracks in conjunction with DoC
- Develop a timetable for the construction and upgrading of the alternative and existing tracks that conforms with the sequence laid out in the Recreation Users Management Plan
- Ensure that the construction timetable allows for the mitigations proposed in the Recreation Users Management Plan to be completed according to the schedule.

4.1 MOUNTAIN BIKE TRACK

The construction track will become available for use as a mountain bike track post completion of the monorail. The concessionaire shall ensure that the appropriate bridging is in place to provide suitable access over waterways along the construction/mountain bike track. This may include upgrades to existing infrastructure or the construction of new bridges where this is appropriate. Any upgrades or bridging constructed for the purposes of the construction/mountain bike track shall be undertaken in accordance with standard SNZ HB 8630:2004.

5. OPERATIONAL OBLIGATIONS

The Recreation Users Management Plan will also set out the methods relating to the ongoing obligations of the concessionaire with respect to the recreational facilities that have been identified above.

5.1 MAINTENANCE OF RECREATIONAL FACILITIES PROVIDED FOR BY THIS CONCESSION

In consultation with DoC, the concessionaire will establish an appropriate maintenance programme, including costs and/or physical works that might be required.

5.2 SIGNAGE

In consultation with DoC, the concessionaire will establish and maintain appropriate safety and informative signage in appropriate locations.

5.3 COMMUNICATION AND SAFETY

The management plan will set out the methods to ensure that an open and effective communication dialogue with recreational users in the area is maintained throughout the construction and operation of the monorail, as is required. Such matters such as gun safety in and around the monorail and mountain bike track will be communicated to users in the area.

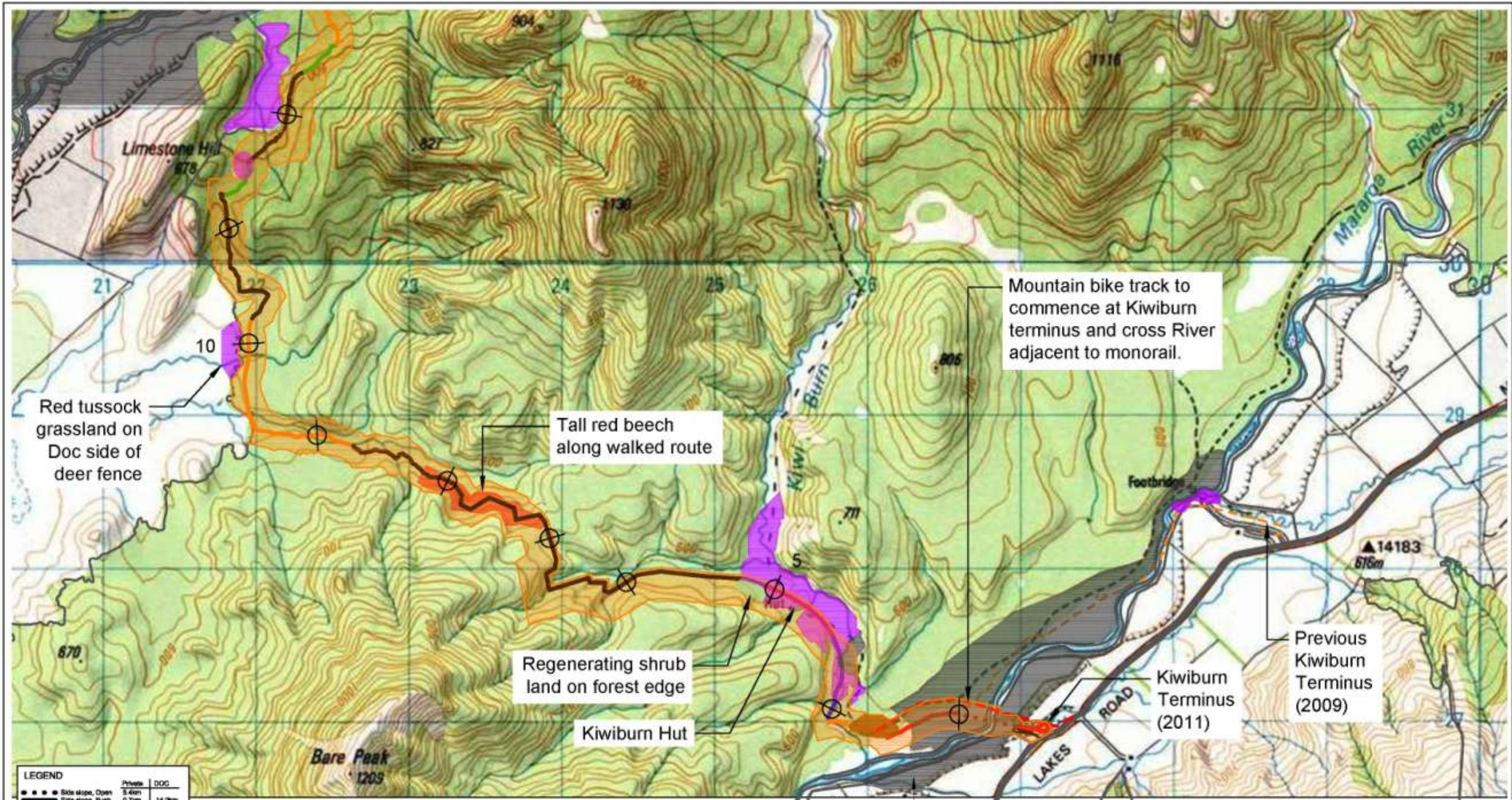
5.4 PROMOTIONAL ACTIVITIES

The concessionaire will be required to promote the revised trampolining options within the site via appropriate media. National promotion of the mountain bike track is also required.

APPENDIX A

Kiwi Burn Terminus Site

DRAFT



Mountain bike track to commence at Kiwiburn terminus and cross River adjacent to monorail.

Red tussock grassland on Doc side of deer fence

Tall red beech along walked route

Regenerating shrub land on forest edge

Kiwiburn Hut

Kiwiburn Terminus (2011)

Previous Kiwiburn Terminus (2009)

Alluvial plains. Anything on the upper terrace is outside this area.

LEGEND		Private	DOG
●	Side slope, Open	5.4km	14.0km
●	Side slope, Bush	0.7km	2.7km
●	Flat, Open	7.4km	5.4km
●	Flat, Bush	0.7km	0.7km
●	Swampy, Open	0.7km	2.5km
●	Swampy, Bush	0.7km	0.2km
●	Deep Gully	0.2km	1.8km
●	Deep piled river foundations (Open, flat)	1.8km	
---	Mountain Bike Track		
---	Proposed 200m wide corridor		
■	Alpine Plains	Wetlands	
■	Tall Red Beech	Red Beech	
■	Red Tussock	Metagout Shrubland	
■	Regenerating Shrubland	L.I. 1C	
■	L.I. to High elevation wetlands	Alluvial Plain	
⊕	Kilometre marker		
---	Parcel boundary		

Contains data sourced from Land Information New Zealand. Land Information New Zealand gives no warranty in relation to the data (including accuracy, reliability, completeness or suitability) and accepts no liability (including, without limitation, liability in negligence) for any loss, damage or costs relating to any use of the data. Crown Copyright Reserved.

R1	Mountain bike track to original terminus at end	WSP	28.01.11
R2	Environment zones added	WSP	28.03.11
R3	Note to monorail line back appended	WSP	06.10.11
R4	Note amended	WSP	03.11.11

Riverstone Holdings Ltd.



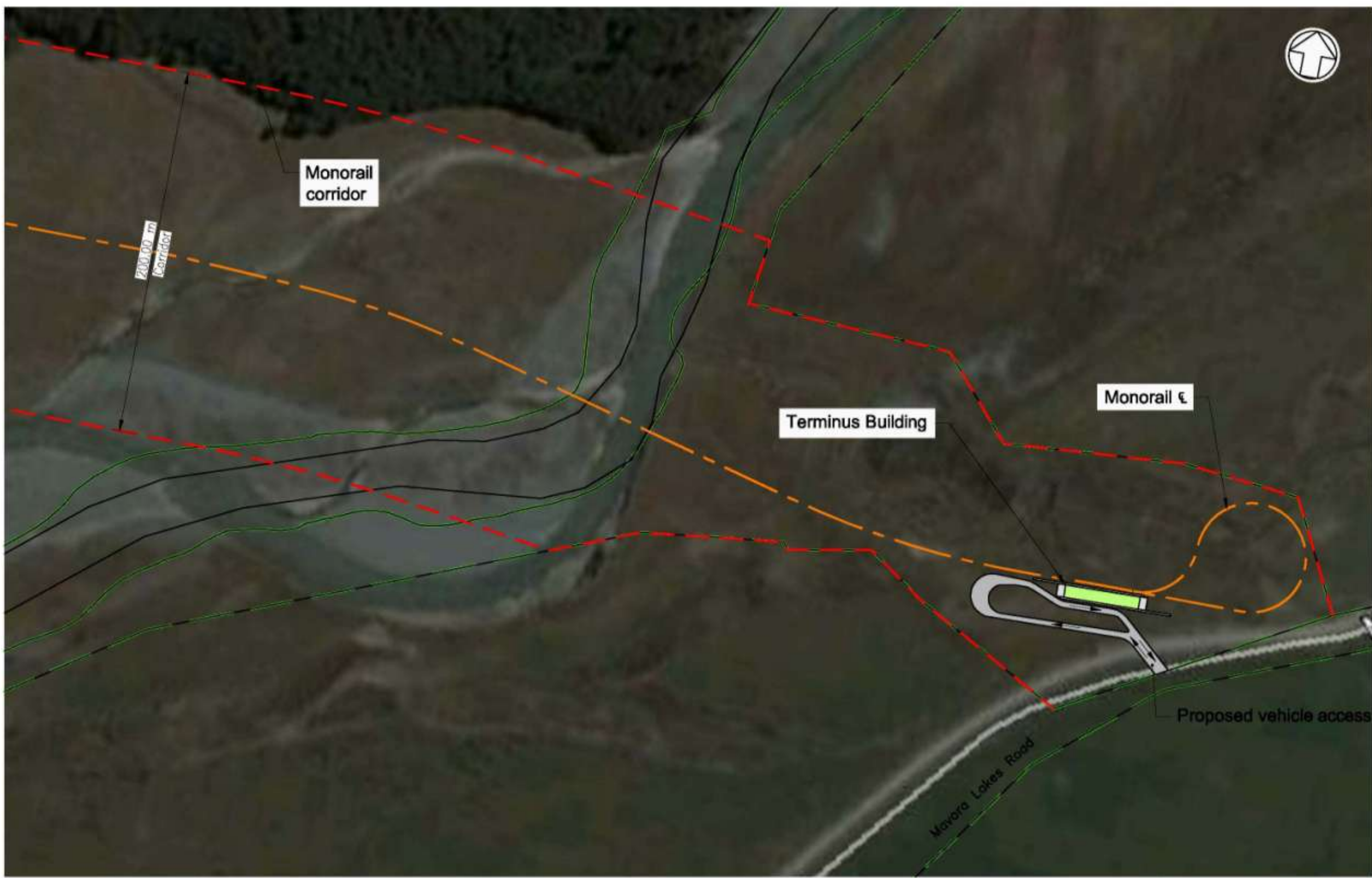
Christchurch Office
P O Box 1482
Christchurch 8140, New Zealand
+64 3 362 5400

RIVERSTONE HOLDINGS LTD
FIORDLAND LINK EXPERIENCE
MONORAIL
ALTERNATIVE KIWIBURN TERMINUS
ROUTE & TERRAIN TYPE PLAN (TOPO PAGE 1 OF 4)

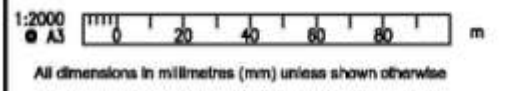
Client	Project	Version	Drawn by
C. Lowry	W. Fisher	03.11.11	
Sheet No.	Scale	Sheet No.	Sheet No.
6-DP038-00	1:25000 @ A3	7/5450/1/5604	52



0 10 mm 30 100 200 mm



Certain data sourced from Land Information New Zealand. Land Information New Zealand gives no warranty in relation to the data (including accuracy, reliability, completeness or suitability) and accepts no liability (including, without limitation, liability in negligence) for any loss, damage or costs resulting in any use of the data. Crown Copyright Reserved.



	BY	CHECKED	DATE
DESIGN	WPL	WP	22/12/2010
DRAWN	DN	WP	22/12/2010
R4 Monorail CL note amended	WP		03/11/11
R5 Current monorail CL removed	WP		08/10/11
R2 Access Road & Rail Alignment Amended	WP		27/01/11
R1 Access Road Amended	JD		25/12/10
APPROVED	W PARKER		27/01/11
APPROVED	APPS	DNB	

This drawing and its contents are the property of Opus International Consultants Limited. Any unauthorised employment or reproduction, in full or in part, is forbidden.

Riverstone Holdings Ltd

Christchurch Civil Engineering
PO Box 1492
Dunedin, New Zealand
Tel: +64 3 367 5400
Fax: +64 3 367 2658

PROJECT: FIDDLAND LINK EXPERIENCE MONORAIL		PROJECT: 6DP038.00	
ALTERNATIVE KIWIBURN TERMINUS INDICATIVE SITE PLAN			
STATUS: PRELIMINARY	DATE: 27/01/11 @ 12:18	PROJECT NUMBER: 7/5460/1	ISSUE: 5604
SCALE: 1:2000 @ A3		SHEET: 50	REVISION: R4

g:\riverburn\6dp038.00 - fiddland link\services\alternative kiw burn site plan.dwg - 5042 - ORIGINAL SHEET 500 A3 (420x297)