

A.N. and A.J Stalker

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**RESOURCE CONSENT**  
**FOR WETLAND MODIFICATION AND**  
**DIVERSION OF GROUND AND**  
**SURFACE WATER**  
**STALKER FARM AND SO BIG SWAMP, MOSSBURN**

9 APRIL 2021

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## RESOURCE CONSENT FOR WETLAND MODIFICATION AND DIVERSION OF GROUND AND SURFACE WATER

### STALKER FARM AND SO BIG SWAMP, MOSSBURN

A.N. & A.J. Stalker

WSP

Invercargill

65 Arena Avenue

PO Box 647

Invercargill 9810, New Zealand

+64 3 211 3580

wsp.com/nz

| REV | DATE         | DETAILS |
|-----|--------------|---------|
| 3   | 9 April 2021 | Final   |

|              | NAME           | DATE         | SIGNATURE  |
|--------------|----------------|--------------|--|
| Prepared by: | Luke McSoriley | 9 April 2021 |  |
| Reviewed by: | Shane Roberts  | 9 April 2021 |  |

This report ('Report') has been prepared by WSP exclusively for A.N. and A.J Stalker ('Client') in relation to a resource consent application to the Southland Regional Council ('Purpose') and in accordance with Short form Agreement with the Client dated 18<sup>th</sup> February 2021. The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.



Our ref: 6-VQ423.80

9 April 2021

Bruce Halligan  
Acting Consents Manager  
Environment Southland  
Corner of North Road & Price Street  
Waikiwi  
Invercargill 9810

Dear Bruce

**A.N. and AJ Stalker Application for Wetland Modification**

Please find attached a resource consent application and Assessment of Environmental Effects relating to proposed wetland modification and diversion of surface and ground water to enable construction of a farm access.

The application fee was paid on lodgement of the application.

Please contact me if you have any questions.

Regards

A handwritten signature in blue ink, appearing to read 'Luke McSoriley', is written over a light blue circular watermark.

Luke McSoriley  
Work Group Manager - Planning



**RESOURCE CONSENT APPLICATION**  
**Pursuant to section 88 of the Resource Management Act 1991**

**TO:** Environment Southland  
Corner of North Road & Price Street  
Waikiwi  
Invercargill 9810  
Southland

**FROM:** A.N. and A.J Stalker  
80 Christie Road  
Mossburn 9792

1. A.N. and A.J Stalker hereby apply for the resource consent as described below:

| RMA Section | Resource Consent Sought                      |
|-------------|--|
| 9           | Wetland modification                         |
| 14          | The diversion of surface water / groundwater |

2. The names and addresses of the owners and occupiers of the land to which the application relates are as follows:
- Athol Trustees Limited, Allan Neil Stalker, Judith Ann Stalker.
  - The Department of Conservation.
3. The location to which the application relates:
- 80 Christie Road, Mossburn (Section 22 Block IV Centre Hill SD).
  - 850 Chewings Road, Mossburn (Section 18 Block VII Centre Hill SD).
  - GPS Coordinates: 1222793 E, 4933242 and 1222965 E, 4933263
4. No additional resource consents are required in relation to the activity and there are no current regional council consents relating to this activity.
5. Resource consent is required to enable construction (earthworks, vegetation clearance & diversion of ground / surface water)) of a farm access to connect two existing farms.
6. The location of the activity is further detailed in the attached report and appendices.
7. The relevant application fee was paid on lodgement of the application.
8. Attached, in accordance with the Fourth Schedule of the Resource Management Act 1991, is a description of the activity and an assessment of the environmental effects the activity may have on the environment.



9. This application does not relate to an existing resource consent, an area subject to a planning document prepared by a customary marine title group, subdivision or reclamation.
10. Also attached is the information required to be included in the application by the relevant Regional Plan, the Resource Management Act 1991 or any regulations made under that Act.
11. We request that all correspondence relating to this application be directed to our Agent.
12. Completed Forms A & B are attached as Appendix F.

**A.N. and A.J. Stalker**

**9<sup>th</sup> April 2021**

Address for Service:  
WSP New Zealand Limited  
PO Box 647  
INVERCARGILL  
ATTENTION: Luke McSoriley  
0272691644  
[luke.mcsoriley@opus.co.nz](mailto:luke.mcsoriley@opus.co.nz)



# TABLE OF CONTENTS

|       |  |    |
|-------|--|----|
| 1     | INTRODUCTION.....                                    | 1  |
| 1.1   | PURPOSE OF THIS REPORT .....                         | 1  |
| 1.2   | BACKGROUND.....                                      | 1  |
| 1.3   | THE APPLICANT.....                                   | 1  |
| 1.4   | CATCHMENT ZONES .....                                | 2  |
| 2     | SITE DESCRIPTION .....                               | 3  |
| 2.1   | STALKER FARM.....                                    | 3  |
| 2.2   | SO BIG SWAMP.....                                    | 3  |
| 2.3   | WETLAND ON STALKER PROPERTY .....                    | 5  |
| 2.4   | STREAMS.....   | 5  |
| 2.5   | PRE-APPLICATION DISCUSSIONS .....                    | 5  |
| 2.6   | WETLAND MODIFICATION .....                           | 6  |
| 2.6.1 | EARTHWORKS.....                                      | 6  |
| 2.6.2 | VEGETATION REMOVAL .....                             | 6  |
| 2.6.3 | ACCESS FORMATION .....                               | 6  |
| 2.7   | CULVERTS.....  | 7  |
| 2.7.1 | FARM ACCESS CULVERTS.....                            | 7  |
| 2.7.2 | STREAM CULVERTS.....                                 | 7  |
| 2.8   | WETLAND ENHANCEMENT.....                             | 7  |
| 2.8.1 | TRANSPLANTING OF HARAKEKE AND COPPER<br>TUSSOCK..... | 7  |
| 2.8.2 | UPSTREAM WETLAND ENHANCEMENT .....                   | 8  |
| 2.9   | PEST MANAGEMENT.....                                 | 10 |
| 2.10  | FORMAL PROTECTION.....                               | 10 |
| 3     | RESOURCE CONSENTS REQUIRED.....                      | 11 |
| 3.1   | OPERATIVE REGIONAL WATER PLAN 2010 .....             | 11 |
| 3.2   | PROPOSED SOUTHLAND WATER & LAND PLAN<br>2016.....    | 11 |
| 3.3   | NES FRESHWATER 2020.....                             | 11 |
| 3.4   | STOCK EXCLUSION REGULATIONS 2020 .....               | 12 |
| 3.5   | PERMITTED BASELINE .....                             | 12 |
| 3.6   | ACTIVITY STATUS SUMMARY .....                        | 12 |

|       |  |    |
|-------|--|----|
| 3.7   | DOC CONCESSION .....   | 12 |
| 4     | ASSESSMENT OF ENVIRONMENTAL EFFECTS .....                      | 14 |
| 4.1   | INTRODUCTION .....   | 14 |
| 4.2   | ECOLOGY .....  | 14 |
| 4.2.1 | INTRODUCTION .....   | 14 |
| 4.2.2 | ECOLOGICAL SIGNIFICANCE .....                                  | 14 |
| 4.2.3 | CONCLUSION .....   | 15 |
| 4.3   | HYDROLOGY .....  | 16 |
| 4.4   | WATER QUALITY .....  | 16 |
| 4.5   | LANDSCAPE & AMENITY .....                                      | 17 |
| 4.6   | NATURAL CHARACTER .....  | 17 |
| 4.7   | PUBLIC ACCESS .....  | 17 |
| 4.8   | CULTURAL & HISTORIC HERITAGE VALUES .....                      | 17 |
| 4.9   | PEST MANAGEMENT .....  | 18 |
| 4.10  | SOCIAL & ECONOMIC .....  | 18 |
| 5     | MITIGATION .....   | 19 |
| 6     | STATUTORY CONSIDERATIONS .....                                 | 21 |
| 6.1   | RESOURCE MANAGEMENT ACT 1991 .....                             | 21 |
| 6.2   | NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT 2020 ..... | 22 |
| 6.3   | REGIONAL POLICY STATEMENT 2017 .....                           | 24 |
| 6.4   | OPERATIVE REGIONAL WATER PLAN 2010 .....                       | 25 |
| 6.5   | PROPOSED SOUTHLAND WATER AND LAND PLAN 2018 .....              | 25 |
| 6.6   | TE TANGI A TAUIRA - THE CRY OF THE PEOPLE .....                | 27 |

|      |  |    |
|------|--|----|
| 7    | ALTERNATIVES.....                                | 28 |
| 8    | CONSULTATION.....                                | 28 |
| 9    | SECTION 95.....                                  | 28 |
| 10   | SECTION 104 MATTERS.....                         | 29 |
| 10.1 | SECTION 104D THE GATEWAY TEST.....               | 29 |
| 10.2 | SECTION 104 (1) (AB).....                        | 29 |
| 11   | CONCLUSION.....                                  | 31 |
|      | APPENDIX A.....                                  | 32 |
|      | ECOLOGICAL ASSESSMENT.....                       | 32 |
|      | APPENDIX B.....                                  | 33 |
|      | HYDROLOGY ASSESSMENT.....                        | 33 |
|      | APPENDIX C.....                                  | 34 |
|      | PLANS OF PROPOSED ACCESS CONSTRUCTION WORKS..... | 34 |
|      | APPENDIX D.....                                  | 35 |
|      | CERTIFICATES OF TITLE.....                       | 35 |
|      | APPENDIX E.....                                  | 36 |
|      | DRAFT CONDITIONS OF RESOURCE CONSENT.....        | 36 |
|      | APPENDIX F.....                                  | 37 |
|      | FORM A AND B.....                                | 37 |
|      | APPENDIX G.....                                  | 38 |
|      | PRE-APPLICATION DISCUSSIONS.....                 | 38 |
|      | APPENDIX H.....                                  | 39 |
|      | PLAN MAPS.....                                   | 39 |



# 1 INTRODUCTION

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## 1.1 PURPOSE OF THIS REPORT

This application has been prepared in accordance with Section 88 of the Resource Management Act 1991 (RMA) and provides a description of the activity with an assessment of the actual and potential effects on the environment, as required by the Fourth Schedule of the RMA.

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## 1.2 BACKGROUND

The Stalker family operates a farm approximately seven kilometres north of Mossburn, west of the Oreti River. The farm is accessed off Christie Road which connects to State highway 94 north of Mossburn.

The western margin of the Stalker property borders conservation land managed by the Department of Conservation (DOC). Parts of the conservation land forms part of the So Big Wetland, also known as the So Big Swamp. Other parts of the So Big Wetland are located on the Stalker's property. The farm and wetland that application relates to is located in the Aparima River Catchment. The Stalkers propose purchase of an adjoining farm (the Brown farm property). Part of the So Big Swamp which is DOC conservation land is located between the Stalker's farm and the adjoining Brown farm property they wish to purchase. Road access to the Brown farm property from the Stalker's farm requires a significant road journey via State highway 94 and Chewings Road. To provide for efficient and effective farming operations the purchase of the adjoining farm is dependent on a direct link between the two farm properties.

This application proposes wetland modification and diversion of ground and surface water to enable construction and use of a farm access across part of the wetland. The conservation land narrows to an approximately 100-metre-wide strip adjacent to the southern part of the Stalker property. The Stalkers propose construction of a farm access across this strip of wetland through creation of an easement or another appropriate legal instrument with agreement of the landowner (DOC). As noted above the Stalker property also contains wetlands with high ecological values. The Stalkers propose wetland restoration and enhancement of those parts of the So Big Wetland located on their property to offset the effects of the formation of the access. They also propose use of a covenant to formally protect part of the wetland and fencing to exclude stock access to wetland areas. The intention is that overall there is no net loss of wetland area, there is a net increase in the area of wetland, and the existing wetland is enhanced and protected.

---

## 1.3 THE APPLICANT

Allan and Judy Stalker own and operate the farm along with their son Craig, daughter-in-law Lisa and their three grandchildren. Craig, Lisa and their three young children recently moved onto the farm from Cambridge with the hope of building up, and one day taking over the family farming business. Craig, Lisa and the kids live on the farm, while Allan and Judy are currently renting a home 10 minutes from the farm. The property and farming business are family based, involving three generations of the Stalker family. The proposed purchase of the adjoining farm will assist in terms of providing for growth of their farming business but will also provide additional residential accommodation that is much needed. Expanding the family farm helps provide a suitable income

to support the two households while giving the ability over the long term for younger generations to become involved in the family business. The purchase of the farm also provides the ability to expand the farming operations without requiring further land development. As outlined in this application it will provide scope to retain and enhance marginal wetland areas that had been historically earmarked for land development.

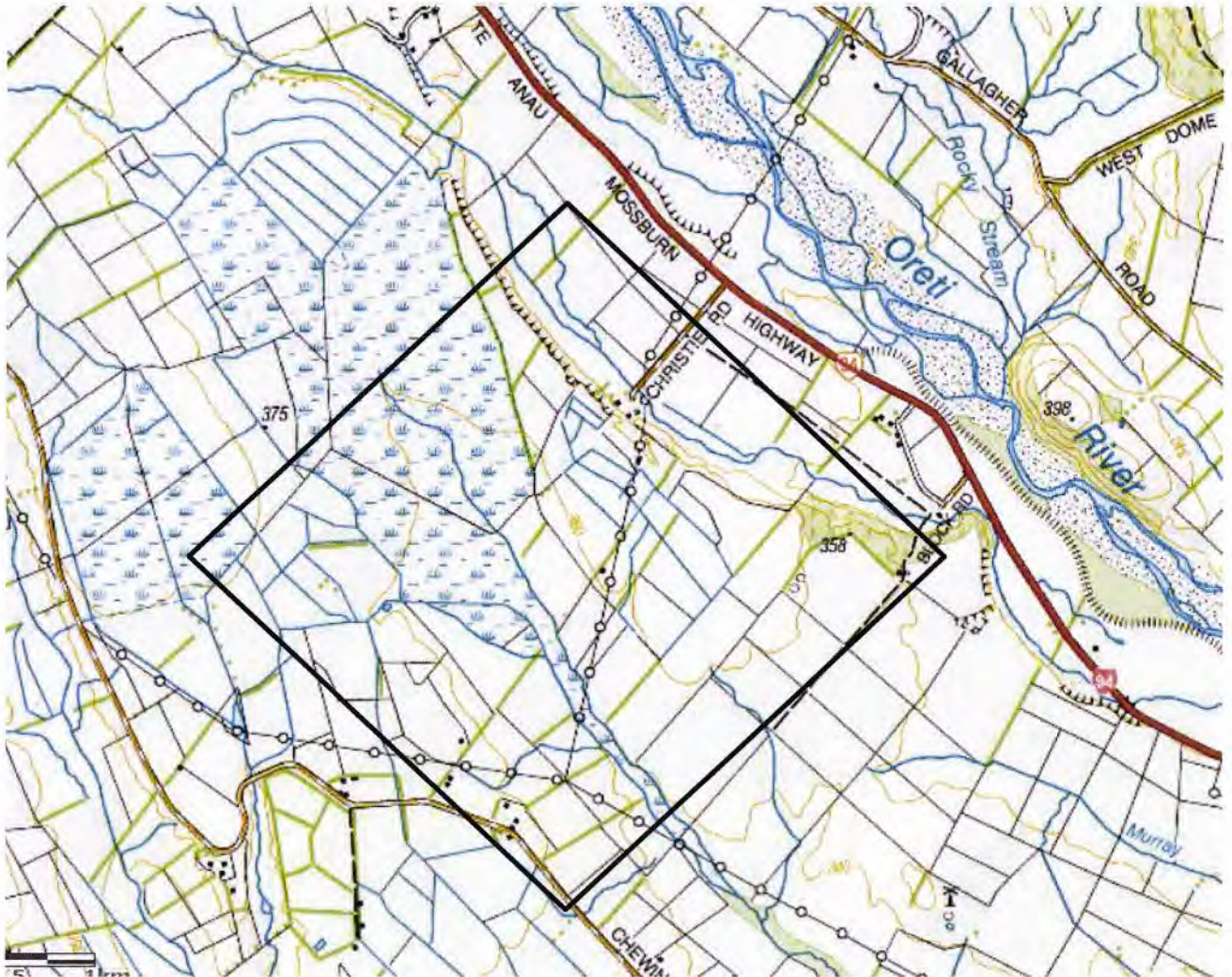


Figure 1 - Site Location

## 1.4 CATCHMENT ZONES

The application site is located within the Aparima Freshwater Management Zone, the Upper Aparima Groundwater Management Zone and the Peat Wetlands Physiographic Zone.

## 2 SITE DESCRIPTION

### 2.1 STALKER FARM

The application relates to an existing farm with the predominant land use being the grazing of livestock (pastoral farming). Sheep farming is the predominant land use, along with a small number (30-50) of beef cattle that are mainly used for pasture quality management. The farm is almost completely self-sufficient with all lambs born on the property being finished on the farm. All hay and baleage for winter feed is grown on farm over the spring/summer and external sources of feed are only occasionally required in adverse conditions e.g. drought. The farm was originally purchased by Allan and Judy 40 years ago as a bare block. Since then, there has been a large amount of development, fencing and tree planting, (mainly as shelter belts) resulting in the well maintained, sheltered, productive farm that is present today.

### 2.2 SO BIG SWAMP

The conservation land that the Stalkers wish to gain access across is part of the 'Conservation Area - So Big Swamp, Mossburn'. So Big Swamp, Mossburn has the status of a Stewardship Area under Section 25 of the Conservation Act.

So Big Swamp is listed in Appendix A of the proposed Southland Water & Land Plan which details 'Regionally Significant Wetlands and Sensitive Water Bodies'. So Big Swamp is referenced as number 79 on the relevant plan map (Map 16) which is and detailed below and a larger version is included in Appendix H.



**Figure 2** – So Big Swamp Map Appendix A of the pSWLP

It largely covers part of a broad raised wire rush bog, but also includes a finger of conservation land extending southeast of this wire rush bog, which contains an old river channel now supporting streams that drain the large wire rush bog, and a variety of vegetation including harakeke (*Phormium tenax*) flaxland, copper tussock (*Chionochloa rubra subsp. cuprea*) grassland, small patches of wire rush bog, and *Carex* sedgeland.



Figure 3 - Wetland and Stalker Farm Location

This application relates to a part of the wetland located within the 'finger' of conservation land that extends to the southeast at the bottom or downstream end of the wetland.

The Stalker property contains a sizeable area of the wire rush bog and other wetland habitats and includes flaxland on the north-eastern margin of the old river channel. A detailed description of the vegetation and habitats present in the wetland at the site of the proposed activity is provided in the Ecological Assessment and this is adopted for the purposes of this application.

## 2.3 WETLAND ON STALKER PROPERTY

A total of 7 vegetation/habitat types are present on the Stalker property as detailed in Table 1.1. The Harakeke-mingimingi flaxland present on the Stalker property is contiguous with similar flaxland on the DOC property. The area of each wetland type present on the Stalker property is detailed in the table below. A detailed description of the vegetation and habitats present in wetland area on the Stalker property is provided in the Ecological Assessment.

Table 1.1 Vegetation Types and Areas on the Stalker Property

| VEGETATION TYPE                           | AREA            |
|---|-----------------|
| Harakeke-mingimingi flaxland              | 2.67ha          |
| Harakeke-copper tussock /exotic grassland | 0.16ha          |
| Copper tussock marsh                      | 0.9ha           |
| <i>Hebe odora</i> /copper tussock marsh   | 3.3ha           |
| Wire rush bog                             | 42.6ha          |
| Mānuka/wire rush bog                      | 14.2ha          |
| Modified copper tussock/wire rush bog     | 0.1ha           |
| <b>TOTAL</b>                              | <b>63.93 ha</b> |

Source: Wildlands Ecological Assessment (Appendix A)

A detailed description of the vegetation and habitats present in wetland area in those parts of the So Big Swamp located on DOC property is provided in the Ecological Assessment.

## 2.4 STREAMS

Two small streams are present at the application site. The Moss Burn is located at the eastern end of the proposed access and is located within the wetland. The width of the Moss Burn at this location is approximately 300 -400mm and it has no flow approximately 2 - 3 months a year. The second stream (the Browns Stream) is a modified waterway located at the western end of the proposed access that is not located in the wetland. This stream has been straightened and is approximately 300 - 400mm in width.

## 2.5 PRE-APPLICATION DISCUSSIONS

The applicant had two pre-application meetings with Southland Regional Council (Environment Southland) prior to lodgement of this application. A council staff member also visited the site and prior to lodgement and additional discussions occurred via e-mail (refer Appendix G). This

application reflects outcomes of those discussions. The applicant engaged ecology, hydrology and planning experts as suggested by council to assist with their proposal early on in the process. The applicant has also undertaken consultation prior to lodgement of this application as outlined in Section 9 below. proposed activity

---

## 2.6 WETLAND MODIFICATION

### 2.6.1 EARTHWORKS

Earthworks will be undertaken to enable construction of the proposed farm access that will be approximately 205m in length by 10m in width. The total volume of earthworks is estimated at 1230m<sup>3</sup>. The volume of earthworks between the two stream is estimated at 1080m<sup>3</sup>. As outlined in the Ecological Assessment not all of this area is comprised of wetland and only the earthworks proposed in natural wetland require resource consent. As such the volume of earthworks proposed in natural wetland which resource consent is sought for is estimated at 200m<sup>3</sup>. As outlined below the amount of wetland vegetation to be removed is estimated at 300m<sup>2</sup>. The estimated volume of earthworks proposed in natural wetland is based on a 30m length of farm access 10m in width (180m<sup>3</sup>). An allowance of an additional 20m<sup>3</sup> is included to provide a rounded figure of 200m<sup>3</sup> of earthworks in wetland.

### 2.6.2 VEGETATION REMOVAL

Construction of the farm access on the Stalker property will require clearance of approximately 800m<sup>2</sup> of vegetation. This will be a mixture of exotic plant species and native wetland species. As outlined in (Figure 4 of the Ecological Assessment) in terms of indigenous plant species this will predominantly involve clearance of flax (harakeke) and copper tussock. However as outlined further below at Section 3.3.1 the applicant's intention is to transplant all of the harakeke and copper tussock to create additional areas of wetland vegetation. It is important to note that of this 800m<sup>2</sup> of vegetation approximately 300m<sup>2</sup> constitutes dense harakeke flaxland comprising wetland vegetation. It is this 300m<sup>2</sup> of vegetation clearance that constitutes wetland modification that resource consent is sought for. The remaining 500m<sup>2</sup> of vegetation is a mix of harakeke, copper tussock and exotic grasses located on dryland rather than wetland.

### 2.6.3 ACCESS FORMATION

Plans of the proposed works are detailed in Appendix C. The farm access will be 205m in length by 10m in width. A 4m wide gravel track will be constructed in the middle of the access and would provide a gravelled surface for the movement of vehicles, machinery, stock and people between the two farms. Track substrate will be built up to 600mm above ground level with geogrid level coarse material formed at the base and compacted gravel material on the surface. Grass verges will be formed within farm access either side of the gravel track with batter edges at a 2:1 gradient to prevent runoff flowing into the wetland. Secure stock proof fences will be constructed on the farm access boundaries to prevent any stock access to the adjoining wetland. The farm access will be formed after the earthworks and vegetation removal / transplanting has occurred.

---

## 2.7 CULVERTS

### 2.7.1 FARM ACCESS CULVERTS

The applicant proposes construction of 6 x 300mm diameter culverts under the proposed farm access as detailed in the plans included as Appendix C. These culverts would enable for surface water / groundwater to flow under (downstream) of the farm access. They will also reduce any risk of any potential ponding that may occur in extreme rainfall events.

### 2.7.2 STREAM CULVERTS

Two larger culverts 1200mm in diameter culverts are proposed one in the Eastern Watercourse (Moss Burn) and the other in the Western Watercourse (Browns Stream) with the proposed farm access formed over the new culverts.

---

## 2.8 WETLAND ENHANCEMENT

### 2.8.1 TRANSPLANTING OF HARAKEKE AND COPPER TUSSOCK

The applicant proposes replanting of all the harakeke and copper tussock located within the area of the proposed farm access.



**Figure 4** – Proposed Farm Access Location (refer to Appendix A & C for larger version)

All harakeke and copper tussock that need to be removed as part of the earthworks and vegetation removal will be transplanted within the planting areas identified in Figure 4 in the Ecological Assessment and below.

The Ecological Assessment at page 18 notes that:

*"Harakeke is a very tough plant that is very practical to replant. Splitting of large plants into individually-rooted clumps can provide a large number of plants for subsequent replanting, thus resulting in a greater area of planting than of clearance. Over time, as these planted clumps grow, the extent of tall, dense, flaxland should increase".*

*"Copper tussock is also very robust and could be either excavated as whole plants or divided into clumps and replanted".*

Planting areas for transplanted vegetation are identified on both the DOC and Stalker properties. The table below provides details on proposed areas of clearance and planting, based on the areas mapped in Figure 4 of the Ecological Assessment.

Table 12 Planting & Clearance Areas

| Planting and clearance areas   | Sum of area (sqm) |
|--|-------------------|
| Proposed planting area on the Stalker property                               | 758               |
| Proposed planting area on conservation land                                  | 821               |
| <b>Transplanting of harakeke and copper tussock in wetland (Total Area)</b>  | <b>1579</b>       |
| <b>Proposed clearance of harakeke wetland vegetation on Stalker property</b> | <b>300</b>        |
| <b>Transplanted vegetation in wetland / enhanced area (Net Area)</b>         | <b>1279</b>       |

Scattered harakeke and copper tussock on conservation land is spread across an area of 1,555m<sup>2</sup>. The location of the proposed farm access is formed of a mix of wetland and exotic plant species and not all of the proposed farm access area is wetland. Harakeke and copper tussock cover only approximately 30% of this wider area which equates to 467m<sup>2</sup>. Harakeke and copper tussock that needs to be removed to enable construction of the farm access that is not wetland vegetation will be transplanted in the wetland areas identified for enhancement.

Harakeke and copper tussock are plant species that are both amenable to transplanting, and the expectation is that there will be no or minimal loss of any of the harakeke and copper tussock plants that are transplanted. Ecological advice indicated that they all should survive being shifted to the planting sites. This should ultimately mean that around 300m<sup>2</sup> of wetland vegetation clearance is addressed by c. 1,279m<sup>2</sup> of planting.

Harakeke vegetation is to be transplanted will be split into 5 - 10 individual plants and will then be replanted in areas identified in Figure 4 of the Ecological Assessment. Ecological advice indicates that transplanting plants has a high probability of success, but it is likely to take some time for the planted harakeke and tussock to become dense across these areas.

## 2.8.2 UPSTREAM WETLAND ENHANCEMENT

The applicant also proposes enhancement of upstream wetland areas located on their farm property as detailed below. There is a large area of partially developed wetland upstream of the proposed farm access as detailed in Figure 5 below. The applicant proposes wetland restoration, via



pest management and protective fencing of this area which totals approximately 21 ha. Overtime this would enhance and restore the wider So Big Swamp wetland.

**Yellow** = 50 Ha of identified Wetland owned by Stalkers currently fenced off and undeveloped for potential QEII protection

**Green** = 21 Ha of mixed partially developed and undeveloped wetland for potential restoration enhancement/offset.



**Red** = Location of proposed farm access

**Figure 5** – Stalker Wetland Protection / Enhancement Areas

The applicant also proposes enhancement of additional wetland areas bordering the property, and Brown's property they wish to purchase This would involve maintenance of the wetland areas detailed below. This would involve exclusion of stock access and pest plant removal. The applicant would be willing to make these areas available for wetland restoration and enhancement projects aimed at re-establishing native species on retired areas of wetland.

## 2.9 PEST MANAGEMENT

The Ecological Assessment notes that all pest plants recorded at the site are woody weeds. Three of these - silver birch (*Betula pendula*), grey willow (*Salix cineria*), and contorta pine (*Pinus contorta*) - were only observed as single individuals. The Assessment further notes that scotch broom and gorse were mostly of scattered occurrence in better-drained areas beside the stream.

Table 1.3 Pest Plant Species Recorded on the Stalker Property

| SPECIES                  | COMMON NAME   | PLANT TYPE |
|--------------------------|---------------|------------|
| <i>Betula pendula</i>    | Silver birch  | Tree       |
| <i>Cytisus scoparius</i> | Scotch broom  | Shrub      |
| <i>Pinus contorta</i>    | Contorta pine | Tree       |
| <i>Salix cinerea</i>     | Grey willow   | Tree       |
| <i>Ulex europaeus</i>    | Gorse         | Shrub      |

Source: Wildlands Ecological Assessment (Appendix A)

The applicant proposes management of pest plant species as recommended in the Ecological Assessment. This is discussed further below in Section 6 and is covered by a draft condition of consent.

## 2.10 FORMAL PROTECTION

The ecological assessment notes there is a significant area of high value indigenous wetland vegetation on the Stalker property adjacent to the So Big Swamp Conservation Area. It then suggests that formal protection of some or all of this area, for example by use of a QEII covenant or a DOC covenant could be offered by the Stalkers in regard these areas. This would provide formal protection of the values of the wetland and is something the applicants willing to promote as part of this application. Figure 5 above details a wetland area approximately 50 ha in size that is currently fenced to prevent stock access that the applicant is willing to covenant. It is noted that any arrangement for a covenant may require agreement from third party such as QEII or DOC. As a result, a condition requiring a covenant is not promoted as part of this application. This does not preclude the applicant progressing formal protection of parts of the wetland.

## 3 RESOURCE CONSENTS REQUIRED

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### 3.1 OPERATIVE REGIONAL WATER PLAN 2010

Under Rule 20 (c) - the diversion of water from any naturally occurring wetland is a discretionary activity.

---

### 3.2 PROPOSED SOUTHLAND WATER & LAND PLAN 2016

The applicant proposes construction of culverts under the proposed farm access. There is no permitted activity rule under the pSWLP that allows the diversion of groundwater or surface water in a wetland. As there is no rule expressly allowing the diversion of water in the regional plan a resource consent is required under Section 14(3)(a) RMA for the proposed diversion of groundwater and / or surface water. A water permit is therefore required for the diversion of water through the proposed culverts that will be located under the farm access and will allow water to flow to the downstream side of the access. Rule 4 of the pSWLP regulates any activity that would otherwise contravene Section 14(3) of the RMA and is not classified by the pSWLP as any other class of activity listed in Section 87A of the RMA is a discretionary activity.

This application seeks resource consent for wetland modification associated with installation of 6 culverts that will be located under the farm access as a non-complying activity.

The construction of the farm access will require earthworks and vegetation removal and under Rule 74 (c) of the pSWLP wetland modification is a non-complying activity.

Under Rule 59 of the pSWLP the placement of any culvert in a watercourse and any associated bed disturbance and discharge resulting from the activity is permitted provided all the conditions of this Rule are met. The application proposes a 1200mm culvert in each of the waterways (The Moss Burn and Browns Stream). The applicant's intention is to construct these two culverts to comply with the conditions of this rule and as such this aspect of the proposal is a permitted activity.

Under Rule 74 (a) (i) the use of land within a wetland for the purposes of maintaining and enhancing the wetland is a permitted activity. The proposed wetland enhancement, restoration and pest management activities outlined in this application are therefore permitted activities.

This application seeks resource consent for wetland modification to enable construction of a farm access. Once the resource consent is implemented and the farm access constructed the area the application relates to will no longer be wetland. As such once the farm access is constructed and is in use to move stock this activity will not result in disturbance of the bed of a wetland under Rule 70 of the pSWLP. The use of the farm access for the movement of stock will be a permitted activity.

---

### 3.3 NES FRESHWATER 2020

The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-FW) came into force on 3 September 2020.

Under Part 3, Subpart 1 Regulation 38 (1) - (3) subject to compliance with specific conditions activities associated with natural wetland restoration are a permitted activity.

Under Part 3, Subpart 1 Regulation 70 (1) the placement and use of any culvert in the bed of any river is permitted provided all the conditions outlined in (2) are met. The application proposes a 1200mm culvert in each of the waterways (the Moss Burn and Browns Stream). The applicant's intention is to construct these two culverts to comply with the permitted conditions and as such this aspect of the proposal is a permitted activity.

Under Part 3, Subpart 1 Regulation 54 (a), vegetation clearance within a natural wetland is a non-complying activity if it does not have another status under this subpart.

Under Part 3, Subpart 1 Regulation 54 (b), earthworks within a natural wetland is a non-complying activity if it does not have another status under this subpart.

Under Part 3, Subpart 1 Regulation 54 (c), the diversion of water within a natural wetland is a non-complying activity if it does not have another status under this subpart.

Overall, the proposed activity is non-complying under the NES-FW 2020.

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### 3.4 STOCK EXCLUSION REGULATIONS 2020

The Resource Management (Stock Exclusion) Regulations 2020 came into force from 3 September 2020. These regulations have been introduced to keep livestock out of certain waterways including wetlands. On existing farms, under these regulations, livestock must be kept out of wetlands by either 1 July 2023 or 1 July 2025. These regulations apply nationally, and the applicant will need to comply with them irrespective of the outcome of this resource consent application.

This application seeks resource consent for wetland modification to enable construction of a farm access. Once the resource consent is implemented and the farm access constructed the site of the farm access will no longer be wetland. As detailed in the Plans in Appendix C the new farm access will be fenced to prevent stock access to the adjoining wetland. The proposed activity can therefore be undertaken in a manner that will comply with the Resource Management (Stock Exclusion) Regulations 2020.

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### 3.5 PERMITTED BASELINE

Under section 104(2) of the RMA, the Council may disregard an adverse effect of an activity on the environment if the district or regional plan or a national environmental standard permits an activity with that effect. In regard to wetland modification, there is no permitted baseline.

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### 3.6 ACTIVITY STATUS SUMMARY

Overall the proposal is a non-complying activity.

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### 3.7 DOC CONCESSION

The applicant has applied for a concession from DOC for the construction of the proposed farm access on conservation land with an easement allowing for its ongoing use. The concession application is currently on hold. The applicant has been discussing the proposal with DOC for some time.

DOC is identified as an affected party in this application and as outlined below the written approval of the Department is being sought in relation to the resource consent application. This application assesses actual and potential environmental effects of the proposed activity and is relevant to the DOC concession process. The applicant's intention is to show through the resource consent process that the proposed activity can be undertaken in a manner that ensures there is no net loss of wetland area, the wetlands values are protected, and restoration of the wetland is promoted.

As outlined below this application concludes that the proposed activity can be undertaken in manner that will ensure any adverse effects on the wetland will be no more than minor. It also concludes that the proposed activity is consistent with the objectives and policies of the relevant RMA Plans and Policy Statements. The applicant's intention is to progress the concession application when either the written approval of DOC is obtained or alternatively when resource consent is granted.

# 4 ASSESSMENT OF ENVIRONMENTAL EFFECTS

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## 4.1 INTRODUCTION

Section 88 of the RMA requires and assessment of any or potential effects on the environment that may arise from a proposed activity, and the way in which any adverse effects may be avoided, remedied or mitigated. The Assessment of Environmental Effects (AEE) detailed below discusses the actual and potential adverse effects of the proposed activity along with positive effects. The AEE references and relies on the Ecological and Hydrological Assessments included in the appendices of this application.

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## 4.2 ECOLOGY

### 4.2.1 INTRODUCTION

Wildland Consultants (Wildlands) were commissioned by the Stalker family to undertake an Ecological Assessment of the conservation land to determine if there was an area of lower conservation value that would be suitable for creation of a farm access route. Wildlands identified the location of the proposed farm access as being the best site. Wildlands also provided an assessment of the wetland values on the Stalker property. The Wildlands Ecological Assessment is attached as Appendix A.

As recommended in the Ecological Assessment the site of the proposed access is in an area that has been identified as containing vegetation and habitats of low ecological value. The Ecological Assessment notes:

*"The preferred site is located immediately below the wire rush bog, along the alignment of an old fence line. This comprises relatively well-drained land covered in low value exotic grassland with scattered copper tussock and harakeke".*

The Ecological Assessment further notes:

*"Harakeke or copper tussock excavated from these areas should be replanted within suitable areas of adjacent conservation land, and two such areas are suggested in Figure 4".*

*"If replanting of excavated harakeke and copper tussock was undertaken, this would mitigate the effects of clearance of the scattered harakeke and copper tussock from conservation land, and the overall effect of the clearance would be minimal".*

### 4.2.2 ECOLOGICAL SIGNIFICANCE

The Ecological Assessment notes that the more intact, indigenous-dominant areas of vegetation on the Stalker property and conservation land are all ecologically significant under Section 6c of the RMA as areas of high value indigenous wetland vegetation that also provide habitat for At Risk plant and bird species. These areas meet the representativeness, rarity, and ecological context criteria of the Southland Regional Policy Statement. It further notes:

*"The modified areas of wire rush bog are of lower significance, but nevertheless have moderate ecological value as examples of indigenous-dominant wetland vegetation. Areas dominated by exotic pasture are not significant and are of low value, and are present on both the Stalker property and on the adjacent conservation land".*

*"..... raised peatland bogs, flaxland swamps, and red (copper) tussock grassland, such as those found on the Stalker property and adjacent conservation land, are all examples of Threatened and/or At Risk habitat types".*

#### 4.2.3 CONCLUSION

The Ecological Assessment notes at the end of Section 12 that:

*"Overall, if the clearance of harakeke wetland vegetation was no more than 300 square metres, and replanting, weed control, and legal protection of adjacent wetland vegetation was undertaken as outlined above, then the overall adverse effects of the activity would be no more than minor".*

The Ecological Assessment then concludes:

*"The So Big Swamp Conservation Area and adjacent wetland habitats on the Stalker property are mostly of high conservation value and ecological significance as relatively intact wetland habitats that support At Risk plant and bird species.*

*Vegetation on part of the Conservation Area has however been grazed and its drainage has been modified, and these areas now support largely exotic vegetation. A corridor across this lower value part of the Conservation Area would not result in the loss of natural resources from the Conservation Area. Minor clearance of harakeke to provide a corridor of 10 metres width could be mitigated by planting the cleared harakeke in adjacent low value areas of the wetland.....*

*..... A mitigation approach involving replanting of cleared harakeke to achieve a net gain in wetland extent, eradication of silver birch, contorta pine, grey willow, and outlying gorse and/or Scotch broom, and legal protection of adjacent wetland habitat would reduce the overall adverse effects to less than minor.*

*The width of the suggested corridor is narrower than that ideally sought by the Stalker family. However, it is important to minimise any clearance of high value wetland vegetation to improve the chances of the proposed corridor being acceptable to the Department of Conservation, and of resource consent being gained from Environment Southland.*

*"Overall, we consider that the construction of an access corridor as described in this report would have no more than minor effects on wetland habitat provided that the suggested mitigation actions are implemented. The adjacent wetland vegetation on the Stalker property is of very high ecological value and complements and buffers the So Big Swamp Conservation Area. It is very worthy of legal protection and if this could be achieved through access negotiations a significant positive outcome for indigenous wetland biodiversity would result".*

The Ecological Assessment concludes that if the clearance of harakeke wetland vegetation was no more than 300m<sup>2</sup> and replanting, weed control, and legal protection of adjacent wetland vegetation was undertaken as outlined above, then the overall adverse effects of the activity would be no more than minor. These suggested avoidance and mitigation measures are adopted by the

application and promoted as part of this application as detailed in Section 6 and Appendix E below.

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## 4.3 HYDROLOGY

Geosolve Consultants were commissioned by the Stalker family to undertake a Hydrological Assessment and this is attached as Appendix B. The Geosolve Assessment notes that:

*“the majority of the proposed track alignment is clearly above normal water levels and is largely vegetated with dryland plants.*

*Therefore track formation will not significantly affect water flows or fish passage, except potentially in the vicinity of the watercourses where provision will be needed to maintain flow capacity and fish passage.*

*Ground contours and existing land drainage channels confirm that the main body of the upstream wetland is almost entirely rain-fed. The wetland is largely isolated hydrologically from surrounding farmland by a perimeter network of streams and drainage ditches. Internal rainfall, groundwater, and any residual inflows from adjacent land are drained by two small watercourses.*

*Track crossings could be provided at both watercourses by suitably designed culverts. With the relatively low prevailing flows, culvert sizing will be based on fish passage considerations (if required), rather than flow capacity. Intermediate culverts could be placed if desired to maintain existing drainage patterns at low lying locations between the two watercourses; these could be of smaller diameter as there is no fish passage required outside of the watercourses.*

*For extreme flood flows a secondary overland flow path is available over the track surface, although this scenario is improbable given the contributing catchment areas are small and flat with low runoff coefficients. With the flat gradients and relatively low flows involved, any such overflows will be of low velocity with negligible danger of serious damage to the track or adjacent ground surface”.*

The Hydrology Assessment concludes:

- If provided with appropriate culverts, the proposed access track will not impede drainage or fish passage within the wetland;
- The track will not result in any water leaving the wetland additional to the current situation, i.e. the track will not cause any drainage of the wetland;
- The track will have no significant effect on water flow patterns within the wetland;
- The track will not cause any flooding or erosion.

The Hydrology Assessment indicated that the proposed activity can be undertaken in a manner that will give rise to no more than minor adverse effects on hydrology.

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## 4.4 WATER QUALITY

There may be limited minor temporary release of sediment into groundwater and surface water when works are completed, and water is diverted through the new culverts. As outlined above the applicant's intention is to construct the two stream culverts in a manner that ensures they comply



with the permitted conditions of the pSWLP and NES-FW. The proposed culverts that will be located under the farm access will be placed and constructed as the farm access is formed and these works are unlikely to have adverse effects on water quality.

Any effects of water quality associated with this will be no more than minor and no on-going effects on water quality will arise from the proposed activity.

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## 4.5 LANDSCAPE & AMENITY

The application site is not located within an area identified as containing Outstanding Natural Features and Landscapes or a Visual Amenity Landscape under the Southland District Plan.

The construction of the proposed farm track will have no more than a minor adverse environmental effect on landscape and amenity values, particularly when regard is had to the setting of the site – a working rural landscape. The wetland restoration and enhancement activities proposed as part of this application will have positive effects on landscape and amenity.

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## 4.6 NATURAL CHARACTER

Natural character includes all natural aspects of the land including ecological and hydrological processes.

The proposed activity can be undertaken in a manner that will not give rise to adverse effects on the natural processes of the wetland or its ecology and the natural landform of the wetland will be retained and enhanced. The hydrology of the wetland will not be adversely impacted allowing for the natural movement of water and sediment. The proposed activity will not adversely affect any wild or scenic values. The natural character of the existing wetland has been modified over time through land development activities to enable rural land use. The proposed activity through restoration and enhancement of the wetland will have positive effects on natural character.

The construction of the proposed farm track will have no more than a minor adverse environmental effect on natural character. The wetland restoration and enhancement activities proposed as part of this application will have positive effects on natural character.

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## 4.7 PUBLIC ACCESS

The DOC property on which So Big Swamp is partially located has frontage to Chewings Road. The property has a narrow 11m wide section that extends approximately 1300 metres to Chewings Road across farmland. There is no formed access from Chewings Road to the wetland. The proposed activity will not impede or reduce the ability of the public to access the wetland.

The proposed activity will not give rise to any adverse effects on public access.

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## 4.8 CULTURAL & HISTORIC HERITAGE VALUES

There are no archaeological sites identified on the District Plan Planning Maps as being located on the site. There are no Historic Places, Historic Areas, Wahi Tapu or Wahi Tapu areas on the site registered on Heritage Rārangi Kōrero/Heritage New Zealand List.

While there are no recorded archaeological sites detailed at the application site, there is the possibility of unrecorded archaeological sites being present. The risk of adverse effects on unrecorded archaeology from the proposed farm access can be mitigated by use of a suitable condition relating to accidental discovery.

Provided the accidental discovery protocol is followed the proposal is not likely to give rise to any adverse effects on historic heritage and any adverse effects will be no more than minor.

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## 4.9 PEST MANAGEMENT

The applicant proposes management of pest plant species as recommended in the Ecological Assessment. Active management of wetland areas on the applicant's property will give rise to positive environmental effects and is consistent with restoration and protection of wetland values.

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## 4.10 SOCIAL & ECONOMIC

The proposed activity will give rise to positive economic effects associated with the applicant's ability to expand their farming business operation through consolidation of the two farms. The proposal will also have positive social effects associated with provision of additional residential accommodation for the Stalker family. Expanding the family farm will also assist in terms of provision of a suitable income to support the two households and a pathway for younger generations to become involved in the family business.

## 5 MITIGATION

As outlined above Ecological and Hydrological Assessments have been completed and form part of this application. These assessments make a number of recommendations in relation to avoidance and mitigation of actual and potential adverse environmental effects. These recommendations have been adopted and promoted by the applicant as outlined below. Where appropriate suggested resource consent conditions have been drafted in relation to these matters and these are promoted by the applicant as detailed in Appendix E.

### Accidental Discovery

1. A condition requiring adoption of the Ngāi Tahu ki Murihiku Accidental Discovery Protocol is promoted.

### Earthworks

2. A condition is promoted to ensure that all earthworks should be undertaken using appropriately sized machinery to minimise disturbance of the wetland.

### Hydrology

3. A condition is promoted to ensure that the culverts are sized, constructed and located within the areas as identified in the application.
4. A condition is promoted to ensure that the proposed culverts that will be located under the farm access do not cause any flooding, erosion, scouring, land instability or property damage.

### Ecology

5. A condition is promoted requiring all harakeke and copper tussock that will be removed to enable construction of the farm access to be replanted in adjacent low value wetland sites as identified in Figure 4 of the Ecological Assessment.
6. A condition is promoted in relation to the transplanting of harakeke and copper tussock to enable construction of the farm access.
7. A condition is promoted requiring provision of an Ecological Management Plan prepared by a suitably qualified ecologist which shall address a number of specific matters.
8. A condition is promoted setting a timeframe for work specified in the certified Ecological Management Plan.
9. A condition is promoted requiring fencing of the proposed farm access to prevent stock access to the adjoining wetland.

### Control of Invasive Weeds

10. A condition is promoted to ensure that all machinery used in construction of the farm access is water blasted prior to entry to site to reduce the risk of the introduction of invasive weed species.
11. A condition is promoted to ensure that any gravel used in formation of the farm access shall be obtained from a weed free source.

12. Conditions are promoted requiring the consent holder to take a precautionary approach to the risks associated with pest plants.
13. A condition is promoted requiring the consent holder to eradicate the pest plant species identified in Figure 2 of the Ecological Assessment to improve the quality of the overall wetland complex and to help maintain current wetland functions.

# 6 STATUTORY CONSIDERATIONS

## 6.1 RESOURCE MANAGEMENT ACT 1991

All resource consent applications must be considered against Part 2 of the Resource Management Act 1991 (RMA). Council must be satisfied that in granting a resource consent, Part 2 of the RMA will be achieved.

### Section 5

Section 5 sets out the purpose of the RMA to promote the sustainable management of natural and physical resources. Section 5 requires activities to be managed so to avoid, remedy or mitigate adverse effects on the environment. The construction of the proposed farm access can be undertaken in a manner consistent with sustaining the potential of natural and physical resources to meet the reasonably foreseeable needs of future generations (Section 5 (2) (a)), will give rise to no more than minor adverse effects on the environment (Section 5 (2) (b)), and will safeguard the life-supporting capacity of air, water, soil, and ecosystems (Section 5 (2) (c)). The activity is consistent with the sustainable management of natural and physical resources.

### Section 6

Section 6 of the RMA lists the matters of national importance which are to be recognised and provided for. The Section 6 matters of relevance to this application are:

*The preservation of the natural character of wetlands lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development (Section 6 (a));*

*The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna (Section 6 (c)); and*

*The maintenance and enhancement of public access to and along lakes, and rivers (Section 6 (d)), and the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (Section 6 (e)).*

The assessment of effects above discusses the effects of the activity in relation to these matters and concludes that they are no more than minor. The proposed activity will result in a net increase in wetland area and will also result in enhancement and restoration of the wetland. The proposed activity is consistent with the preservation of the natural character of the wetlands, its protection from inappropriate use and development. The proposed activity is also consistent with the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. The proposed activity will not give rise to any adverse effects on public access or the relationship of Maori and their culture and traditions with water and wetland areas. The activity is therefore considered consistent with the relevant Section 6 matters.

### Section 7

Section 7 lists other matters to regard in relation to managing the use, development, and protection of natural and physical resources. Of relevance to this application is the intrinsic values of ecosystems (s7(d)). Other relevant Section 7 matters include the efficient use and development of natural and physical resources (s7(b)), maintenance and enhancement of amenity values (s7(c)) and maintenance and enhancement of the quality of the environment (s7(f) and the protection of the habitat of trout and salmon (s7(h)).

The activity is consistent with the efficient use and development of natural and physical resources, the maintenance and enhancement of amenity values and maintenance and enhancement of the quality of the environment. The proposed activity will not give rise to any significant effects on amenity values and through restoration and enhancement will contribute to the quality of the environment. Regarding s7(d) as discussed above any adverse effects on ecology will be no more than minor. There are also positive social, recreational and public access benefits associated with the farm access. Ecological effects have been discussed in the Ecological Assessment and the activity is considered consistent with the protection of the habitat of trout and salmon.

## Section 8

The principles of the Treaty of Waitangi (Te Tiriti o Waitangi) must be accounted for in accordance with Section 8. The relevant issues and policies of Te Tangi a Taurira are assessed and discussed below. Consultation with iwi via TAMI has also been undertaken and is ongoing. Their written approval is being sought for the proposed activity. The activity is not inconsistent with the principles of the Treaty of Waitangi.

## 6.2 NATIONAL POLICY STATEMENT FOR FRESHWATER MANAGEMENT 2020

The National Policy Statement for Freshwater Management 2020 (NPS-FW) came into force on 3 September 2020 and replaced the 2014 National Policy Statement for Freshwater Management. The NPS-FW is a relevant consideration in regard the proposed activity. The overarching objective of the NPS-FW is:

### *2.1 Objective*

*(1) The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:*

*(a) first, the health and well-being of water bodies and freshwater ecosystems*

*(b) second, the health needs of people (such as drinking water)*

*(c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.*

**Comment:** As outlined in the AEE above the proposed activity can be undertaken in a manner that avoid and remedies actual and potential adverse effects on the environment. Provided promoted conditions of consent are adhered to the proposed activity will have no more than minor adverse effects on the health and wellbeing of water bodies or freshwater ecosystems (Objective 2.1 (a)) or the health needs of people (Objective 2.1(b)). As outlined in the AEE the proposed activity will have positive social and economic effects (Objective 2.1 (c)).

Overall, the proposed activity is considered consistent management of resources in a manner that prioritises the matters outlined in (a) – (c) of Objective 2.1.

*Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai.*

**Comment:** Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai and is about restoring and preserving the balance between the water, the wider environment, and the community. Te Mana o te Wai encompasses 6 principles which inform implementation of the NPS-FW. There is a hierarchy of obligations in Te

Mana o te Wai that prioritises: (a) first, the health and well-being of water bodies and freshwater ecosystems (b) second, the health needs of people (such as drinking water) (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future. As outlined in the AEE above the proposed activity can be undertaken in a manner that avoids or remedies actual and potential adverse effects on water. The proposed activity will have no more than minor adverse effects on freshwater. Through proposed enhancement and restoration of the wetland the activity is considered consistent with the priorities of Policy 1 and management of freshwater in a way that gives effect to Te Mana o te Wai.

*Policy 2: Tangata whenua are actively involved in freshwater management (including decision-making processes), and Māori freshwater values are identified and provided for.*

**Comment:** Tangata whenua have been consulted through Te Ao Marama Inc and their written approval is being sought. The applicable policies of the relevant iwi management plan are discussed below. The proposed activity is not considered contrary to this policy.

*Policy 3: Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.*

**Comment:** As the proposed activity will not have any significant effects on water it is not considered inconsistent with this policy.

*Policy 4: Freshwater is managed as part of New Zealand's integrated response to climate change.*

**Comment:** This policy is not considered directly relevant to the proposed activity.

*Policy 5: Freshwater is managed through a National Objectives Framework to ensure that the health and well-being of degraded water bodies and freshwater ecosystems is improved, and the health and well-being of all other water bodies and freshwater ecosystems is maintained and (if communities choose) improved.*

**Comment:** As outlined in the AEE above the proposed activity can be undertaken in a manner that avoids or remedies actual and potential adverse effects on water. The proposed activity is not inconsistent with this policy.

*Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.*

**Comment:** The proposed activity will result in a net increase in wetland area and the wetland will be restored and its values protected via wetland enhancement and pest management.

*Policy 7: The loss of river extent and values is avoided to the extent practicable.*

**Comment:** The proposed activity will not result in any loss of river extent or values.

*Policy 9: The habitats of indigenous freshwater species are protected.*

*Policy 10: The habitat of trout and salmon is protected, insofar as this is consistent with Policy 9.*

**Comment:** As outlined above in the AEE the proposed activity will have no more than minor effects on the ecology of the wetland. The proposed activity is not considered contrary to Policy 10.

*Policy 12: The national target (as set out in Appendix 3) for water quality improvement is achieved.*

**Comment:** As outlined in the AEE above the proposed activity can be undertaken in a manner that avoids or remedies actual and potential adverse effects on water. The proposed activity is not inconsistent with this policy.

**Summary:** The proposed activity is not anticipated to give rise to any significant adverse effects the health and well-being of water bodies and freshwater ecosystems or the health needs of people and will have positive social and economic effects.

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## 6.3 REGIONAL POLICY STATEMENT 2017

The Regional Policy Statement for the Southland Region (SRPS) provides an overview of the resource management issues of the region. It sets out how natural and physical resources are to be managed in an integrated way to promote sustainable management. Relevant policies are listed below:

*Policy TW.1 Treaty of Waitangi/Te Tiriti o Waitangi.*

*Policy TW.3 Take iwi management plans into account.*

*Policy TW.4 Decision making*

*Policy WQUAL.1 Overall management of water quality*

*Policy WQUAL.2 All waterbodies – maintain or improve having particular regard to the following contaminants: nitrogen; phosphorus; sediment; microbiological contaminants.*

*Policy WQUAL.3 Wetlands and outstanding freshwater bodies.*

*Policy WQUAL.6 Water in natural state – to manage discharges and land use activities to maintain the quality of water and the associated values where it is in its natural state*

*Policy WQUAL.7 Recognise the social, economic and cultural benefits that may be derived from the use, development or protection of water resources.*

*Policy WQUAL.12 Integrated management.*

*Policy BRL.1 Managing effects on values and physical processes*

*Policy BRL.2 Existing uses of lake and river beds*

*Policy BRL.4 Public access*

*Policy BIO.2 Protect significant areas*

*Policy BIO.4 Maintain indigenous biodiversity*

*Policy BIO.7 Active Management*

*Policy BI).8 Tangata whenua*

The proposed activity will result in a net increase in wetland area and will also result in enhancement and restoration of the wetland and will maintain indigenous biodiversity. The proposed activity is consistent with the preservation of the natural character of the wetlands, its protection from inappropriate use and development. The proposed activity is also consistent with the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. The proposed activity will not give rise to any adverse effects on public access or the relationship of Maori and their culture and traditions with water and wetland areas. The activity is therefore considered consistent with the relevant Section 6 matters.



As concluded in the AEE above the activity will have no more than minor effects on the environment and will give rise to positive social and economic effects.

The activity is considered consistent with the relevant objectives and policies of the Southland Regional Policy Statement 2017.

## 6.4 OPERATIVE REGIONAL WATER PLAN 2010

The objectives and policies of the Regional Water Plan that are relevant to this application are as follows:

### *Policy 1A Take into account Iwi Management Plans*

Te Tangi a Taurira is the iwi management plan for Southland and is discussed considered below.

### *Objective 10 Habitats and ecosystems*

Objective 10 requires habitats and ecosystems to be maintained, and where possible enhanced. The ecological effects have been assessed as no more than minor and the proposed activity will maintain the wetland habitats and ecosystems.

### *Objective 12 Public access*

Objective 12 requires public access to be maintained and enhanced and recognizes that public access to crown land is a traditional right and is important for social, cultural and recreational reasons. The activity is not in consistent with this objective and will not give rise to any adverse effects on public access.

### *Objective 13 Natural character and outstanding natural features*

Effects on natural character have been discussed above in the AEE and will be no more than minor. Proposed maintenance and enhancement of the wetland is proposed as part of the activity and this is likely to have positive effects on natural character.

### *Policy 38 Adverse effects of activities*

Policy 38 of the RWP requires that adverse effects of activities on wetlands should be avoided wherever possible through an integrated management approach. The proposed activity will result in a net increase in wetland area and the Ecological Assessment concludes that it can be undertaken in a manner that ensures any adverse effect on the ecology of the wetland will be no more than minor. The proposed activity is considered is consistent with this policy.

### *Policy 40 - Encourage the maintenance and restoration of existing wetlands and the creation of new wetlands.*

Policy 40 encourages the maintenance and restoration of exiting wetlands and the proposed activity includes maintenance and restoration of wetland areas consistent with this policy.

## 6.5 PROPOSED SOUTHLAND WATER AND LAND PLAN 2018

The objectives and policies of the pSWLP that are relevant to this application are as follows:

*Objective 1 - Land and water and associated ecosystems are sustainably managed as integrated natural resources, recognising the connectivity between surface water and groundwater, and between freshwater, land and the coast.*

Objective 1 is a broad high-level objective that sets the goal of sustainable management of land and water and associated ecosystems, the manner of management and the need to recognise the connectivity of water. As noted above the effects of the activity on the wetland are no more than minor. In my opinion the activity is not contrary to this objective.

*Objective 2 - Water and land is recognised as an enabler of primary production and the economic, social and cultural wellbeing of the region.*

Objective 2 acknowledges water and land as an enabler for key RMA matters in the region. The proposed activity will enable positive social and economic effects and will contribute positively to the wellbeing of the Southland Region. In my opinion the activity is consistent with Objective 2.

*Objective 9A - Surface water is sustainably managed to support the reasonable needs of people and communities to provide for their social, economic and cultural wellbeing.*

The proposed activity is not considered contrary to Objective 9A.

*Objective 14 - The range and diversity of indigenous ecosystem types and habitats within rivers, estuaries, wetlands and lakes, including their margins, and their life-supporting capacity are maintained or enhanced.*

The Ecological Assessment concludes that the activity can be undertaken in a manner that will ensure any adverse effect on the wetland is no more than minor. The range and diversity of indigenous ecosystem types and habitats of the wetland and its margins will be maintained and enhanced.

*Objective 16 - Public access to, and along, river (excluding ephemeral rivers) and lake beds is maintained and enhanced, except in circumstances where public health and safety or significant indigenous biodiversity values are at risk.*

The proposed activity is not considered contrary to Objective 16.

*Objective 17 - The natural character values of wetlands, rivers and lakes and their margins, including channel and bed form, rapids, seasonably variable flows and natural habitats, are protected from inappropriate use and development.*

Effects on natural character have been discussed above in the AEE and will be no more than minor. Proposed maintenance and enhancement of the wetland is proposed as part of the activity and this is likely to have positive effects on natural character. T

*Objective 3 - The mauri of waterbodies provide for te hauora o te tangata (health and mauri of the people), te hauora o te taiao (health and mauri of the environment) and te hauora o te wai (health and mauri of the waterbody).*

*Objective 4 - Tangata whenua values and interests are identified and reflected in the management of freshwater and associated ecosystems.*

*Policy 1 - Enable papatipu rūnanga to participate*

*Policy 2 - Take into account iwi management plans*

Regarding Objectives 3 and 4 and Policies 1 and 2 consultation with Te Ao Marama will be undertaken, cultural effects have been discussed above in the AEE and relevant policies of the Iwi Management Plan (Te Tangi ā Taurā) are discussed below. The activity is considered consistent with these objectives and policies.

*Policy 32 Protect significant indigenous vegetation and habitat - Protect significant indigenous vegetation and significant habitats of indigenous fauna associated with natural wetlands, lakes and rivers and their margins.*

The proposed activity will result in a net increase in wetland area and includes enhancement and restoration of the wetland. The proposed activity is considered consistent with this policy.

*Policy 33 Adverse effects on natural wetlands - Prevent the reduction in area, function and quality of natural wetlands, including through drainage, discharges and vegetation removal.*

The proposed activity will result in a net increase in wetland area and the Ecological Assessment concludes that it can be undertaken in a manner that ensures any adverse effect on the ecology of the wetland will be no more than minor. The proposed activity is considered consistent with this policy.

## 6.6 TE TANGI A TAUIRA – THE CRY OF THE PEOPLE

The kaupapa of this Plan is Ki Uta Ki Tai – From the Mountains to the Sea. It is a culturally based natural resource framework developed by and for Ngāi Tahu Whānui and has been identified and advocated as a key tool in assisting Ngāi Tahu achieve more meaningful rangatiratanga and kaitiakitanga in natural resource management. It provides an indigenous understanding of the environment that can be used to help address the wide range of issues Rūnaka face with regards to environmental management. Te Rūnanga o Oraka/Aparima is the relevant Rūnanga Papatipu o Murihiku. The issues and policies of the Iwi Management Plan, relevant to the activity are listed and considered below.

### Earthworks

*Policy 9: Any earthworks or roadworks near rivers must have appropriate measures in place to avoid contaminants (including dust, sediment run-off from stockpiles or any hazardous substance) from entering waterways that may cause contamination, discolouration, or siltation in such waterways.*

### Water Quality

*Policy 5. Avoid the use of water as a receiving environment for the direct, or point source, discharge of contaminants. Generally, all discharge must first be to land.*

### Water Quantity

*Policy 20. Avoid adverse effects on the base flow of any waterway, and thus on the mauri of that waterway and on mahinga kai or taonga species.*

### General Water Policy

*Policy 1. The role of Ngāi Tahu ki Murihiku as kaitiaki of freshwater must be given effect to in freshwater policy, planning and management.*

*Policy 3. Protect and enhance the mauri, or life supporting capacity, of freshwater resources throughout Murihiku.*

*Policy 4 Manage our freshwater resources wisely, mō tātou, ā, mō ngā uri ā muri ake nei, for all of us and the generations that follow.*

*Policy 5 Promote the management of freshwater according to the principle of ki uta ki tai.*

### Wetlands (3.5.18)

1. Avoid the direct or indirect drainage or modification of any existing wetland area.

**Comment:** The AEE above concludes that the proposed activity subject to use of suitable avoidance and mitigation measures can be undertaken in a manner which will not give rise to any significant adverse effects on soils, water quality or water quantity. The proposed activity is considered consistent with these policies and objectives.

The wetlands policy seeks to avoid direct or indirect drainage of any existing wetland area and no drainage of the wetland is proposed. As discussed above modification of a small part of the existing wetland is proposed to enable construction of the farm access. Any adverse effects of this are off-set by the enhancement of the wetland through the relocation of the existing vegetation and creation of additional areas of wetland. There will be no net loss of wetland area. Restoration and enhancement of the existing wetland is also proposed on previously developed parts of the wetland. Pest management within the wetland is also proposed by the applicant. The intention is that net area of the wetland is increased, it is enhanced and restored, and its values protected. The proposed activity is considered consistent with the relevant policies when they are read and appraised as a whole.

## 7 ALTERNATIVES

The option of 'do nothing' provides one alternative but would not enable the applicant to purchase the adjoining farm to achieve social and economic benefits that have led to the proposal. The applicant is proposing wetland enhancement and restoration of the wetland and we note that these benefits are unlikely to arise if the proposal does not progress.

Alternative forms of crossing the wetland were considered such as a bridge but these are cost prohibitive. The farm access needs to provide for effective use for stock, vehicles and farm machinery and as such a raised boardwalk or similar form of crossing is also not practical.

The proposed activity as outlined in this application can result in a positive environmental outcome for the wetland and its values. These positive effects may not be achieved without the need for a resource consent for the proposed farm access.

## 8 CONSULTATION

The following parties have been identified as affected and their written approval sought:

1. Department of Conservation;
2. Te Ao Marama Inc; and
3. Southland Fish and Game.

Written approvals from these persons will be provided to the council when or if obtained.

## 9 SECTION 95

Section 95A of the RMA 1991 sets out that an application must be notified if the activity will have or is likely to have adverse effects on the environment that are more than minor; if the applicant requests it; or it is required by a rule or national environmental standard.

As outlined above in AEE above the activity can be undertaken in a manner that ensures any adverse environmental effects will be no more than minor. There is no district plan rule or national environmental standard that requires notification and in addition the applicant does not request public notification.

Provided the written approval of the persons listed above can be obtained the application can be processed in a non-notified manner.

## 10 SECTION 104 MATTERS

Under Section 104 the matters that the decision maker must have regard to include the actual or potential effects on the environment of allowing the activity, any relevant Plan or Proposed Plan provisions, and any other matter the decision maker considers relevant. Section 104 is subservient to Part 2 of the Act.

### 10.1 SECTION 104D THE GATEWAY TEST

As outlined above wetland modification is a non-complying activity under Rule 74 of the pSWLP and is also a non-complying under the relevant rules of the NES-FW.

When considering a non-complying activity, the Council may only, in accordance with section 104D, grant a resource consent for the activity if it is satisfied that the adverse effects of the activity are minor, or the application is for an activity that will not be contrary to the objectives and policies of the relevant plan or proposed plan.

If the application passes one of either of the limbs of the "gateway" tests in section 104D, under section 104B the Council may grant or refuse consent and if it grants the application, may impose conditions under section 108 of the RMA. There is no primacy given to either of the two limbs, so if one limb can be passed then the 'test' is passed. If the application passes one of either of the limbs of the "gateway" tests in Section 104D, under Section 104B the Council may grant or refuse consent and if it grants the application, may impose conditions under Section 108 of the RMA.

As outlined in the AEE above an Ecological Assessment has been completed that concludes that subject to specific avoidance and mitigation measures the adverse effects of the activity on ecology will be no more than minor. The AEE above also concludes that the activity will not give rise to any other environmental effects that are more than minor. The activity therefore passes the effects limb and the 'gateway test'.

There is no primacy given to either of the two limbs, so if one limb can be passed then the 'test' is passed. As one of the limbs of the 'gateway test' has been passed, then the application is eligible for approval under s104.

This application has also provided an assessment of the activity against the objectives and policies of the relevant plan or proposed plan. This application concludes that when the objectives and policies are read and appraised as a whole the activity also meets the second gateway test and is not contrary to the relevant objectives and policies of the pSWLP or RWP. The activity therefore also passes the objectives and policies limb of the 'gateway test'.

### 10.2 SECTION 104 (1) (AB)

Under section 104(1)(ab) when considering an application for a resource consent the consent authority must, subject to Part 2, have regard to any measure proposed or agreed to by the

applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity. As outlined above the applicant proposes weed control within the wetland focussed on the pest plants identified in the Ecological Assessment. This will provide suitable conditions for indigenous wetland vegetation and will benefit of the wetland's natural character. In addition, the applicant proposes transplanting of all existing harakeke and copper tussock located in the area of the proposed farm track in order to enhance other parts of the wetland. The removal of existing harakeke will enable each plant to be split into additional plants for transplanting. This will enable an increase in the area of the wetland in the areas identified for enhancement. The applicant also proposes enhancement via fencing, pest management and protection of a 21 ha section of previously developed wetland area. These are positive effects on the environment that will compensate adverse effects from allowing the activity.

# 11 CONCLUSION

We believe it is appropriate for this application to be granted resource consent for the following reasons:

- The proposed activity can be undertaken in a manner that will avoid, mitigate or remedy actual; and potential adverse environmental effects to the extent that any adverse environmental effects will be no more than minor.
- The proposed activity is consistent with relevant RMA plan and policy documents.
- The proposal is consistent with the sustainable management purposes of the Resource Management Act 1991, in that it will provide for the sustainable management of the natural and physical resources.

The purpose of the Act will be better met by the approval of the application than its refusal

# APPENDIX A

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## ECOLOGICAL ASSESSMENT



**ECOLOGICAL ASSESSMENT OF PROPOSED  
ACCESS ACROSS CONSERVATION LAND  
NEAR MOSSBURN, SOUTHLAND**

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providing  
outstanding  
ecological  
services to  
**sustain**  
and improve our  
**environments**

# ECOLOGICAL ASSESSMENT OF PROPOSED ACCESS ACROSS CONSERVATION LAND NEAR MOSSBURN, SOUTHLAND

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Old fence on the boundary between the Stalker property (left) and conservation land (right).

## **Contract Report No. 5514**

Revised and updated April 2021

### **Project Team:**

Kelvin Lloyd - Report author

Carey Knox - Report author

### **Prepared for:**

A.N. and J.A. Stalker

Mossburn

## CONTENTS

|     |  |    |
|-----|--|----|
| 1.  | INTRODUCTION   | 1  |
| 2.  | METHODS  | 1  |
| 3.  | ECOLOGICAL CONTEXT   | 1  |
| 4.  | VEGETATION AND HABITATS ON THE CONSERVATION LAND                         | 2  |
|     | 4.1 Overview   | 2  |
|     | 4.2 Harakeke-mingimingi flaxland   | 5  |
|     | 4.3 Harakeke-copper tussock/ <i>Carex sinclairii</i> sedgeland           | 5  |
|     | 4.4 Harakeke-copper tussock marsh  | 6  |
|     | 4.5 Modified [harakeke]/wire rush bog                                    | 6  |
|     | 4.6 [Harakeke-copper tussock-Scotch broom]/exotic grassland              | 7  |
| 5.  | WETLAND VEGETATION AND HABITATS ON THE STALKER PROPERTY                  | 8  |
|     | 5.1 Overview   | 8  |
|     | 5.2 [Harakeke-copper tussock]/exotic grassland (0.16 hectares)           | 8  |
|     | 5.3 Copper tussock marsh (0.9 hectares)                                  | 9  |
|     | 5.4 <i>Hebe odora</i> /copper tussock marsh (3.3 hectares)               | 9  |
|     | 5.5 Wire rush bog (42.6 hectares)  | 9  |
|     | 5.6 Mānuka/wire rush bog (14.2 hectares)                                 | 10 |
|     | 5.7 Modified copper tussock/wire rush bog (0.1 hectares)                 | 11 |
| 6.  | FLORA  | 12 |
|     | 6.1 Overview   | 12 |
|     | 6.2 Threatened and At Risk plant species                                 | 12 |
|     | 6.3 Pest plants  | 12 |
| 7.  | AVIFAUNA   | 13 |
| 8.  | LIZARDS  | 13 |
|     | 8.1 Desktop assessment   | 13 |
|     | 8.2 Avoid or minimise impacts on indigenous lizards                      | 14 |
| 9.  | PEST ANIMALS   | 15 |
| 10. | ECOLOGICAL SIGNIFICANCE  | 15 |
| 11. | ACCESS ACROSS CONSERVATION LAND  | 17 |
|     | 11.1 Location of a potential access corridor                             | 17 |
|     | 11.2 Clearance and planting of harakeke flaxland on the Stalker property | 18 |
|     | 11.3 Vegetation clearance on conservation land                           | 18 |
|     | 11.4 Fencing   | 18 |
|     | 11.5 Stream crossings  | 18 |
|     | 11.6 Compensation  | 19 |
|     | 11.7 Conservation Act 1987   | 19 |

|     |   |    |
|-----|---|----|
| 12. | HARAKEKE WETLAND CLEARANCE ON THE STALKER PROPERTY      | 21 |
| 13. | CONCLUSIONS   | 22 |
|     | ACKNOWLEDGMENTS   | 24 |
|     | REFERENCES  | 24 |
|     | APPENDIX:   |    |
| 1.  | Vascular plant species recorded on the Stalker property | 25 |

**Reviewed and approved for release by:**



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W.B. Shaw  
Director/Lead Principal Ecologist  
Wildland Consultants Ltd

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## 1. INTRODUCTION

The Stalker family operates a farm approximately seven kilometres north of Mossburn, on gently-sloping land west of the Oreti River. The western margin of the Stalker property borders conservation land (Figure 1). The landowners are considering purchase of farmland to the west of the conservation land, but face access issues if they are unable to cross the conservation land to this additional farmland. The conservation land narrows to a c.100 metre wide strip adjacent to the southern part of the Stalker property, and the Stalkers wish to be able to obtain access across this strip through creation of an easement or another appropriate legal instrument. The Stalker property also contains wetlands with high ecological values, previously fenced to exclude stock, and potentially these could be used as part of an exchange to achieve an outcome that both parties would be satisfied with. However the conservation land has been assessed as having high value, and a preliminary opinion from the Department of Conservation is that an application for an easement may not be successful.

Wildland Consultants were commissioned by the Stalker family to undertake an ecological assessment of the conservation land to determine if there was an area of lower conservation value that would be suitable for creation of a farm access route. In addition, an assessment of the wetland values on the Stalker property was required. This report describes the results of these assessments.

## 2. METHODS

The site was visited on 11 August 2020, comprising a survey on foot of the narrow strip of conservation land, and the extensive area of wetland vegetation on the Stalker property. Notes were made on the ecological values of the conservation land, and areas of different ecological value were mapped. Threats to the ecological values of the conservation land were also described.

Wetland vegetation on the Stalker property, adjacent to the conservation land, was also traversed on foot. All vascular plants and bird species observed on the Stalker property were documented, and vegetation/habitat types were described and mapped using hard copy aerial imagery. Hard copy maps were later digitised by Wildlands GIS staff.

## 3. ECOLOGICAL CONTEXT

The Stalker property is located in the northern part of the Taringatura Ecological District, which occupies the Wairaki and Taringatura Hills lying on both sides of the Aparima River, and is notable for wide flat valleys supporting large wetlands (McEwen 1987). The climate is cool temperate with annual rainfall of 800-1,000 millimetres.

The conservation land that the Stalkers wish to gain access across is part of the 'Conservation Area - So Big Swamp, Mossburn'. Other nearby conservation land comprises marginal strips in the Oreti River to the north, and Centre Burn to the southwest. Centre Burn Scenic Reserve protects a wire rush (*Empodisma minus*) wetland complex about two kilometres to the northwest of So Big Swamp, and another large wire rush bog is protected by a QEII covenant some four kilometres to the south

of So Big Swamp. Smaller areas of more modified and unprotected wire rush bog occur c.500 metres to the west of So Big Swamp, and on the Stalker property to the east of the fenced off areas of wetland vegetation (Figure 1).

Conservation Area - So Big Swamp, Mossburn has the status of a Stewardship Area under Section 25 of the Conservation Act<sup>1</sup>. It largely covers part of a broad raised wire rush bog, but also includes a finger of conservation land extending southeast of this wire rush bog, which contains an old river channel now supporting streams that drain the large wire rush bog, and a variety of vegetation including harakeke (*Phormium tenax*) flaxland, copper tussock (*Chionochloa rubra* subsp. *cuprea*) grassland, small patches of wire rush bog, and *Carex* sedgeland.

The Stalker property contains a sizeable area of the wire rush bog and other wetland habitats (Figure 1), and includes flaxland on the northeastern margin of the old river channel.

## 4. VEGETATION AND HABITATS ON THE CONSERVATION LAND

### 4.1 Overview

Vegetation and habitats on the conservation land were only assessed where the conservation land narrows below the large area of wire rush bog, where potential access across the conservation land for farming operations would be considered.

Vegetation on the conservation land becomes quite complex at this point, with gradients in soil moisture and disturbance from cattle browse and trampling resulting in the current pattern of vegetation and habitats. It should be noted that access by cattle onto the conservation land is from the western side, and there is no evidence of stock accessing the conservation land from the Stalker property.

Five vegetation/habitat types were identified, as mapped in Figure 2: and are described in more detail below:

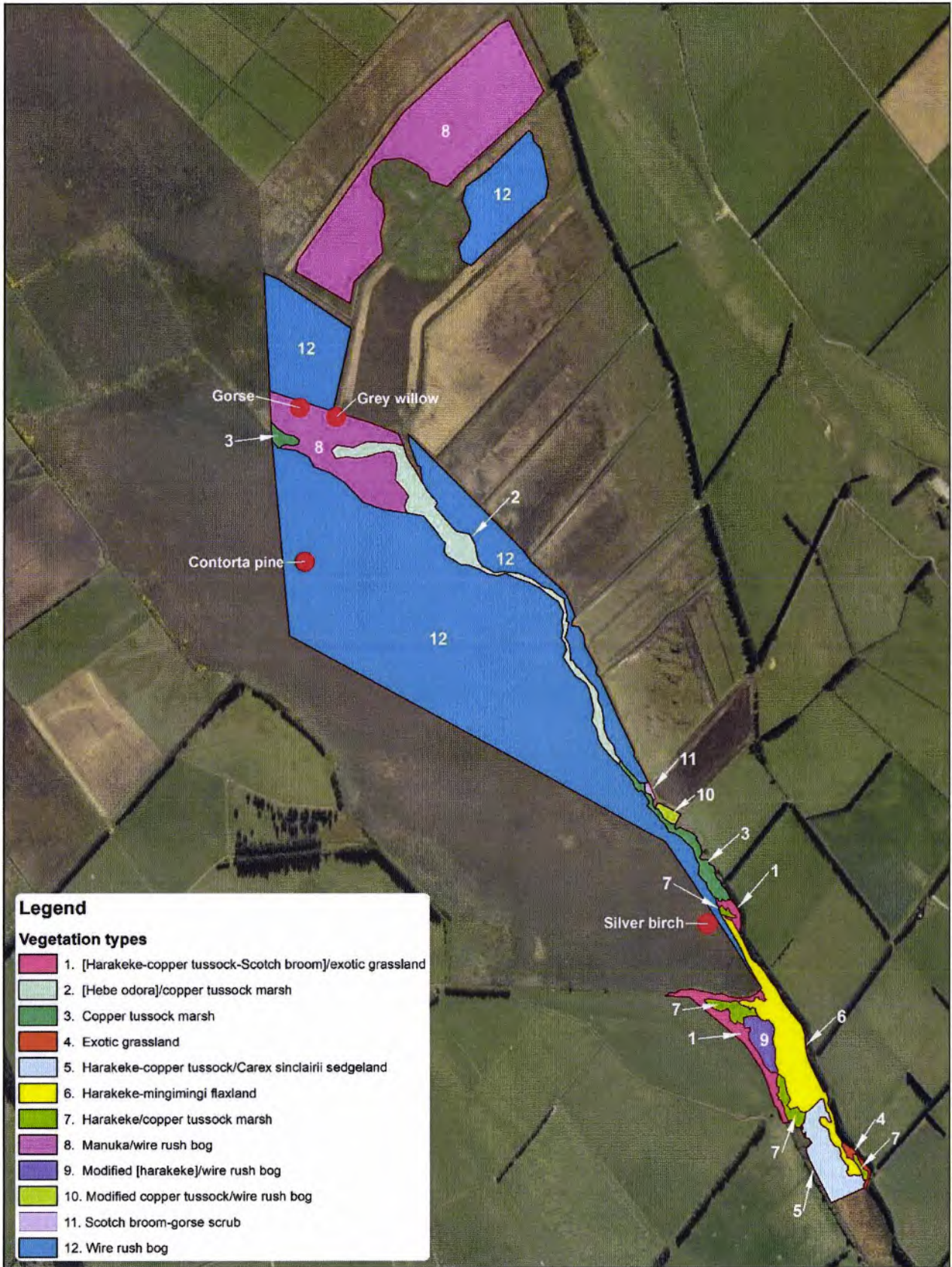
- Harakeke-mingimingi flaxland
- Harakeke-copper tussock/*Carex sinclairii* sedgeland
- Harakeke-copper tussock marsh
- Modified [harakeke]/wire rush bog
- [Harakeke]-copper tussock-Scotch broom]/exotic grassland

These types are described in more detail below.

---

<sup>1</sup> <https://maps.doc.govt.nz/mapviewer/index.html?viewer=docmaps>

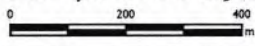




**Data Acknowledgment**  
 Maps contain data sourced from LINZ  
 Crown Copyright Reserved

Report: XXXX  
 Client: Wildlands GIS  
 Ref: 01 0867  
 Path: E:\gis\StalkerFarm.mxd  
 Plot: figure\_2\_vegetationhabitats.mxd

**Figure 2. Vegetation and habitats on the Stalker property and lower part of the adjacent conservation land**



**Wildlands**  
 www.wildlands.co.nz, 0538 10 1022

Scale: 1:8,000  
 Date: 24/08/2020  
 Cartographer:  
 Format: A3



## 4.2 Harakeke-mingimingi flaxland

Two metre tall flaxland dominated by harakeke (Plate 1), with frequent mingimingi (*Coprosma propinqua*) occurs along the eastern side of the area (Figure 2), associated with the stream from the eastern side of the wire rush bog. Other species include shield fern (*Polystichum vestitum*), *Coprosma elatirioides*, *Austroblechnum penna-marina*, *Carex geminata*, *Ranunculus glabrifolius* and the exotic species lotus (*Lotus pedunculatus*), Yorkshire fog (*Holcus lanatus*), and mouse-ear chickweed (*Cerastium fontanum*).



Plate 1: Dense, tall harakeke-mingimingi flaxland on the Stalker property, contiguous with similar vegetation on conservation land further downstream.

This vegetation is contiguous with similar flaxland on the Stalker property. In total, there is approximately 2.7 hectares of harakeke-mingimingi flaxland in the wetland complex, with approximately 1.8 hectares of this flaxland on conservation land, and 0.9 hectares on the Stalker property.

## 4.3 Harakeke-copper tussock/*Carex sinclairii* sedgeland

Sedgeland dominated by *Carex sinclairii* occurs further south where very wet conditions are present right across the gully floor (Figure 2). Harakeke is common, but of low stature (Plate 2). Copper tussock is frequent, and there are occasional toetoe. A range of other wetland plant species including wire rush, holy grass (*Hierochloa redolens*), *Montia fontana*, *Epilobium macropus*, occasional *Deschampsia cespitosa*, and the exotic species spearwort (*Ranunculus flammula*), jointed rush (*Juncus articulatus*), Yorkshire fog, creeping bent (*Agrostis stolonifera*), sweet vernal (*Anthoxanthum odoratum*), and lotus. Mātātā/South Island fernbird (*Bowdleria punctata punctata*) were heard calling in this habitat, which provides good quality habitat for them.

#### 4.4 Harakeke-copper tussock marsh

On somewhat drier sites, copper tussock is abundant with scattered harakeke. Yorkshire fog and *Carex geminata* are occasionally present.

#### 4.5 Modified [harakeke]/wire rush bog

In the northwestern part of the narrow strip of conservation land, a small area of wire rush bog with scattered harakeke is present. This vegetation has been grazed and trampled by cattle, resulting in chewed harakeke, strongly clumped wire rush, and strips of exotic grass swards between clumps of wire rush (Plate 3; Figure 2).



Plate 2: Shorter harakeke-copper tussock/*Carex sinclairii* sedgeland on conservation land, providing excellent habitat for mātātā/South Island fernbird.



Plate 3: Modified wire rush bog on conservation land, affected by trampling by cattle, with exotic grasses occupying gaps between wire rush clumps.

#### 4.6 [Harakeke-copper tussock-Scotch broom]/exotic grassland

Well-drained sites on the western and northern parts of the narrow strip of conservation land (Figure 2) are dominated by exotic grassland with prominent cocksfoot (*Dactylis glomerata*), Yorkshire fog, creeping bent, and broad dock (*Rumex obtusifolius*) and scattered harakeke, copper tussock, and Scotch broom (*Cytisus scoparius*). These modified areas may have historically incorporated wetlands but currently do not, due to the effects of drainage and possibly, historic earthworks. These areas have also been grazed and trampled by cattle (Plate 4). A stream flowing in from the northwest is confined to an excavated channel in this part of the site. Small areas of exotic grassland also occur on the eastern margins of the site, dominated by creeping bent and Yorkshire fog.



Plate 4: Exotic grassland with scattered copper tussock, showing recent grazing by cattle, on the western side of the conservation land.

## 5. WETLAND VEGETATION AND HABITATS ON THE STALKER PROPERTY

### 5.1 Overview

Further upstream, flaxland on the Stalker property gives way to copper tussock marsh beside the stream. Extensive wire rush bog is present to the west of the stream, and in places to the east.

In addition to the flaxland described above, six vegetation/habitat types are present, which are mapped in Figure 2 and described in more detail below:

- [Harakeke-copper tussock]/exotic grassland.
- Copper tussock marsh.
- *Hebe odora*/copper tussock marsh.
- Wire rush bog.
- Mānuka/wire rush bog.
- Modified copper tussock/wire rush bog.

### 5.2 [Harakeke-copper tussock]/exotic grassland (0.16 hectares)

A small area of exotic grassland (Plate 5) with scattered harakeke and copper tussock occurs immediately above the northern-most extent of tall flaxland (Figure 2). Yorkshire fog is common along with red fescue (*Festuca rubra*) and spearwort. One individual of the At Risk sedge *Carex tenuiculmis* was also present in this area.

Large clumps of the green alga *Chara corallina* were present in the stream adjacent to this vegetation.



Plate 5: Ungrazed exotic grassland with scattered copper tussock immediately northeast of the upstream extent of dense tall harakeke flaxland on the Stalker property.

### 5.3 Copper tussock marsh (0.9 hectares)

Copper tussock marsh occurs upstream of the area of exotic grassland (Figure 2), dominated by copper tussock, with holy grass, hard rush (*Juncus edgariae*), *Montia fontana*, *Senecio minimus*, and the exotic species Yorkshire fog, spearwort, and broad dock. Occasional plants of *Carex tenuiculmis* are also present in this vegetation.

### 5.4 *Hebe odora*/copper tussock marsh (3.3 hectares)

Further upstream (Figure 2), shrubs of *Hebe odora* and tauhinu (*Ozothamnus vauvilliersi*) become prominent in the copper tussock marsh beside the stream, along with wire rush, and there are fewer exotic species present.

### 5.5 Wire rush bog (42.6 hectares)

Extensive and highly intact wire rush bog occurs on the western side of the stream, directly adjacent to similar wire rush bog on conservation land to the west (Plate 6; Figures 1 and 2). Wire rush dominates this vegetation, with sparse *Dracophyllum rosmarinifolium*, bog pine (*Halocarpus bidwillii*), mānuka, tauhinu, copper tussock, *Coprosma elatirioides*, hard rush, *Thelymitra* sp., *Celmisia gracilentia*, and very sparse occurrences of exotic grass species. This central part of this wire rush bog is striated with lines of small pools, around which abundant Canada geese (*Branta canadensis*) were resting.



Plate 6: Extensive and highly intact wire rush bog on the Stalker property, with similar wire rush bog on conservation land on the right hand side of the dilapidated fence.

Similarly intact areas of wire rush bog are present on the eastern side of the stream, but these are periodically interrupted by more modified vegetation associated with side drains entering from the adjacent farmland.

#### 5.6 Mānuka/wire rush bog (14.2 hectares)

Near the western boundary of the Stalker property (Figure 2), an area of wire rush bog is associated with frequent emergent mānuka (*Leptospermum scoparium*) and occasional inaka (*Dracophyllum longifolium*), *D. rosmarinifolium*, *Coprosma rugosa*, *C. elatirioides*, and copper tussock (Plate 7). Other species include *Celmisia gracilentia*, *Carex sinclairii*, and creeping bent. This vegetation is also very intact, with few exotic species, including one outlying shrub of gorse (*Ulex europaeus*).

Further north, relatively intact areas of wire rush bog and mānuka/wire rush bog remain in an area where pastoral development has included excavation of ditches and fencing (Figure 2). A black-backed gull (*Larus dominicanus*) breeding colony has altered the trophic status of wire rush bog in this area, leading to dominance of exotic grass swards between the more intact areas of wire rush bog (Figure 2).



Plate 7: Mānuka/wire rush bog with locally common copper tussock on the Stalker property.

#### 5.7 Modified copper tussock/wire rush bog (0.1 hectares)

A small area of wire rush bog on the eastern margin of the stream has been strongly modified, probably by stock, although no stock have grazed the area recently. It is now infused with exotic grasses (Plate 8; Figure 2).



Plate 8: Modified wire rush bog with Scotch broom on adjacent stream margins on the Stalker property.

## 6. FLORA

### 6.1 Overview

A total of 55 plant species were recorded on the Stalker property, with 33 of these being indigenous species, and 22 exotic plant species.

### 6.2 Threatened and At Risk plant species

Of the indigenous species recorded on the Stalker property, *Carex tenuiculmis* and mānuka are currently classified as At Risk-Declining (de Lange *et al.* 2018). The threat classification for mānuka has a precautionary basis as mānuka is a member of the Myrtaceae family that is vulnerable to myrtle rust (*Austropuccinia psidii*). To date however, myrtle rust has not been detected in the lower South Island, and in the areas where myrtle rust is prevalent, mānuka has not proved to be very susceptible to myrtle rust.

Tufted hair grass (*Deschampsia cespitosa*), also classified as At Risk-Declining (de Lange *et al.* 2018) was recorded in wetland habitats on the conservation land, but was not observed on the Stalker property.

### 6.3 Pest plants

Pest plants recorded at the site are all woody weeds. Three of these - silver birch (*Betula pendula*), grey willow (*Salix cineria*), and contorta pine (*Pinus contorta*) - were only observed as single individuals (Figure 2), while Scotch broom and gorse were mostly of scattered occurrence in better-drained areas beside the stream (Table 1; Plate 9).

Table 1: Pest plant species recorded on the Stalker property.

| Species                  | Common Name   | Plant Type | Abundance       |
|--------------------------|---------------|------------|-----------------|
| <i>Betula pendula</i>    | Silver birch  | Tree       | Rare (one seen) |
| <i>Cytisus scoparius</i> | Scotch broom  | Shrub      | Occasional      |
| <i>Pinus contorta</i>    | Contorta pine | Tree       | Rare (one seen) |
| <i>Salix cinerea</i>     | Grey willow   | Tree       | Rare (one seen) |
| <i>Ulex europaeus</i>    | Gorse         | Shrub      | Sparse          |



Plate 9: Isolated occurrences of gorse (left) and contorta pine (right) in wire rush bog on the Stalker property.



## 7. AVIFAUNA

Four indigenous bird species and five exotic bird species were recorded in or adjacent to the wetland habitats assessed on the Stalker property (Table 1). Each of the indigenous bird species is classified as Not Threatened (Robertson *et al.* 2017). Approximately 170 Canada geese (*Branta canadensis*) were observed resting and feeding in the vicinity of the concentration of small pools in the wire rush bog.

Table 1: Bird species recorded on the Stalker property.

| Species                    | Common Name         | Status                     |
|----------------------------|---------------------|----------------------------|
| <i>Branta canadensis</i>   | Canada goose        | Introduced and Naturalised |
| <i>Carduelis carduelis</i> | Redpoll             | Introduced and Naturalised |
| <i>Gerygone igata</i>      | Grey warbler        | Not Threatened             |
| <i>Gymnorhina tibicen</i>  | Australasian magpie | Introduced and Naturalised |
| <i>Larus dominicanus</i>   | Black-backed gull   | Not Threatened             |
| <i>Tadorna variegata</i>   | Paradise shelduck   | Not Threatened             |
| <i>Turdus merula</i>       | Blackbird           | Introduced and Naturalised |
| <i>Turdus philomelos</i>   | Song thrush         | Introduced and Naturalised |
| <i>Vanellus miles</i>      | Spur-winged plover  | Not Threatened             |

As noted above, mātātā/South Island fernbird (*Bowdleria punctata punctata*) were observed in wetland habitats on conservation land, and may utilise the more structurally complex wetland habitats on the Stalker property. Mātātā/South Island fernbird has a threat classification of At Risk-Declining (Robertson *et al.* 2017).

## 8. LIZARDS

### 8.1 Desktop assessment

Up to three lizard species (Plate 10; Table 2) with a threat classification of 'At Risk-Declining' (Hitchmough *et al.* 2016) may be present on the conservation land that would be affected by the proposed access track. All of these species have been found within a 10 kilometre radius of the site. These species (in order of presumed likelihood of occurrence) include the southern grass skink (*Oligosoma polychroma*; Clade 5), cryptic skink (*Oligosoma inconspicuum*), and Southland green skink (*Oligosoma chloronoton*).

These species all prefer damp sites with complex ground cover. The southern grass skink is the most widespread species, and aside from avoiding dry areas, is a generalist in habitat user that utilises a range of indigenous and exotic vegetation, e.g. it can be abundant in rank grassland on roadsides. In contrast, both the cryptic skink and green skink are much less widespread and generally only persist in areas that are both sufficiently damp and contain complex native ground cover, such as dense low-growing shrubs, tussocks, or vines, usually combined with loose rocks or woody debris to shelter underneath.

Cryptic skink can still be found in many places where its preferred habitat remains and is particularly abundant in alpine areas, whereas the much larger Southland green skink

is thought to be in severe decline on the mainland and is becoming increasingly rare, presumably due to predation from introduced mammals combined with habitat loss.

Two indigenous gecko species have also been found within 10 kilometres of the site: korero gecko (*Woodworthia* “Otago-large”) and short-toed gecko (*Woodworthia* “southern mini”). However, both species are very unlikely to be present as they both prefer rocky habitat, and are generally absent from areas without extensive rock cover.

## 8.2 Avoid or minimise impacts on indigenous lizards

To reduce or avoid adverse impacts on indigenous lizards, potential lizard habitat should be taken into account when determining the best location for the vehicle access track. To minimise impacts on lizards the track should be formed in a location which avoids ground cover that may be utilised by lizards (i.e. rock and woody cover), and avoids dense ground-level vegetation cover as much as is practical to do so.



Plate 10: Cryptic skink (*Oligosoma inconspicuum*) may be present in the So Big Swamp Conservation Area near Mossburn.

Table 2: Lizard species present (or potentially present) in the area of a proposed vehicle access track across a conservation area near Mossburn. The likelihood of occurrence for each species is based on their known habitat preferences and distribution in the general area. Conservation status is as per Hitchmough *et al.* 2016.

| Common Name   | Conservation Status | Likelihood of Occurrence, and Justification  | Habitat Notes  |
|---|---------------------|--|--|
| Southern grass skink ( <i>Oligosoma</i> aff. <i>polychroma</i> ; Clade 5) | At Risk-Declining   | Moderate. A widespread species, but patchy in this part of Southland. Recorded recently c.2018 near Centre Hill and on West Dome.  | Prefers damp or well vegetated habitats such as grasslands, wetlands, stream edges, and gullies. Widespread from Banks Peninsula to Stewart Island.  |
| Cryptic skink ( <i>Oligosoma inconspicuum</i> )                           | At Risk-Declining   | Moderate. A widespread species, but patchy in this part of Southland. Recorded recently c. 2018 near Centre Hill, near Braxton, and on West Dome.  | Occupies damp areas with dense ground level vegetation, wood, or rock cover, in Otago and Southland.   |
| Southland green skink ( <i>Oligosoma chloronoton</i> )                    | At Risk-Declining   | Low – records from nearby areas are not recent (Mossburn 1970; West Dome 1990; Braxton/ edge of Takitimu Conservation Area 1997). Shrublands or tussocklands may not be dense enough. Rock or wood cover is unlikely to be extensive enough to support this species in the Conservation Area. Not often found in lowland agricultural areas. | A large, but cryptic species found in damp and structurally complex habitats, typically with woody or rocky cover in the form of logs, rock piles, or loose slabs, such as stream/river/lake edges, wetlands, gullies, shrublands, scree-edges, boulderfields, and tussocklands. |

## 9. PEST ANIMALS

European hare (*Lepus europaeus*) was observed at the site. Other pest animals likely to be present are rabbit (*Orytolagus cuniculus*), possum (*Trichosurus vulpecula*), hedgehog (*Erinaceus europaeus*), feral cat (*Felis catus*), mustelids (*Mustela* spp.), rodents (*Rattus* spp.), and mice (*Mus musculus*).

## 10. ECOLOGICAL SIGNIFICANCE

The more intact, indigenous-dominant areas of vegetation on the Stalker property and conservation land are all ecologically significant under Section 6c of the RMA as areas of high value indigenous wetland vegetation (Figure 3) that also provide habitat for At Risk plant and bird species. These areas meet the representativeness, rarity, and ecological context criteria in Appendix 3 of the Southland Regional Policy Statement. The modified areas of wire rush bog are of lower significance, but nevertheless have moderate ecological value as examples of indigenous-dominant wetland vegetation. Areas dominated by exotic pasture are not significant and are of low value, and are present on both the Stalker property and on the adjacent conservation land (Figure 3).



Under Appendix 2 of the Southland Regional Policy Statement, raised peatland bogs, flaxland swamps, and red (copper) tussock grassland, such as those found on the Stalker property and adjacent conservation land, are all examples of Threatened and/or At Risk habitat types.

## 11. ACCESS ACROSS CONSERVATION LAND

### 11.1 Location of a potential access corridor

There is only one place where access across the area of Stewardship Land should be considered, due to generally high value indigenous vegetation extending across most of the width of gully below the wire rush bog (Figure 3), allied with very wet conditions further downstream.

The preferred site is located immediately below the wire rush bog, along the alignment of an old fence line (Plate 11). This comprises relatively well-drained land covered in low value exotic grassland with scattered copper tussock and harakeke (Figure 11). Ground conditions gradually become wetter from west to east, with harakeke becoming more frequent along this gradient. Vegetation abruptly transitions to dense harakeke flaxland on the Stalker property immediately to the east of the conservation land (Figure 4).



Plate 11: Old fence line aligned across well-drained land supporting exotic pasture and scattered copper tussock.

## 11.2 Clearance and planting of harakeke flaxland on the Stalker property

Approximately 300 metres squared of dense harakeke flaxland comprising wetland vegetation (Figure 1) would be required on the Stalker property to provide a corridor with width of approximately 10 metres<sup>1</sup>. All of the excavated harakeke should be conserved, as it provides an excellent resource for dividing and replanting upstream on the Stalker property (Figure 4) so as to mitigate the effects of clearance.

Harakeke is a very tough plant that is very practical to replant. Splitting of large plants into individually-rooted clumps can provide a large number of plants for subsequent replanting, thus resulting in a greater area of planting than of clearance. Over time, as these planted clumps grow, the extent of tall, dense, flaxland should increase.

## 11.3 Vegetation clearance on conservation land

If acceptable to the Department of Conservation, scattered harakeke and copper tussock could be excavated from the better-drained conservation land along the proposed corridor (Figure 11). Harakeke or copper tussock excavated from these areas should be replanted within suitable areas of adjacent conservation land, and two such areas are suggested in Figure 4. The total area of the corridor on conservation land is 1,555 square metres, but at most, only thirty percent of this (467 square metres) is covered by harakeke and copper tussock. If replanting of excavated harakeke and copper tussock was undertaken, this would mitigate the effects of clearance of the scattered harakeke and copper tussock from conservation land, and the overall effect of the clearance would be minimal.

Copper tussock is also very robust and could be either excavated as whole plants or divided into clumps and replanted.

## 11.4 Fencing

The access corridor should be fenced securely so that stock can not access the adjacent conservation land outside of the access corridor. This would provide for the partial recovery of natural values affected by cattle grazing and trampling on the conservation land on the western side of the gully, in particular the modified harakeke/wire rush bog (Figure 2) might recover over time. In addition, nutrient inputs in urine and dung, which are partly responsible for the invasion of exotic grasses into the harakeke/wire rush bog, would also cease. Areas of conservation land currently covered in exotic grassland would need to be actively planted to promote their recovery.

## 11.5 Stream crossings

The access corridor would require two stream crossings, one on conservation land (Figure 4). The proposed farm access track would need to be built up above the current substrate, especially at the eastern end. A culvert would be required where the track crosses the eastern stream, and should provide for fish passage. This culvert would have no effect on the hydrology of the adjacent wire rush bog, which is a raised,

---

<sup>1</sup> The Stalkers would prefer a wider access strip but 10 metres is suggested as a practical width to minimise footprint effects.

ombrotrophic (rain-fed) bog from which water runs off. The excavated stream in the western part of the proposed corridor would also require a bridge or culvert. Culverts should be embedded in the substrate to provide for unimpeded fish passage. These culverts should have no effect on downstream or upstream wetland condition so long as they are placed in-line with the current streams that pass through these wetlands.

## 11.6 Compensation

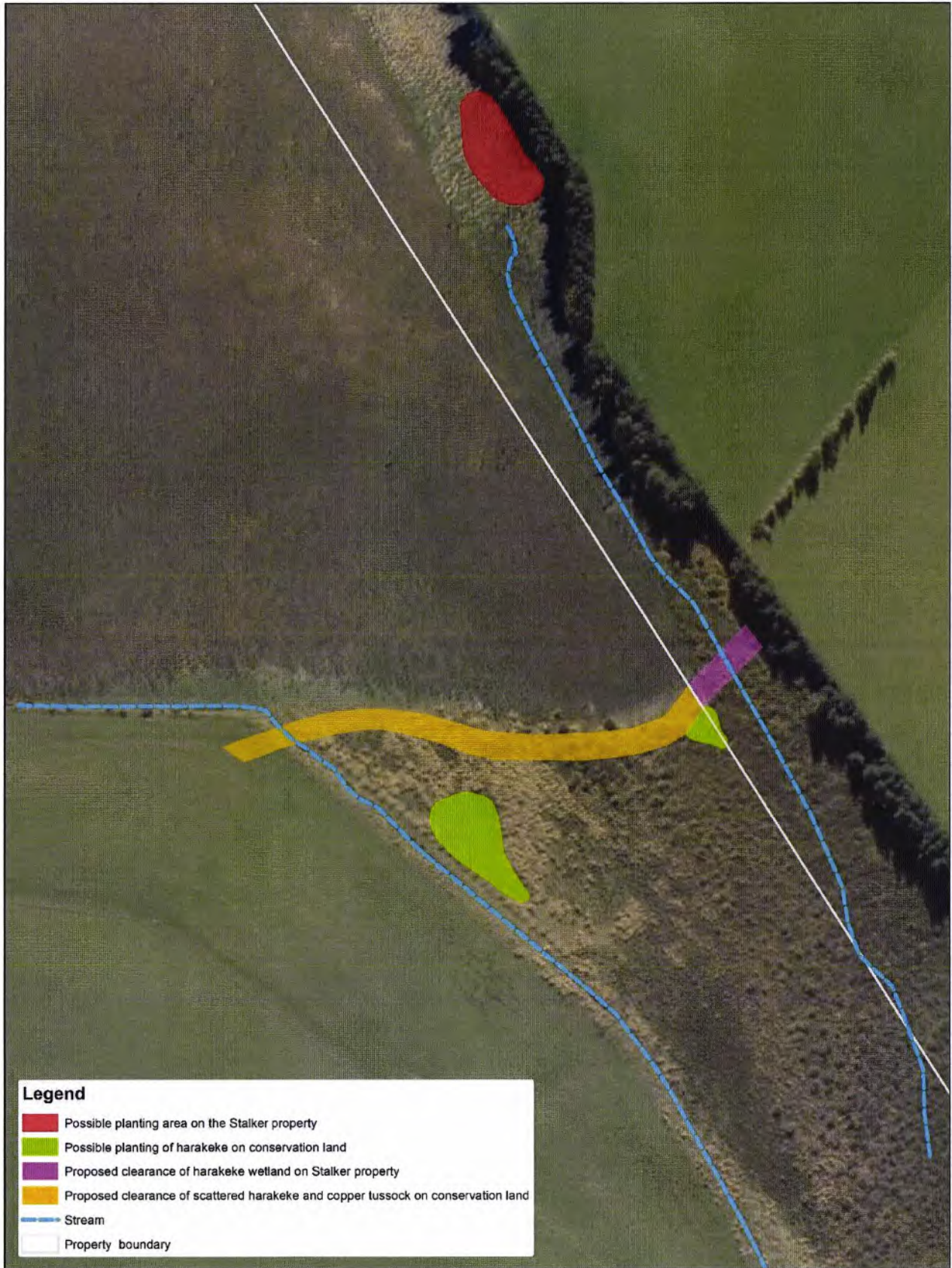
As there is a significant area of high value indigenous wetland vegetation on the Stalker property adjacent to the So Big Swamp Conservation Area, legal protection of some or all of this area - for example by use of a QEII covenant or a Department of Conservation covenant - could be offered by the Stalkers as an additional positive effect for the Department of Conservation to consider in exchange for access across the conservation land.

## 11.7 Conservation Act 1987

Under Section 25 of the Conservation Act, Stewardship areas are to be managed so that the natural and historic resources are protected.

Under Section 26 of the Conservation Act, Stewardship Areas can be disposed of under the Land Transfer Act 2017, but this requires public notification.

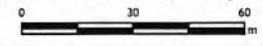
An access corridor could be provided across the So Big Swamp Stewardship Land while protecting the natural resources of the conservation land, subject to the access corridor having a relatively narrow width aligned with areas of lower ecological value and that the proposed mitigation planting is undertaken. The natural resources of the land could be enhanced by exclusion of stock from the area of modified wire rush bog on conservation land, and preventing stock access to browse on harakeke.



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Report: R5514  
 Client:  
 Ref: 04 0916  
 Photo: E:\gls\Stalker\Fig4\m101a2.d  
 Plan: Figure4\_Access.mxd

**Figure 4. An option for potential access across the area of Stewardship Land**



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Scale: 1:1,250  
 Date: 25/08/2020  
 Cartographer: DBM  
 Format: A3



## 12. HARAKEKE WETLAND CLEARANCE ON THE STALKER PROPERTY

Creation of farm access on the Stalker property may require clearance of approximately 300 square metres of harakeke wetland vegetation (Figure 4), which would require a resource consent from Environment Southland.

Rule 74 (c) of the proposed Southland Water and Land Plan requires that any use of land within a natural wetland that is not for maintaining or enhancing the wetland, or for maintaining existing structures within the wetland, or to continue a previous commercial peat harvesting operation, is a non-complying activity.

This is a relatively high threshold as to be considered for consent the activity needs either to either have adverse effects that are no more than minor, or be consistent with the policies of the relevant statutory plans.

Relevant policies of the proposed Southland Water and Land Plan are:

- *Policy 32: Protect significant indigenous vegetation and significant habitats of indigenous fauna associated with natural wetlands, lakes and rivers and their margins.*
- *Policy 33: Prevent the reduction in area, function, and quality of natural wetlands, including through drainage, discharges, and vegetation clearance.*

To comply with Policy 33, any clearance of harakeke wetland vegetation would need to be addressed by mitigation that resulted in no loss in area, function, and quality of the natural wetland vegetation at the site. This could be achieved by:

- Retaining all cleared harakeke, and as much mingimingi and other indigenous wetland plant species as possible, for replanting in adjacent low value wetland sites (Figures 3 and 4).
- Replanting of significantly more than 300 square metres of harakeke wetland to achieve a net gain in wetland extent. As noted above, the splitting of mature harakeke plants would create a large number of clumps for subsequent planting. There is scope to plant harakeke across an area of 758 metres squared on the Stalker property, and across two areas totalling 821 metres squared on conservation land, which would also be used for transplanting of scattered copper tussock.
- Eradicating silver birch, grey willow, contorta pine, and isolated gorse and/or Scotch broom (Figure 2) from upstream wetland vegetation, to improve the quality of the overall wetland complex and to help maintain current wetland functions.
- Ensuring that any culvert used in order to cross the stream on the Stalker property (Figure 4) meets permitted activity standards and does not impede fish passage. Culverts should be embedded in the substrate so as to avoid any overhang and retain gravel cover across the floor of the culvert.

It is possible that legal protection of adjacent wetland vegetation on the Stalker property would achieve consistency with Policy 32, but compliance with this policy would need to be evaluated by a legal/planning expert.

Overall, if the clearance of harakeke wetland vegetation was no more than 300 square metres, and replanting, weed control, and legal protection of adjacent wetland vegetation was undertaken as outlined above, then the overall adverse effects of the activity would be no more than minor.

### 13. CONCLUSIONS

The So Big Swamp Conservation Area and adjacent wetland habitats on the Stalker property are mostly of high conservation value and ecological significance as relatively intact wetland habitats that support At Risk plant and bird species.

Vegetation on part of the Conservation Area has however been grazed and its drainage has been modified, and these areas now support largely exotic vegetation. A corridor across this lower value part of the Conservation Area would not result in the loss of natural resources from the Conservation Area. Minor clearance of harakeke to provide a corridor of 10 metres width could be mitigated by planting the cleared harakeke in adjacent low value areas of the wetland.

Clearance of harakeke wetland vegetation on the Stalker property would be a non-complying activity under the proposed Southland Water and Land Plan, and to be considered for consent, would have to either have effects that were no more than minor, or be consistent with relevant planning policies. A mitigation approach involving replanting of cleared harakeke to achieve a net gain in wetland extent, eradication of silver birch, contorta pine, grey willow, and outlying gorse and/or Scotch broom, and legal protection of adjacent wetland habitat would reduce the overall adverse effects to less than minor.

The width of the suggested corridor is narrower than that ideally sought by the Stalker family. However, it is important to minimise any clearance of high value wetland vegetation to improve the chances of the proposed corridor being acceptable to the Department of Conservation, and of resource consent being gained from Environment Southland.

Non-complying status is a significant threshold for activities to gain a resource consent, and the Stalkers should obtain legal/planning advice on this aspect of the project.

Overall, we consider that the construction of an access corridor as described in this report would have no more than minor effects on wetland habitat provided that the suggested mitigation actions are implemented. The adjacent wetland vegetation on the Stalker property is of very high ecological value and complements and buffers the So Big Swamp Conservation Area. It is very worthy of legal protection and if this could be achieved through access negotiations a significant positive outcome for indigenous wetland biodiversity would result.



## ACKNOWLEDGMENTS

The Stalker family are thanked for hospitality and advice on access to the wetland sites.

## REFERENCES

- de Lange P.J., Rolfe J.R., Barkla J.W., Courtney S.P., Champion P.D., Perrie L.R., Beadel S.M., Ford K.A., Breitwieser I., Schönberger I., Hindmarsh-Walls R., Heenan P.B. and Ladley K. 2018: Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington. 82 pp.
- Hitchmough R., Barr B., Lettink M., Monks J., Reardon J., Tocher M., van Winkel D., and Rolfe J. 2016: Conservation status of New Zealand reptiles, 2015. *New Zealand Threat Classification Series 17*. Department of Conservation, Wellington. 14 pp.
- Robertson H.A., Baird K., Dowding J.E., Elliott G.P., Hitchmough R.A., Miskelly C.M., McArthur N., O'Donnell C.J., Sagar P.M., Scofield R.P., and Taylor G.A. 2017: Conservation status of New Zealand birds, 2016. *New Zealand Threat Classification Series 19*. Department of Conservation, Wellington. 23 pp.

## VASCULAR PLANT SPECIES RECORDED ON THE STALKER PROPERTY

| Species                             | Common Name                | Plant Type   | Abundance  |
|-------------------------------------|----------------------------|--------------|------------|
| <i>Acaena novae-zelandiae</i>       | Red bidibidi               | Dicot herb   | Rare       |
| <i>Agrostis stolonifera</i> *       | Creeping bent              | Grass        | Frequent   |
| <i>Anthoxanthum odoratum</i> *      | Sweet vernal               | Grass        | Occasional |
| <i>Austroblechnum penna-marina</i>  | Little hard fern           | Fern         | Occasional |
| <i>Betula pendula</i> *             | Silver birch               | Tree         | Rare       |
| <i>Blechnum minus</i>               | Swamp kiokio               | Fern         | Occasional |
| <i>Carex coriacea</i>               | Cutty grass, rautahi       | Sedge        | Occasional |
| <i>Carex geminata</i>               | Cutty grass, rautahi       | Sedge        | Occasional |
| <i>Carex secta</i>                  | Pūrei, pūkio               | Sedge        | Occasional |
| <i>Carex sinclairii</i>             |                            | Sedge        | Frequent   |
| <i>Carex tenuiculmis</i>            |                            | Sedge        | Rare       |
| <i>Celmisia gracilentia</i>         | Slender mountain daisy     | Dicot herb   | Occasional |
| <i>Cerastium fontanum</i> *         | Mouse-ear chickweed        | Dicot herb   | Occasional |
| <i>Chionochloa rubra</i>            | Copper tussock             | Grass        | Abundant   |
| <i>Cirsium vulgare</i> *            | Scotch thistle             | Dicot herb   | Rare       |
| <i>Coprosma elatirioides</i>        |                            | Shrub        | Occasional |
| <i>Coprosma propinqua</i>           | Mingimingi                 | Shrub        | Occasional |
| <i>Cytisus scoparius</i> *          | Scotch broom               | Shrub        | Occasional |
| <i>Dracophyllum longifolium</i>     | Inaka                      | Shrub        | Occasional |
| <i>Dracophyllum rosmarinifolium</i> |                            | Shrub        | Occasional |
| <i>Empodisma minus</i>              | Wire rush                  | Rush         | Abundant   |
| <i>Epilobium ciliatum</i> *         | Tall willowherb            | Dicot herb   | Occasional |
| <i>Epilobium pallidiflorum</i>      | Swamp willowherb           | Dicot herb   | Occasional |
| <i>Festuca rubra</i> *              | Red fescue                 | Grass        | Occasional |
| <i>Galium trilobum</i>              | Native bedstraw            | Dicot herb   | Rare       |
| <i>Gaultheria macrostigma</i>       | Prostrate snowberry        | Shrub        | Rare       |
| <i>Gonocarpus aggregatus</i>        |                            | Dicot herb   | Rare       |
| <i>Gonocarpus micranthus</i>        |                            | Dicot herb   | Rare       |
| <i>Halocarpus bidwillii</i>         | Bog pine                   | Tree         | Occasional |
| <i>Hebe odora</i>                   |                            | Shrub        | Occasional |
| <i>Hierochloa redolens</i>          | Holy grass, kāretu         | Grass        | Occasional |
| <i>Holcus lanatus</i> *             | Yorkshire fog              | Grass        | Frequent   |
| <i>Huperzia varia</i>               | Clubmoss                   | Fern         | Rare       |
| <i>Hypericum perforatum</i> *       | St Johns wort              | Dicot herb   | Occasional |
| <i>Hypochaeris radicata</i> *       | Catsear                    | Dicot herb   | Rare       |
| <i>Juncus bufonius</i> *            | Toad rush                  | Rush         | Rare       |
| <i>Juncus effusus</i> *             | Soft rush                  | Rush         | Occasional |
| <i>Leontodon taraxacoides</i> *     | Hawkbit                    | Dicot herb   | Rare       |
| <i>Leptospermum scoparium</i>       | Mānuka                     | Tree         | Occasional |
| <i>Lotus pedunculatus</i> *         | Lotus                      | Dicot herb   | Occasional |
| <i>Montia fontana</i>               | Blinks, dwarf montia       | Dicot herb   | Frequent   |
| <i>Phormium tenax</i>               | Harakeke                   | Monocot herb | Abundant   |
| <i>Pilosella officinarum</i> *      | Mouse-ear hawkweed         | Dicot herb   | Rare       |
| <i>Pinus contorta</i> *             | Lodgepole pine             | Tree         | Rare       |
| <i>Poa cita</i>                     | Silver tussock, wī         | Grass        | Rare       |
| <i>Polystichum vestitum</i>         | Prickly shield fern, pūniu | Fern         | Occasional |
| <i>Pseudognaphalium luteoalbum</i>  | Jersey cudweed             | Dicot herb   | Rare       |
| <i>Ranunculus glabrifolius</i>      | Buttercup, waioriki        | Dicot herb   | Occasional |
| <i>Salix cinerea</i> *              | Grey willow                | Tree         | Rare       |

| <b>Species</b>                | <b>Common Name</b> | <b>Plant Type</b> | <b>Abundance</b> |
|-------------------------------|--------------------|-------------------|------------------|
| <i>Senecio jacobaea</i> *     | Ragwort            | Dicot herb        | Occasional       |
| <i>Senecio minimus</i>        | Native fireweed    | Dicot herb        | Occasional       |
| <i>Stellaria alsine</i> *     | Bog stitchwort     | Dicot herb        | Occasional       |
| <i>Taraxacum officinale</i> * | Dandelion          | Dicot herb        | Rare             |
| <i>Thelymitra cyanea</i>      | Sun orchid         | Orchid            | Rare             |
| <i>Ulex europaeus</i> *       | Gorse              | Shrub             | Rare             |



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# APPENDIX B

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## HYDROLOGY ASSESSMENT



Craig Stalker  
PO Box 106  
Mossburn  
Southland 9747

## Hydrological Assessment Proposed access, Sobig Swamp, Mossburn

In accordance with our Agreement dated 21 January 2021 we have undertaken a hydrological assessment at the above location. Our investigation has comprised a site inspection on 8 February 2021, and review and interpretation of information including plans and maps, photographs, existing reports, and topographical data.

With the exception of a watercourse corridor at either end, the majority of the proposed track alignment is clearly above normal water levels and is largely vegetated with dryland plants (Photo 1). Therefore track formation will not significantly affect water flows or fish passage, except potentially in the vicinity of the watercourses where provision will be needed to maintain flow capacity and fish passage.



*Photo 1 Foreground: proposed track location on dry ground in Conservation land. Elevated wire rush bog in middle background. View is approximately northward from track.*

Ground contours and existing land drainage channels confirm that the main body of the upstream wetland is almost entirely rain-fed. The wetland is largely isolated hydrologically from surrounding farmland by a perimeter network of streams and drainage ditches (Figure 1). Internal rainfall, groundwater, and any residual inflows from adjacent land are drained by two small watercourses (Photos 2).



Figure 1: Wetland (centre) surrounded by drainage channels.



*Photos 2: Eastern (left) and Western (right) watercourses. A4 clipboard shown for scale.*

Track crossings could be provided at both watercourses by suitably designed culverts. With the relatively low prevailing flows, culvert sizing will be based on fish passage considerations (if required), rather than flow capacity. Intermediate culverts could be placed if desired to maintain existing drainage patterns at low lying locations between the two watercourses; these could be of smaller diameter as there is no fish passage required outside of the watercourses.

For extreme flood flows a secondary overland flow path is available over the track surface, although this scenario is improbable given the contributing catchment areas are small and flat with low runoff coefficients. With the flat gradients and relatively low flows involved, any such overflows will be of low velocity with negligible danger of serious damage to the track or adjacent ground surface.

Conclusions:

- If provided with appropriate culverts, the proposed access track will not impede drainage or fish passage within the wetland;
- The track will not result in any water leaving the wetland additional to the current situation, i.e. the track will not cause any drainage of the wetland;
- The track will have no significant effect on water flow patterns within the wetland;
- The track will not cause any flooding or erosion.



This report has been prepared for the benefit of Craig Stalker with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

Yours faithfully,

A handwritten signature in black ink that reads 'H Stocker'.

Hank Stocker  
Senior Engineer - Water  
GeoSolve Limited

# APPENDIX C

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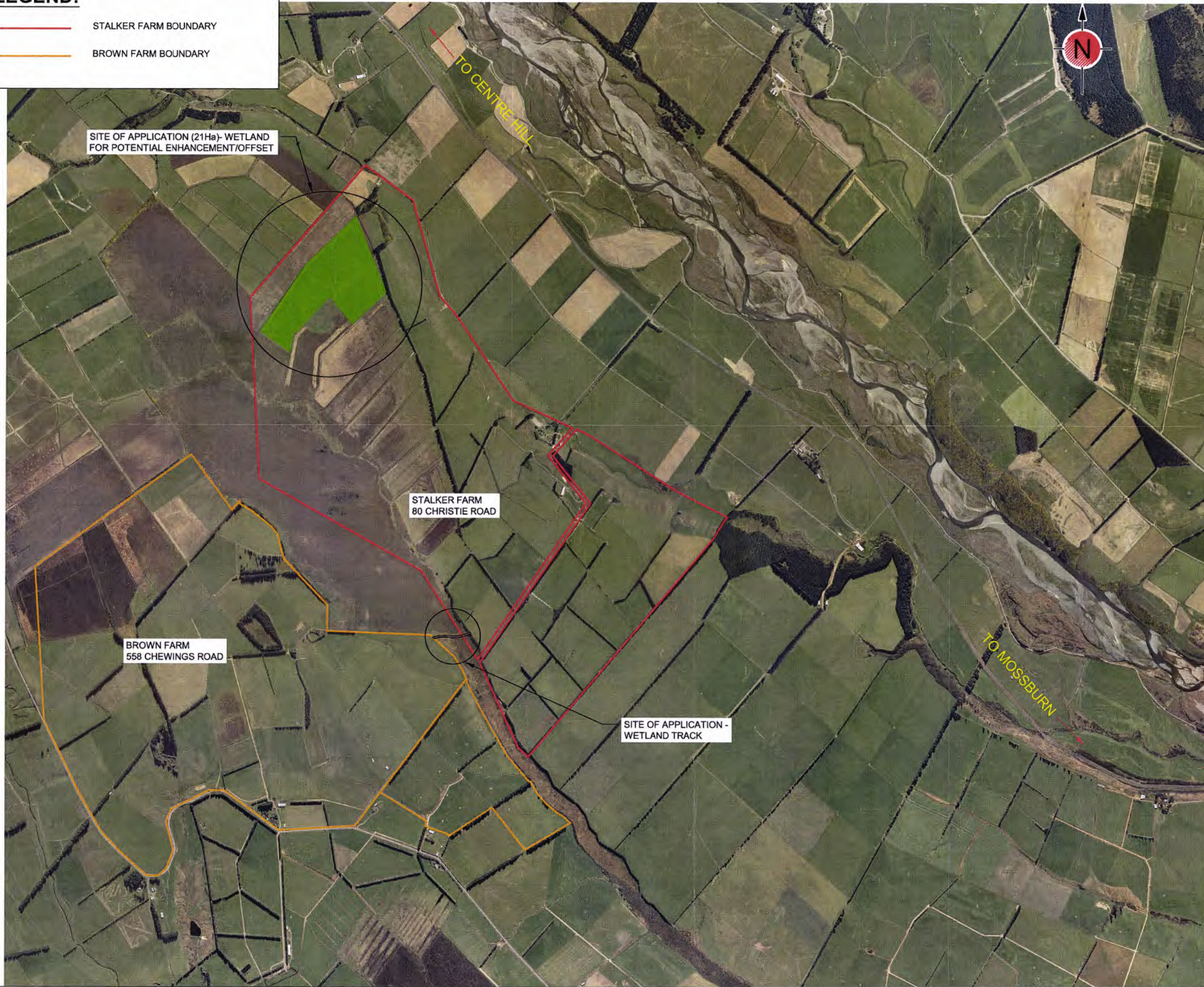
## PLANS OF PROPOSED ACCESS CONSTRUCTION WORKS

**LEGEND:**

- STALKER FARM BOUNDARY
- BROWN FARM BOUNDARY

**NOTES:**

300 mm  
200  
100  
50  
0 10 mm



| REVISION | AMENDMENT   | APP  | DATE       |
|----------|-------------|------|------------|
| 1        | FOR CONSENT | A. B | 2021-04-09 |
|          |             |      |            |
|          |             |      |            |
|          |             |      |            |

**CONSENT**



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| SCALES        | ORIGINAL SIZE |
|---------------|---------------|
| 1:20 000 @ A3 | A3            |

| DRAWN     | DESIGNED | APPROVED |
|-----------|----------|----------|
| O. JAFFER |          | A. BRUCE |

| DRAWING VERIFIED | DESIGN VERIFIED | APPROVED DATE |
|------------------|-----------------|---------------|
| L. MCSORILEY     |                 | 2021-04-09    |

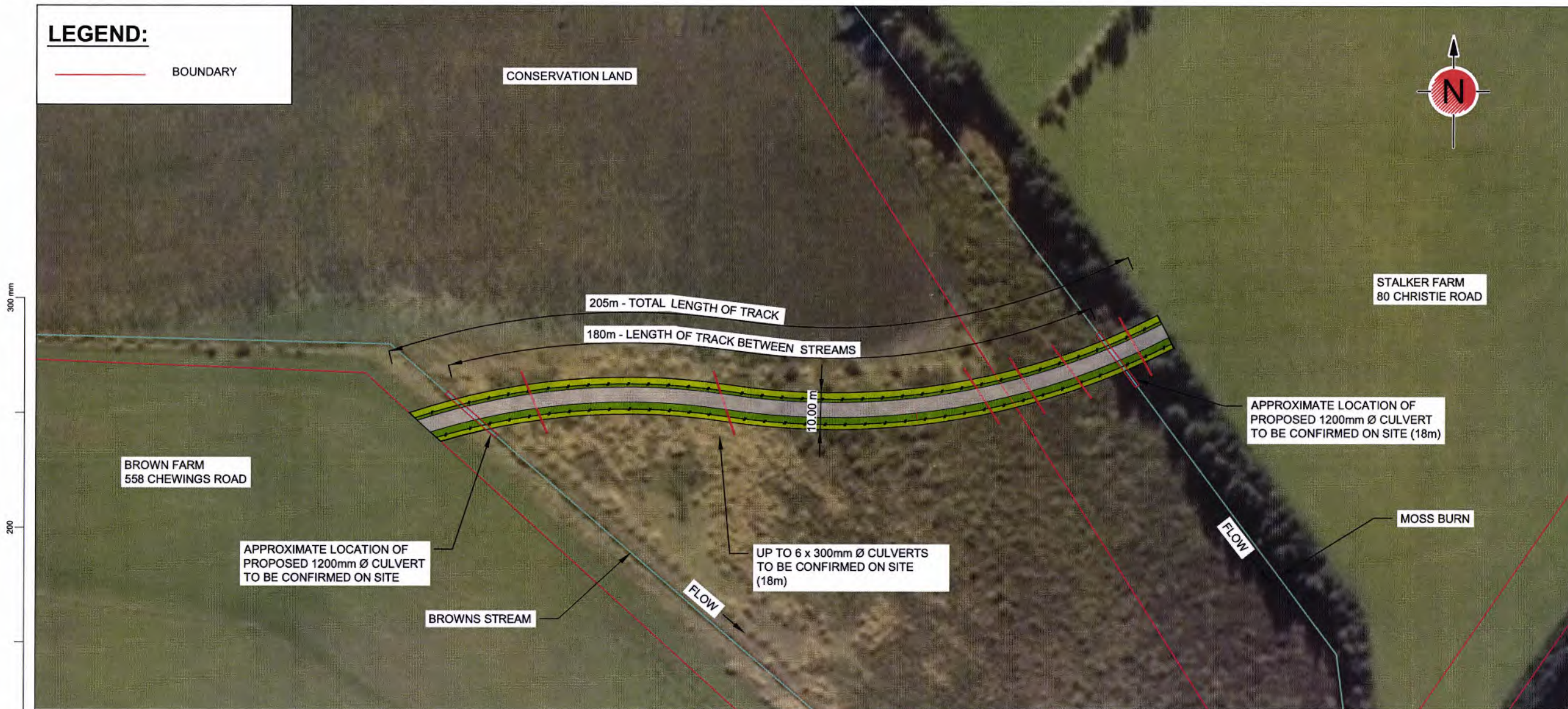
PROJECT  
**STALKER WETLAND MODIFICATION  
 RESOURCE CONSENT  
 80 CHRISTIE ROAD, MOSSBURN  
 PROPOSED FARM ACCESS**

TITLE  
**LOCALITY PLAN**

| PROJECT DRAWING NO. (SUB-PROJECT) | SHEET NO. | REVISION |
|-----------------------------------|-----------|----------|
| 6-VQ423.80                        | P00       | 1        |

**CONSENT**

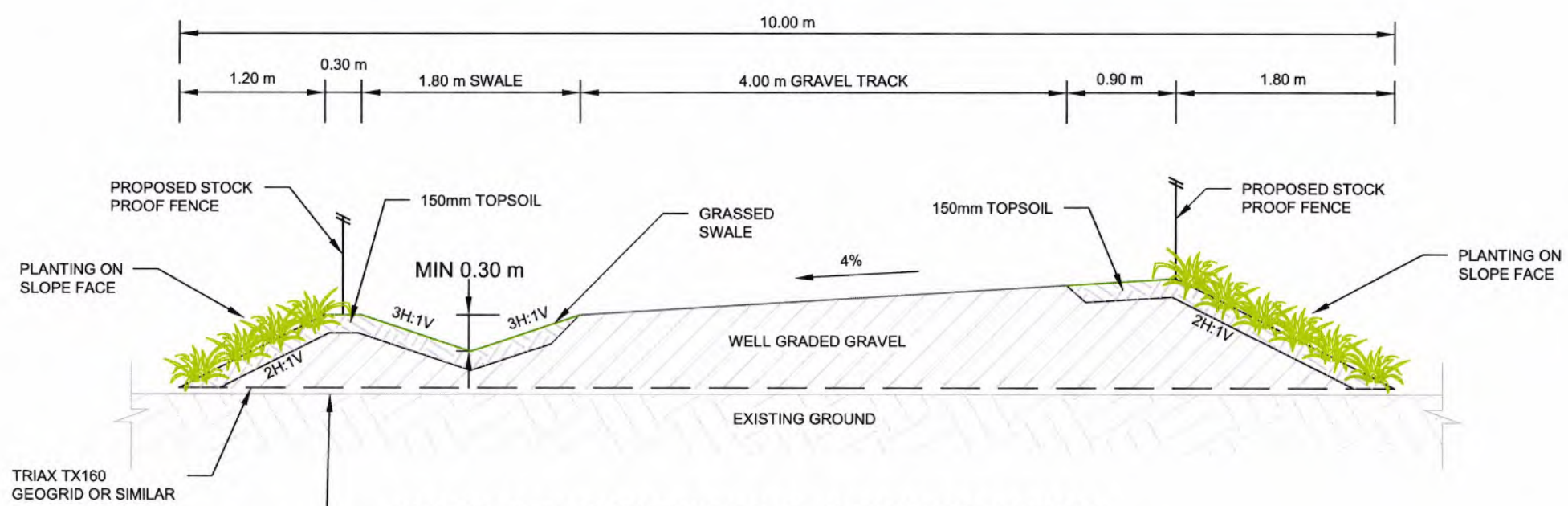
**LEGEND:**  
 — BOUNDARY



- NOTES:**
1. GEOTEXTILE IS TO BE PLACED ON THE EXISTING GROUND AND OVERLAIN WITH THE GEOGRID.
  2. THE GEOGRID IS NOT TO BE TRAFFICKED. GRAVEL IS TO BE CASCADED FROM THE BUCKET OF AN EXCAVATOR OR PUSHED OUT WITH A DOZER.
  3. GRASS COVER IS TO BE ESTABLISHED WITHIN 30 DAYS OF SPREADING TOPSOIL.
  4. TEMPORARY SEDIMENT CONTROL IS REQUIRED UNTIL GRASS AND PLANT COVER HAS ESTABLISHED.
  5. THE PLANTED BATTER SLOPES ARE TO BE WEEDED REGULARLY UNTIL ESTABLISHED.
  6. SWALE HIGH POINT AT MOSS BURN CULVERT.
  7. WETLAND LOCATION IS DEFINED AS BETWEEN THE TWO WATERWAYS.

| REVISION | AMENDMENT   | APP  | DATE       |
|----------|-------------|------|------------|
| 1        | FOR CONSENT | A. B | 2021-04-09 |
|          |             |      |            |
|          |             |      |            |
|          |             |      |            |
|          |             |      |            |

**GRAVEL TRACK LAYOUT PLAN**  
 SCALE 1:1250



**GRAVEL TRACK TYPICAL CROSS SECTION**  
 SCALE 1:50

CONSENT



Invercargill Office  
+64 3 211 3580

PO Box 647  
Invercargill 9840  
New Zealand

| SCALES           | AS SHOWN        | ORIGINAL SIZE |
|------------------|-----------------|---------------|
|                  |                 | A3            |
| DRAWN            | DESIGNED        | APPROVED      |
| O. JAFFER        |                 | A. BRUCE      |
| DRAWING VERIFIED | DESIGN VERIFIED | APPROVED DATE |
| L. McSORILEY     |                 | 2021-04-09    |

PROJECT  
 STALKER WETLAND MODIFICATION  
 RESOURCE CONSENT  
 80 CHRISTIE ROAD, MOSSBURN  
 PROPOSED FARM ACCESS

TITLE  
 PROPOSED LOCATION OF TRACK  
 THROUGH WETLAND

| PROJECT DRAWING NO. (SUB-PROJECT) | SHEET NO. | REVISION |
|-----------------------------------|-----------|----------|
| 6-VQ423.80                        | P01       | 1        |

CONSENT



**NOTES:**

| REVISION | AMENDMENT   | APP  | DATE       |
|----------|-------------|------|------------|
| 1        | FOR CONSENT | A. B | 2021-04-09 |
|          |             |      |            |
|          |             |      |            |
|          |             |      |            |
|          |             |      |            |

**CONSENT**



Invercargill Office  
+64 3 211 3580

PO Box 647  
Invercargill 9840  
New Zealand

| SCALES      | ORIGINAL SIZE |
|-------------|---------------|
| 1:5000 @ A3 | A3            |

| DRAWN     | DESIGNED | APPROVED |
|-----------|----------|----------|
| O. JAFFER |          | A. BRUCE |

| DRAWING VERIFIED | DESIGN VERIFIED | APPROVED DATE |
|------------------|-----------------|---------------|
| L. McSORILEY     |                 | 2021-04-09    |

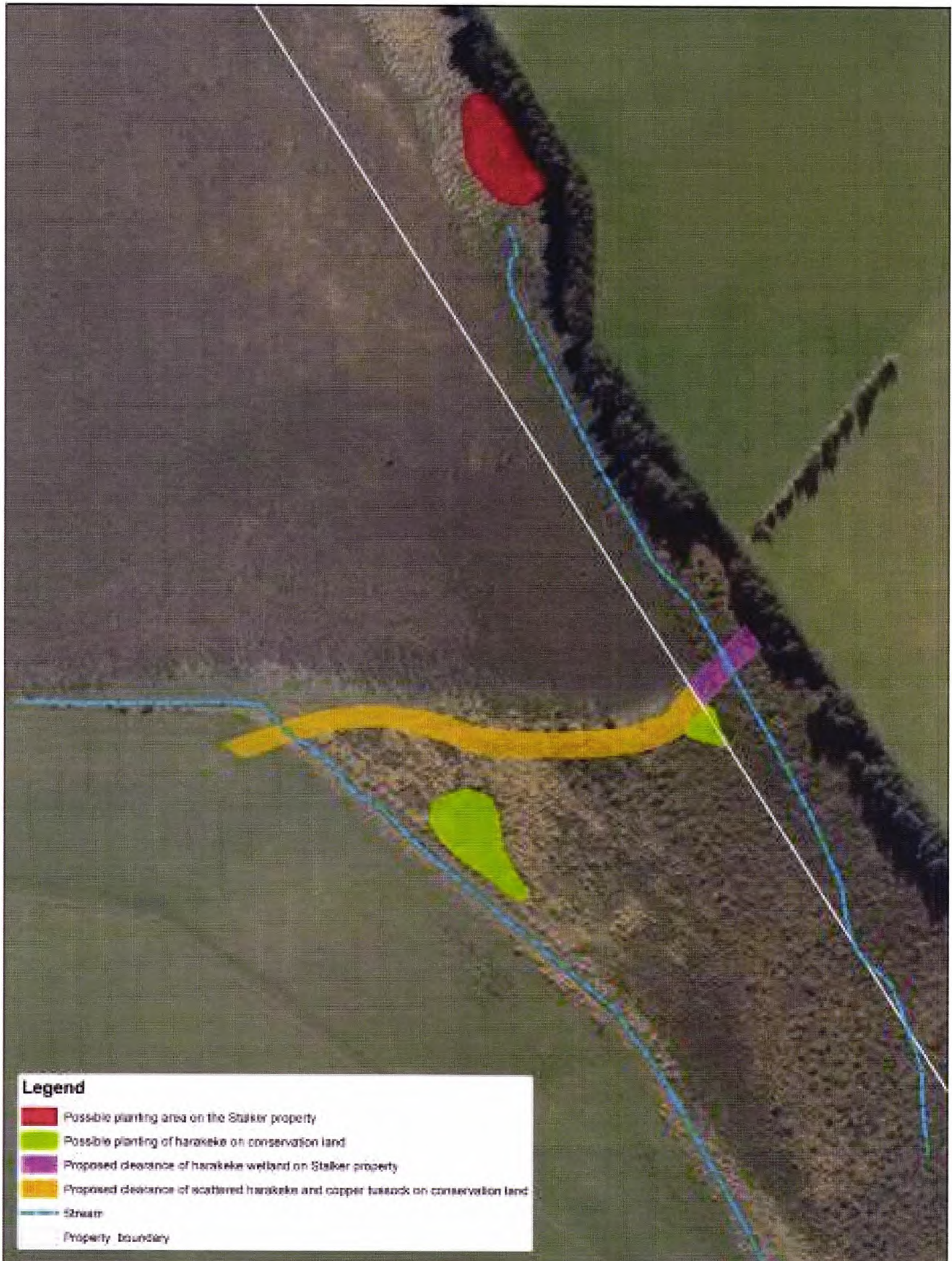
**PROJECT**  
**STALKER WETLAND MODIFICATION**  
**RESOURCE CONSENT**  
**80 CHRISTIE ROAD, MOSSBURN**  
**PROPOSED FARM ACCESS**

**TITLE**  
**LAYOUT PLAN - UNDEVELOPED WETLAND**  
**FOR POTENTIAL ENHANCEMENT / OFFSET**

| PROJECT DRAWING NO. (SUB-PROJECT) | SHEET NO. | REVISION |
|-----------------------------------|-----------|----------|
| 6-VQ423.80                        | P02       | 1        |

**CONSENT**





**Legend**

- Possible planting area on the Staker property
- Possible planting of harakeke on conservation land
- Proposed clearance of harakeke wetland on Staker property
- Proposed clearance of scattered harakeke and copper tussock on conservation land
- Stream
- Property boundary

|   |            |
|---|------------|
| <b>Data Acknowledgment</b>  |            |
| Map data and aerial imagery from a NZLDS Crown Copyright Resource |            |
| Scale:  | 1:1,250    |
| Date:   | 25/08/2020 |
| Cartographer:   | DBB        |
| Format:   | A1         |

**Figure 4. An option for potential access across the area of Stewardship Land**



**Wildlands**  
 CONSULTANTS

Scale: 1:1,250  
 Date: 25/08/2020  
 Cartographer: DBB  
 Format: A1

# APPENDIX D

---

## CERTIFICATES OF TITLE



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



R. W. Muir  
Registrar-General  
of Land

**Identifier** SL11B/229  
**Land Registration District** Southland  
**Date Issued** 03 July 1996

**Prior References**

SL10A/647 SL6B/927

---

|                          |   |
|--------------------------|---|
| <b>Estate</b>            | Fee Simple  |
| <b>Area</b>              | 368.4135 hectares more or less  |
| <b>Legal Description</b> | Section 22 and Section 24 Block IV Centre<br>Hill Survey District and Lot 1-2 Deposited<br>Plan 13963 |

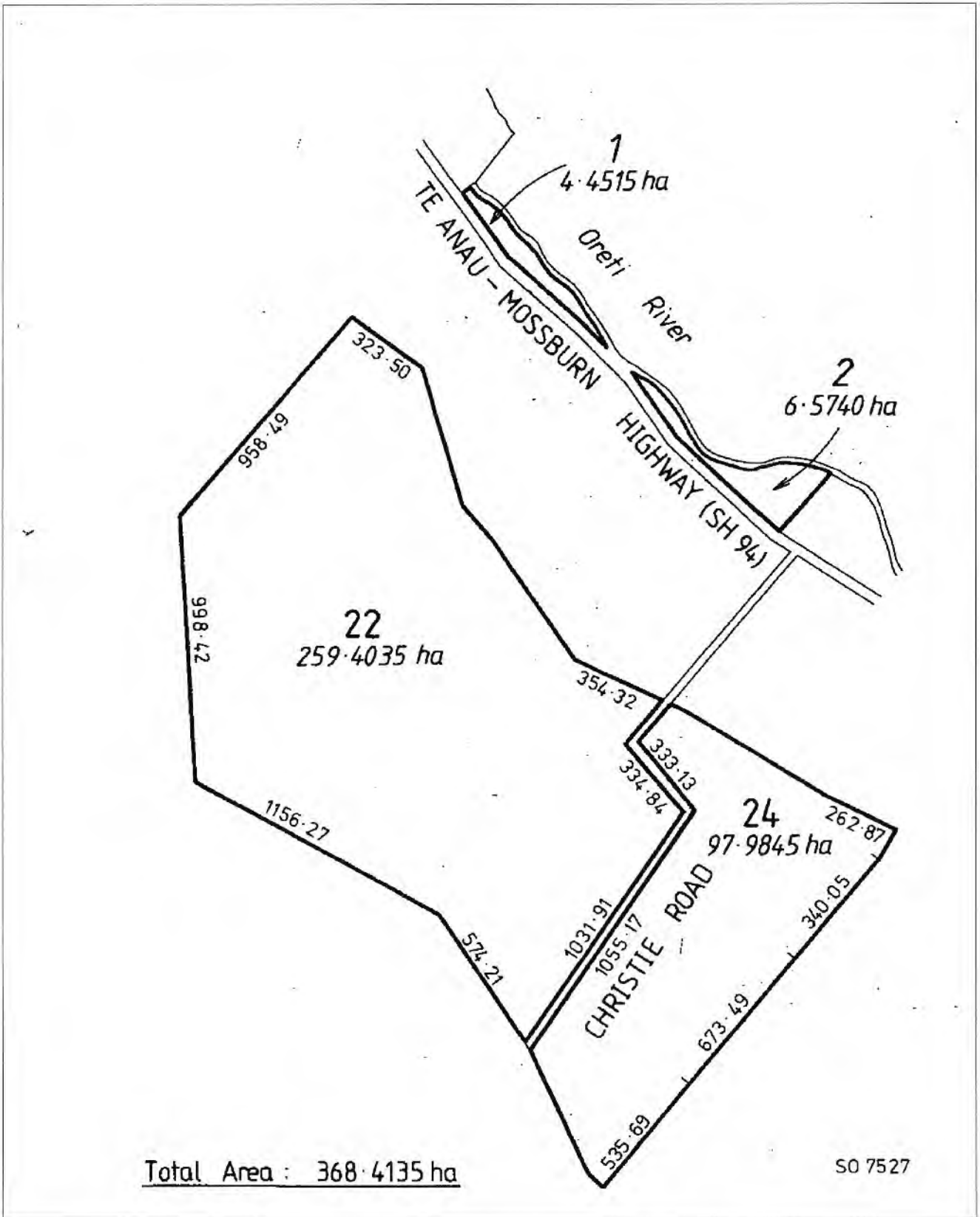
**Registered Owners**

Allan Neil Stalker, Judith Ann Stalker and Athol Trustees Limited

---

**Interests**

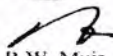
Subject to Sections 241(2) & 242 Resource Management Act 1991  
Subject as to Sections 22 and 24 Block IV Centre Hill Survey District to Section 8 Mining Act 1971  
Subject as to Sections 22 and 24 Block IV Centre Hill Survey District to Section 168A Coal Mines Act 1925  
Subject as to Lots 1 and 2 DP 13963 to Part IV A Conservation Act 1987  
Every mineral existing in its natural condition in Lots 1 and 2 DP 13963 are owned by the Crown  
096724.1 Land Improvement Agreement as to Sections 22 and 24 Block IV Centre Hill Survey District under the Soil Conservation and Rivers Control Amendment Act 1959 - 20.7.1983 at 1.32 pm  
104525.1 Land Improvement Agreement as to Sections 22 and 24 Block IV Centre Hill Survey District under the Soil Conservation and Rivers Control Amendment Act 1959 - 19.3.1984 at 1.38 pm  
143895.1 Land Improvement Agreement as to Lots 1 and 2 DP 13963 under the Soil Conservation and Rivers Control Amendment Act 1959 - 26.8.1987 at 11.06 am  
7563516.3 Mortgage to ANZ National Bank Limited - 4.10.2007 at 1:14 pm  
9799727.1 Compensation Certificate pursuant to Section 19 Public Works Act 1981 by Southland District Council - 31.7.2014 at 7:00 am





**RECORD OF TITLE  
UNDER LAND TRANSFER ACT 2017  
FREEHOLD  
Historical Search Copy**



  
R.W. Muir  
Registrar-General  
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

**Identifier** SL11B/229  
**Land Registration District** Southland  
**Date Issued** 03 July 1996

**Prior References**

SL10A/647 SL6B/927

---

**Estate** Fee Simple  
**Area** 368.4135 hectares more or less  
**Legal Description** Section 22 and Section 24 Block IV Centre  
Hill Survey District and Lot 1-2 Deposited  
Plan 13963

**Original Registered Owners**

Allan Neil Stalker as to a 1/2 share  
Judith Ann Stalker as to a 1/2 share

---

**Interests**

Subject to Sections 241(2) & 242 Resource Management Act 1991  
Subject as to Sections 22 and 24 Block IV Centre Hill Survey District to Section 8 Mining Act 1971  
Subject as to Sections 22 and 24 Block IV Centre Hill Survey District to Section 168A Coal Mines Act 1925  
Subject as to Lots 1 and 2 DP 13963 to Part IV A Conservation Act 1987  
Every mineral existing in its natural condition in Lots 1 and 2 DP 13963 are owned by the Crown  
096724.1 Land Improvement Agreement as to Sections 22 and 24 Block IV Centre Hill Survey District under the  
Soil Conservation and Rivers Control Amendment Act 1959 - 20.7.1983 at 1.32 pm  
104525.1 Land Improvement Agreement as to Sections 22 and 24 Block IV Centre Hill Survey District under the  
Soil Conservation and Rivers Control Amendment Act 1959 - 19.3.1984 at 1.38 pm  
143895.1 Land Improvement Agreement as to Lots 1 and 2 DP 13963 under the Soil Conservation and Rivers  
Control Amendment Act 1959 - 26.8.1987 at 11.06 am  
182484.7 Mortgage of Sections 22 and 24 Block IV Centre Hill Survey District to The Rural Bank Limited -  
17.12.1990 at 9.16 am  
7563516.1 Discharge of Mortgage 182484.7 - 4.10.2007 at 1:14 pm  
7563516.2 Transfer to Allan Neil Stalker, Judith Ann Stalker and Athol Trustees Limited - 4.10.2007 at 1:14 pm  
7563516.3 Mortgage to ANZ National Bank Limited - 4.10.2007 at 1:14 pm  
9799727.1 Compensation Certificate pursuant to Section 19 Public Works Act 1981 by Southland District Council  
- 31.7.2014 at 7:00 am

References

Prior C/T 6B/927. 10A/647

Transfer No.

N/C. Order No. 242463.4

Land and Deeds 69



REGISTER

No. 11B/229

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 3rd day of July one thousand nine hundred and ninety-six under the seal of the District Land Registrar of the Land Registration District of SOUTHLAND

WITNESSETH that ALLAN NEIL STALKER of Lumsden stock agent and JUDITH ANN STALKER his wife as tenants in common in equal shares

BW

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 368.4135 hectares more or less being Sections 22 and 24 Block IV CENTRE HILL SURVEY DISTRICT and Lots 1 and 2 Deposited Plan 13963 and being part Section 14 and Section 15 Block IV CENTRE HILL SURVEY DISTRICT

Interests as at Date of Issue:

Subject to Sections 241(2) and 242 Resource Management Act 1991

Subject as to Sections 22 and 24 to Section 8 Mining Act 1971 and Section 168A Coal Mines Act 1925

Subject as to Lots 1 and 2 to Part IVA Conservation Act 1987

Every mineral existing in its natural condition in Lots 1 and 2 are owned by the Crown. Entered pursuant to Section 86 of the Crown Minerals Act 1991.

096724.1 Land Improvement Agreement as to Sections 22 and 24 under the Soil Conservation and Rivers Control Amendment Act 1959 - 20.7.1983 at 1.32 p.m.

104525.1 Land Improvement Agreement as to Sections 22 and 24 under the Soil Conservation and Rivers Control Amendment Act 1959 - 19.3.1984 at 1.38 p.m.

143895.1 Land Improvement Agreement as to Lots 1 and 2 under the Soil Conservation and Rivers Control Amendment Act 1959 - 26.8.1987 at 11.06 a.m.



ASSISTANT LAND REGISTRAR

182484.7 Mortgage of Sections 22 and 24 to (now) The Rural Bank Limited - 17.12.1990 at 9.16 a.m.

Handwritten signature and initials

A.L.R.

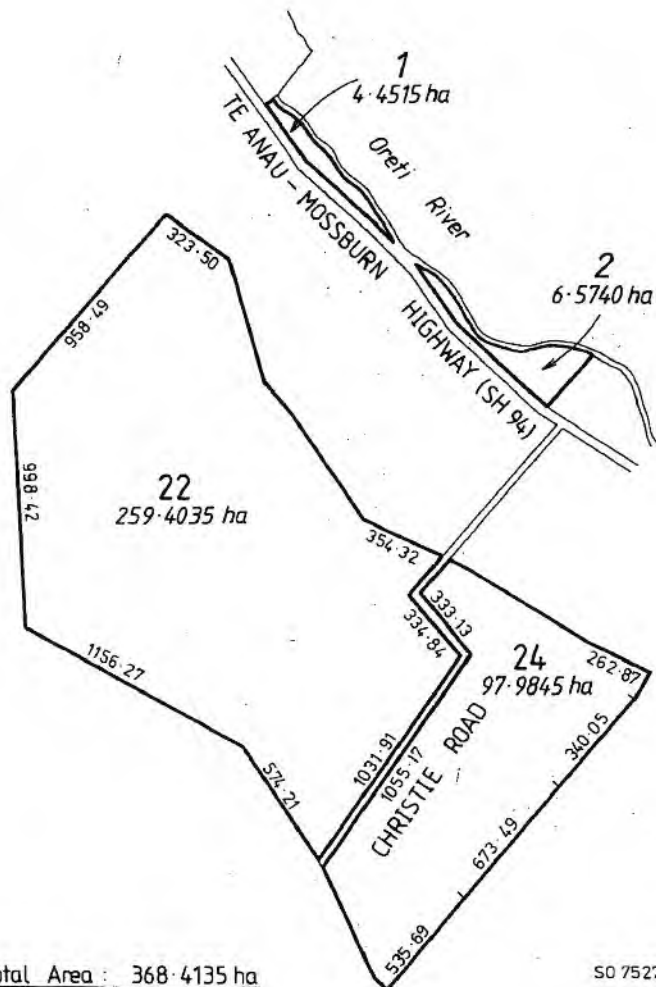
J

No. 11B/229

For Diagram see over

Measurements are Metric

CERTIFICATE OF TITLE No. 11B/229



Total Area : 368 4135 ha

SO 7527

*Handwritten signature*



- REFERENCE**
- Level District Boundary
  - Survey District Block Boundary
  - Medicinal Control Boundary
  - Road
  - Railway
  - Transmission Line
  - Suburban Boundary
  - Open Suburban Boundary
  - Suburban Section Number
  - Suburban Lot Number
  - Suburban Area or Section
  - Designated District or Main Block Name
  - Control Area
  - National Park, Forest Park, Reserve, State Forest, Special Area, etc.
  - County, City or Borough Boundary
  - Neighbourhood District Boundary
- DESCRIPTIVE NOTES**
- DP Deposited Plan
  - LT Land Transfer Plan
  - CL Closed Road
  - CR Closed Railway
  - CS Crown Reserve
  - SL State Forest
  - DL Down Land

**GRID INFORMATION**

**NEW ZEALAND MAP GRID**

This map is drawn on the New Zealand Map Grid. The map shows the grid lines and the coordinates of the map. The grid lines are spaced at 1000 metres north and 1000 metres east.

**MERCATOR CONIC GRID**

The meridional and grid lines shown at the top of this map are in metres.

The true north is the initial station of the meridional control line and the coordinates of this point are 700 000 metres north and 200 000 metres east.

Meridional Control on this map are:

- Initial Station
- Scale
- North True

**INDEX TO SURVEY DISTRICTS AND ADJOINING SHEETS**

|     |     |     |
|-----|-----|-----|
| D43 | E43 | F43 |
| D44 | E44 | F44 |
| D45 | E45 | F45 |

50 23 Eye S.D.  
 50 22 Motu S.D.  
 50 21 Cassin S.D.  
 50 20 Seme S.D.  
 50 19 Waiwaka S.D.  
 50 18 Takapuna S.D.  
 50 17 Hatake S.D.  
 50 16 Waiwaka S.D.

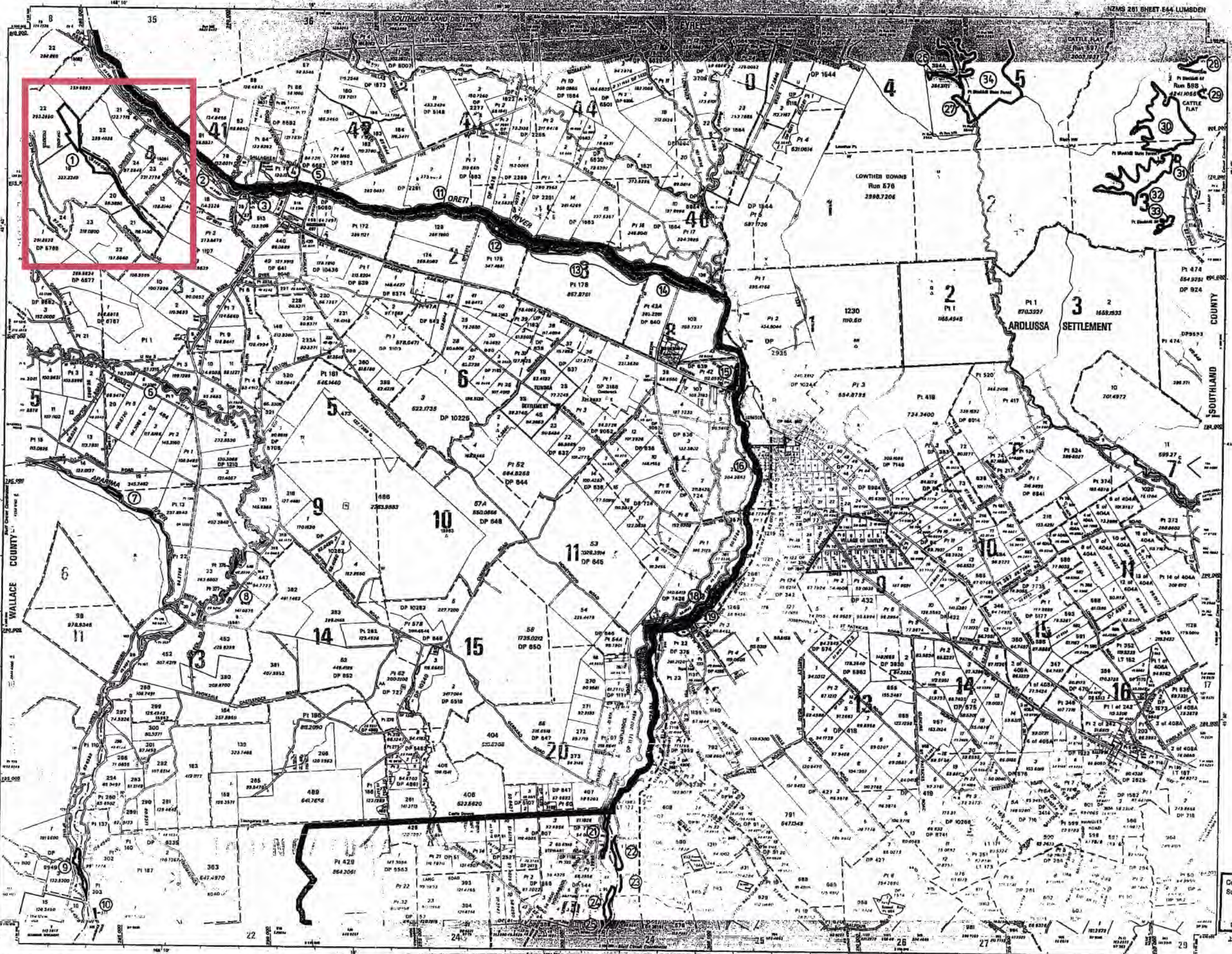
Copyright from Survey Office Plans as at 11.82

Level Authority boundaries as at 11.82

**NEW ZEALAND CADASTRAL MAP 1:50 000**

Published by the Department of Lands & Survey, New Zealand, under the authority of W.H. Healey, Survey General.

P. Hensberg Government Printer, Wellington, New Zealand.



Certified as correct for the purpose of Section 62 Conservation Act 1987

*[Signature]*  
 Chief Surveyor 21.1.87



# APPENDIX E

---

## DRAFT CONDITIONS OF RESOURCE CONSENT

## Land Use Consent for Wetland Modification

### Draft Conditions of Consent

1. This consent authorises wetland modification and the use of land within the wetland to enable the construction a farm access and the placement and use of 6 culverts at the location specified above, as described in the application for resource consent dated .....AUTH-2021.....
2. The culverts shall be sized and constructed as detailed in the application and located within the areas as identified and described in the application.
3. The Consent Holder shall notify the Consent Authority in writing (escompliance@es.govt.nz) on commencement and upon completion of works.
4. The Consent Holder shall ensure that:
  - a) contaminants, other than sediment, but including cement and oil are prevented from entering the wetland during the construction works;
  - b) all reasonable steps shall be taken to minimise the release of sediment to water;
  - c) the structure and approaches are constructed so that run-off from the structure is discharged to land rather than directly to water;
  - d) fish passage is not impeded as a result of the works;
  - e) all construction equipment, machinery, plant, and debris are removed from the site on completion of the works;
  - f) silt disturbance and works in the wetland are kept to a minimum;
  - g) no washing of equipment occurs in the wetland; and
  - h) works shall, as far as practicable, be undertaken when flows in the wetland are low.
5. Culverts shall be embedded in the substrate so as to avoid any overhang and retain gravel cover across the floor of the culvert.
6. The Consent Holder shall ensure that the culverts authorised by this consent do not cause any flooding, erosion, scouring, land instability or property damage.
7. In the event of any contamination of the wetland the Consent Holder shall remove the contaminants immediately from the site and notify, without undue delay, the Consent Authority.
8. The consent holder shall eradicate silver birch, grey willow, contorta pine, and isolated gorse and/or Scotch broom identified in Figure 2 of the Ecological Assessment to improve the quality of the overall wetland complex and to help maintain current wetland functions.
9. The Consent Holder shall take all reasonable precautions to minimise the spread of pest plants and aquatic weeds. In particular, the Consent Holder shall:

- a) remove any vegetation caught on the machinery;
  - b) where necessary, clear vegetation from the site;
  - c) avoid working in areas where aquatic weeds such as *Lagarosiphon major* are known to be present (for information, contact Environment Southland); and
  - d) to avoid the spread of the *didymosphenia geminata* or any other pest plant, do not use machinery that has been used in any area where the pest plant(s) are known to be present in the previous 20 working days, unless it has been thoroughly cleansed.
10. All harakeke and copper tussock that will be removed to enable construction of the farm access shall be replanted in adjacent low value wetland sites as identified in Figure 4 of the Ecological Assessment.
11. Transplanting of harakeke and copper tussock removed to enable construction of the farm access shall be undertaken within the areas identified in Figure 4 of the Wildlands Consultants Ecological Assessment prior to the farm access construction works commencing.
12. An Ecological Management Plan shall be prepared by a suitably qualified ecologist and must be submitted to the Consent Authority for certification within three months of resource consent being issued. The Plan, shall address:
- Monitoring of the transplanted harakeke and copper tussock described in Condition 8;
  - The maintenance of the transplanted harakeke and copper tussock,
  - Weed species to be monitored and controlled;
  - Methodologies and timing for reviewing the frequency of weed monitoring and control activities; and
  - Timeframes for transplanting of harakeke and copper tussock and weed control.
13. The Consent Holder must undertake all weed management and other work specified in the certified Ecological Management Plan in accordance with the timeframes specified in the Plan.
14. The farm access is to be fenced so that stock cannot access the adjacent wetland.
15. In the event of a discovery, or suspected discovery, of a site of cultural importance (Wahi Taonga/Tapu) during the construction, the consent holder shall immediately cease operations in that location and inform the local iwi authority (Te Ao Marama Inc, phone 03 931 1242). Operations may recommence at a time as agreed upon in writing with the Consent Authority. The discovery of Koiwi (human skeletal remains) or Taonga or artefact material (e.g. pounamu/greenstone) would indicate a site of cultural importance. Appendix A to this consent outlines the process that is to be followed in the event of such a discovery.
16. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the

conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, or on receiving monitoring results, for the purposes of:

- a) determining whether the conditions of this permit are adequate to deal with any adverse effect on the environment, including cumulative effects, which may arise from the exercise of the permit, and which it is appropriate to deal with at a later stage, or which become evident after the date of commencement of the permit;
- b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or Policy Statement;
- c) amending the monitoring programme to be undertaken; or
- d) adding or adjusting compliance limits.

### **Water Permit for Diversion of Ground and Surface Water**

#### **Draft Conditions of Consent**

1. This consent authorises the diversion of ground and surface water within a wetland to allow for the construction of a farm access, as described in the application dated ..... 2021.
2. The consent holder shall take all reasonable precautions to minimise the spread of pest plants and aquatic weeds. In particular, the consent holder shall:
  - remove any vegetation caught on the machinery;
  - where necessary, clear vegetation from the site before gravel is extracted;
  - to avoid the spread of the *didymosphenia geminata* or any other pest plant, do not use machinery that has been used in any area where the pest plant(s) are known to be present in the previous 20 working days, unless it has been thoroughly cleansed.
3. The Consent Authority may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this consent during the period 1 February to 30 September each year, or within two months of any enforcement action being taken by the Consent Authority in relation to the exercise of this consent, or on receiving monitoring results, for the purposes of: (a) determining whether the conditions of this consent are adequate to deal with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or (b) ensuring the conditions of this consent are consistent with any National Environmental Standards Regulations, relevant plans and/or the Environment Southland Regional Policy Statement.

# APPENDIX F

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## FORM A AND B

# PART A

## Application for Resource Consent



This application is made under Section 88 of the Resource Management Act 1991 (Form 9)

The purpose of this Part A form and the relevant Part B form(s) is to provide applications with guidance on information that is required under the Resource Management Act 1991. Please note that these forms are to act as a guide only, and Environment Southland reserves the right to request additional information.

To: Environment Southland  
Private Bag 90116  
Invercargill 9840

*Refer to attached resource consent application (RCA)*

### 1. Applicant(s) Details

A resource consent can only be held by a legal organisation or fully named individual(s).

1.1. Applicant's name (full name of proposed consent holder). Please complete either (a) OR (b) to whom consent is to be issued

|  | First Name | Middle Name | Surname |
|--|------------|-------------|---------|
|--|------------|-------------|---------|

(a) Individual(s)

\_\_\_\_\_

\_\_\_\_\_

OR

(b) Registered company name

\_\_\_\_\_

Company number

\_\_\_\_\_

1.2. Applicant's address [not consultant's address]

(a) Individual(s)

*Refer to attached RCA.*

Postal Address

\_\_\_\_\_

Email

\_\_\_\_\_

Phone

Mobile

Fax

\_\_\_\_\_

(b) Company

Contact Person

\_\_\_\_\_

Postal Address

\_\_\_\_\_

Email

\_\_\_\_\_

Phone

Mobile

Fax

\_\_\_\_\_

**2. Consultant/ Agent details (if applicable)**

Contact person

*Refer to attached RCA,*

Company

Postal Address

Email

Phone

Mobile

Fax

*During the processing of your application who will be the contact person for making decisions?*

Applicant

Consultant/ Agent

**Note:** All correspondence during the consent process will be directed to this contact person, unless instructed otherwise. Final decision documents will be sent to the applicant.

Are you the owner or occupier at the site?

Yes

No

*If not, please complete the following information*

Name of owner or occupier at the site  
(if different from 1.1.)

Address of the owner or occupier at the site  
(if different from 1.2.)

**2 Site Details**

Location of activity (including street/road name, number, and locality)

*Refer attached RCA,*

Map Co-ordinates (NZTM 2000)

E

N(NZTM 2000)

Legal description of property at site of activity (refer to land title or rates notice)

**Please attach a map or a coloured aerial photograph, showing at a minimum, the location of the proposed activities.**

**3. Consents required in relation to this proposal:**

Please tick the box for the consent(s) you are applying for and complete the relevant Part B form(s) where available

**Water**

- Take and use surface water
- Take and use groundwater

- Divert water
- Dam water

**Land Use**

- Bore/ Well
- New or expanded dairy farming
- Intensive winter grazing
- Feed-pad, wintering pad, calving pad or silage pad
- Bridges and culverts

- Effluent storage
- Cultivation
- Gravel extraction
- Riverbed activity
- Tree planting

wetland modification

**Discharge**

- To air
- To Land

- To water

**Coastal**

- Whitebait stand
- Removal of natural materials
- Discharge/deposit substances
- Reclaim/drain foreshore/seabed
- Other coastal activities

- Structures/occupation of space
- Disturb foreshore/seabed
- Commercial surface water activity
- Marine farming

Refer attached RCA.



**What is the purpose of this application?**

New resource consent

Renew resource consent

Variation of conditions according to S 127 RMA

Certificate of compliance

Are there any **current** or **expired** consents relating to this proposal?

Yes

No

If yes, please provide consent number(s) and description:

Are any other consents required from Environment Southland or **other authorities**?

Yes

No

If yes, please state the relevant authority and the type of consent(s) required:

For what **purpose** is this consent(s) required: (e.g. discharge of effluent, gravel extraction etc.)

*Refer attached RCA.*

Pre application advise- Have you discussed this proposal with a council staff member?

Yes

No

If yes, please provide name of staff member if known

Any further comments you would like to advise us about this application?

*Refer attached RCA.*

## 5 Assessment of effects on the environment (AEE)

Please complete the applicable Part B form(s) for the proposed activities. For those activities where no Part B form is available, please attach a written statement that assesses the effects that your activities may have on the environment. An assessment of effects **must** include the following information:

- (a) *if it likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity;*
- (b) *an assessment of the actual or potential effect on the environment of the activity;*
- (c) *if the activity includes the use of hazardous substances and installations, an assessment of any risks to the environment that are likely to arise from such use;*
- (d) *if the activity includes the discharge of any contaminant, a description of—*
  - (i) *the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
  - (ii) *any possible alternative methods of discharge, including discharge into any other receiving environment;*
- (e) *a description of the mitigation measures (safeguards and contingency plans where relevant) to be undertaken to help or prevent or reduce the actual or potential effect;*
- (f) *identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any persons consulted;*
- (g) *if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved;*
- (h) *if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).*

You should also include:

- (a) *an assessment of the activity against any relevant provisions of any relevant objectives, policies, or rules;*
- (b) *any information specified to be included in the application in accordance with the relevant regional plan;*
- (c) *for an application to replace an existing consent, an assessment of the value of the investment of the existing consent holder;*

An assessment of effects **must** address the following matters:

- (a) *any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects;*
- (b) *any physical effect on the locality, including any landscape and visual effects;*
- (c) *any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity;*
- (d) *any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations;*
- (e) *any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants;*
- (f) *any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.*

**6 Affected Parties**

Please attach written approval from parties who may be affected by your activity. *Written Approval of an Affected Party* forms are available on the Environment Southland website. During the processing of your application, Council may determine that additional approvals are required.

**7 Site visit from the Consents Team**

Consents staff are able to meet with you, visit your site and see what you are proposing to do. We find that this is beneficial to everyone involved. The cost of the visit will be included in the total cost of processing your consent. We find that applications that have an on-site visit are processed with less congestion and at a similar or lesser overall cost. We will contact you if we consider a site visit to be advantageous in processing your application.

**8 How much will it cost to process my application?**


The cost of a consent depends on the complexity of the activities. Staff time is charged out at a rate of \$145/hr and vehicle use for site visits is charged at \$0.73/km (inclusive of GST).

The fees shown below under section two are **deposits to be paid at the time of application**. Due to the complexity of these activities, this deposit will not usually cover the full cost of processing the application. **Further costs may be incurred** relating to staff time, disbursements, legal charges, consultation fees, and hearing commissioner fees. Environment Southland’s User Charges and Fees document is available at:

[www.es.govt.nz/fees-and-charges](http://www.es.govt.nz/fees-and-charges)

When the consent has been processed you will receive an invoice for an additional fee, or for a refund.

The Council’s user charges are fixed under Section 36 of the Resource Management Act 1991. Our fee schedule is:

|   |   |
|---|---|
| <b>1. Fixed fee:</b>  |   |
| Bores and wells   | <b>\$303</b>  |
| Whitebait stand   | <b>\$230</b>  |
| <b>2. Deposit:</b>  |   |
| All other non-notified applications including: <ul style="list-style-type: none"> <li>• Certificates of compliance</li> <li>• Changes to consent conditions (variations)</li> <li>• Change of lapse date</li> </ul> |  <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <span style="font-size: 1.2em; font-weight: bold;">\$1,500</span> </div> |
| Applications that require notification or limited notification  | <b>\$2,000</b>  |

**How to pay**

Environment Southland accepts payment in the forms of cash, Eftpos, cheque, or electronic transfer. All electronic transfers must include the applicant’s name and “consent application” as a reference. Please make electronic payments to: Environment Southland, 01-0961-0018998-00.

**User Charges**

Please note that additional Annual User Charges will apply to all consents. These are payable in advance on the first day of July each year. Tables 4, 5 and 6 of the Environment Southland User Charges and Fees Schedule outlines the fees associated with Annual Administration Charges and Annual Consent Monitoring and Inspection Charges. Table 7: Annual Research and Monitoring Charges applies only to surface and groundwater takes and comprises the following:

- **Surface water takes (per consent, for volumes up to 50,000 m<sup>3</sup>/day):**
  - A charge of \$2.08 per year per cubic metre authorised as a maximum daily take.
  - Minimum of \$138, maximum of \$8,363.
- **Surface water takes (per consent, for volumes over 50,000 m<sup>3</sup>/day):**
  - \$0.0031 per cubic metre authorised as a maximum daily take.
- **Groundwater takes (per consent):**
  - A charge of \$0.98 per year per cubic metre.
  - Minimum of \$162, maximum of \$1,965.

Municipal and stock water discount (of 50%) no longer applies.

**9 Checklist: Have you included the following?**

- Payment of the required deposit (see fee schedule)
- Written approval from all potentially affected parties (forms available from the Environment Southland website) *Refer attached RCA.*
- Site plan/location map/sketch of the proposed activity
- A copy of the Certificate of Incorporation (where applicant is a company)
- Part B form(s) specific to your activity and/or a separate assessment of environmental effects (AEE)  
*No form B for wetland modifications.*

**Notes:**

- (a) If your application does not contain the necessary information and the appropriate fee, Environment Southland may return the application.
- (b) Under S35 of the Resource Management Act 1991 your application will be publicly available information and subject to the relevant provisions of the Local Government Official Information and Meetings Act 1987.

**Signature of applicant**

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

*I undertake to pay all actual and reasonable application processing costs incurred by Environment Southland.*

Name (block capitals) Refer to attached RCA

Signed \_\_\_\_\_ Date \_\_\_\_\_

*(Signature of applicant or person authorised to sign on behalf of applicant)*

# Application to Dam or Divert Water (PART B)

This application is made under Section 88 of the Resource Management Act 1991



A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information. Please also refer to Appendix A of the Regional Water Plan for Southland, 2010 and the proposed Southland Water and Land Plan, 2018.

### 1 What is the application for?

|                                     |                 |                          |   |
|-------------------------------------|-----------------|--------------------------|---|
| <input checked="" type="checkbox"/> | To divert water | <input type="checkbox"/> | The renewal of existing diversion consent number: _____ |
| <input type="checkbox"/>            | To dam water    | <input type="checkbox"/> | The renewal of existing dam consent number: _____       |

Please note that if the diversion or dam requires the alteration of the bed or banks of a lake or watercourse, a Land Use Consent is also likely to be required. Please refer to the relevant Part B Form.

This form is not for water takes. Please refer to the relevant Part B Form to take surface water or groundwater.

### 2 For what purpose(s) will the water be dammed or diverted?

Refer attached resource consent application.

### 3 What type of water body do you intend to dam or divert?

|                                       |   |                               |   |
|---------------------------------------|---|-------------------------------|---|
| <input type="checkbox"/> River/stream | <input type="checkbox"/> Modified watercourse | <input type="checkbox"/> Lake | <input checked="" type="checkbox"/> Natural Wetland |
|---------------------------------------|---|-------------------------------|---|

### 4 What is the name of the water body of the proposed dam or diversion? If the water body is unnamed then please note this and state which water body it flows into.

So Big Swamp

5 What are the GPS co-ordinates of the point(s) you propose to dam/divert water?

*Refer to attached resource consent application*

Point 1: NZTM 2000 \_\_\_\_\_ E \_\_\_\_\_ N

Point 2: NZTM 2000 \_\_\_\_\_ E \_\_\_\_\_ N

6 Please describe your proposed method to dam or divert water:

*Refer to attached resource consent application*

7 If you answered river, stream, or modified watercourse above, please answer the following:

(a) What is the average channel width nearest to the proposed dam/diversion? \_\_\_\_\_ metres

(b) What is the channel depth nearest to the proposed dam/diversion? \_\_\_\_\_ metres

(c) What is the minimum flow – determined as per Appendix K of the proposed Southland Water and Land Plan? \_\_\_\_\_ l/sec

*Refer to attached resource consent application*

**Existing Environment**

**10 Are any of the following features found within the existing environment of the proposed activity? Describe these features in the space below, along with details of the assessment undertaken to determine the presence of these features.**

- (a) Signs of instream life (e.g. fish, eels, bullies, crayfish, native birds, frogs)?
- (b) Areas where food is gathered from a water body (e.g. watercress, eels, wildfowl)?
- (c) Wetlands, wildlife habitats or bird nesting habitats (e.g. swamp areas)?
- (d) Other activities occurring in the area (e.g. commercial activity, fishing, swimming, boating)?
- (e) Areas of particular aesthetic, cultural, heritage or scientific value (e.g. archaeological sites)?
- (f) Waste discharges, water takes and/or monitoring sites?

| Yes | No |
|-----|----|
|     |    |
|     |    |
|     |    |
|     |    |
|     |    |
|     |    |

*Refer to attached resource consent application.*

Please also include a map or aerial photograph showing the following details:

- the location(s) of the proposed activities
- the location of any structures
- the location of any existing points of take for other water users
- the total property area boundary
- distances to any discharge activities
- other surface water bodies nearby (including wetlands) and the distance to them

8 If you answered *lake* above, please answer the following:

(a) What is the surface area of the lake?

N/A

(b) What is the average depth of the lake?

\_\_\_\_\_

(c) What is the main source of water that fills the lake?

Rainfall

Groundwater/springs

Streams/rivers

9 Does your proposed damming or diversion of water have any associated wastewater discharges? If yes, please describe below:

Yes

No

*Please note that a discharge into the environment may require a resource consent application to be made specifically for the discharge (please refer to the relevant Part B form).*



**Assessment of Effects**

*Refer to attached resource consent application*

11 Will the damming or diversion have any effects on the following:

- (a) Water quality, including temperature
- (b) Water availability and reliability to other users
- (c) River and stream flows
- (d) Water levels in any other water body (including wetlands)

| Yes | No |
|-----|----|
|     |    |
|     |    |
|     |    |
|     |    |

*For those answered **No** above, please describe why there will be no effect. For those answered **Yes**, please describe how these effects may occur.*

12 Based on the assessment of minimum flow, as per Appendix K of the proposed Southland Water and Land Plan (pSWLP), please assess the following:

- (a) In situations where the total volume of surface water allocation is between 10 and 30 percent of the Q95 at any downstream point in the catchment as determined by the Southland Regional Council, please include an assessment of effects using **Method 1 - Assessment using Generalised Habitat Models**, as per Appendix K of the pSWLP; or
- (b) In situations where the total volume of surface water allocation will breach 30 percent of the Q95 at any downstream point in the catchment as determined by the Southland Regional Council, please include an assessment of effects using **Method 2 - Assessment using Instream Habitat Flow Incremental Methodology**, as per Appendix K of the pSWLP.

Refer to attached resource  
consent application.

- 13 How will the proposed activity affect the overall environment in the short term? For example, how does the establishment of your proposed activity (including any construction and watercourse or waterbody disturbance) affect the environment, particularly in terms of land disturbance and waterbody behaviour (i.e. where does any disturbed water and soil end up?)

Refer attached resource consent application

- 14 Please consider the long term effects that your proposed diversion or damming of water may have on the surrounding environment.

Refer to attached resource consent application.

- 15 Are there any structures near to the proposed activity? If yes, will the proposed activity have any effect on these structures? Please provide specific details including the type of structure, owner of the structure, distance from the proposed activity, and what effects the proposed activity will have on the stability/function of the structure.

Refer to attached resource consent application

- 16 Pursuant to Schedule 4 of the Resource Management Act, 1991, there are a number of matters that must be addressed by an assessment of environmental effects. Please discuss what effects the proposed activity will have on the following:

- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects

Refer to attached resource consent application.

(b) any physical effect on the locality, including any landscape and visual effects

(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations

(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants

- (f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations

- 17 Please include a description of the monitoring or mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values.

Refer to attached resource consent application.

- 18 Please include a description of any possible alternative locations or methods for undertaking the activity and why these alternatives have not been selected.

Refer to attached resource consent application.

- 19 Please include evidence of any consultation undertaken for this application. This may include (but not be limited to) consultation with adjoining landowners, other consent holders in the immediate area, iwi (e.g. Te Rūnanga O Ngāi Tahu, Te Ao Marama Inc.), government departments/ministries (e.g. DOC), territorial authorities and recreational associations.

Please note that in accordance with Schedule 4 of the RMA, you must provide an assessment of whether or not the proposed activity is contrary to any of the relevant provisions of the following documents:

- (a) Regional Water Plan for Southland, 2010 (and any proposed/subsequent versions)*
- (b) proposed Southland Water and Land Plan (Appeals Version), 2018 (and any proposed/subsequent versions)*
- (c) Resource Management (National Environmental Standards for Freshwater) Regulations 2020*
- (d) National Policy Statement for Freshwater Management, 2020*
- (e) Southland Regional Policy Statement, 2017 (and any proposed/subsequent versions)*
- (f) Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations, 2007*

Staff are able to advise whether the document is relevant, as it is dependant on the location, scale and complexity of your proposal. We invite you to come in for a pre-application meeting with Environment Southland consents staff to discuss this. The first half hour of assistance on any application or proposal is free of charge, with subsequent assistance being charged according to the Environment Southland Fees and Charges schedule.

END OF FORM

# APPENDIX G

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## PRE-APPLICATION DISCUSSIONS

## McSoriley, Luke

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**From:** McSoriley, Luke  
**Sent:** Friday, 26 March 2021 4:43 p.m.  
**To:** Ryan Hodgson  
**Cc:** 'craigstalker727@hotmail.com'  
**Subject:** RE: wetlands map

Hi Ryan

Thank you for your e-mail.

The Stock Exclusion Regulations detail dates for existing farms to comply with the provisions you refer to. On existing farms, livestock must be kept out of wetlands by either 1 July 2023 or 1 July 2025. This applies irrespective of the Stalkers current proposal.

The application will seek resource consent for wetland modification. Once the resource consent is implemented and the farm access formed it will no longer be wetland. The use of the farm access to move stock will therefore not result in disturbance of the bed of a wetland under Rule 70 of the pSWLP. The new farm access will also be fenced to prevent stock access to the adjoining wetland. So the Stalkers will also be able to comply with the Stock Exclusion Regulations once they apply. We will address these matters in the application.

I agree with Lauren's comments in terms of being cautious on the wetland mapping through a desk top exercise. The Ecologist has done the on-site assessment, determined the actual boundaries of the wetland and this is detailed in the Ecological Assessment. This Assessment provides the most definitive information on the wetland including its extent and area.

I don't consider that any reclamation is proposed.

Regards

**Luke McSoriley**  
Work Group Manager - Planning



T: +64 3 211 3589  
M: +64 27 269 1644  
luke.mcsoriley@wsp.com

WSP  
65 Arena Ave  
Invercargill 9810  
New Zealand

[wsp.com/nz](http://wsp.com/nz)



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**From:** Ryan Hodgson <Ryan.Hodgson@es.govt.nz>  
**Sent:** Wednesday, 24 March 2021 9:51 a.m.  
**To:** McSoriley, Luke <luke.mcsoriley@wsp.com>  
**Cc:** 'craigstalker727@hotmail.com' <craigstalker727@hotmail.com>  
**Subject:** FW: wetlands map



Hi Luke

See below Lauren's response to my query regarding wetlands. This information will be useful for your application if you choose to lodge one (or indeed if you can still lodge one when considering rules around reclamation and stock exclusion).

Cheers,  
Ryan

**From:** Lauren Maciaszek  
**Sent:** Tuesday, 23 March 2021 12:08 PM  
**To:** Ryan Hodgson <Ryan.Hodgson@es.govt.nz>  
**Subject:** FW: wetlands map

Hi Ryan,

I'm not sure where the ArcMap regionally significant wetlands came from, but for the purposes of the pSWLP it will need to be the Appendix A pSWLP maps that are used.

I would find it easier to consider that separately from the wetland itself – ie. what's mapped as regionally significant isn't necessarily the whole wetland. I would say that what's mapped as wetland isn't necessarily the whole wetland either, as the wetlands layer in Arcmap was developed through a desktop study looking at aerial imagery and hasn't been ground-truthed. I would treat the mapping as indicative and expect that the application would include an on-site assessment by an ecologist showing where the actual boundaries of the wetland are. This is especially important as the NES and the pSWLP currently have slightly different definitions of a natural wetland in relation to telling the difference between wetland and pasture – Rule 73 of the pSWLP also uses 'wetland' rather than 'natural wetland'. This may mean that the boundary ends up being different under the pSWLP and the NES for the purposes of determining rules.

Appendices 2 and 3 of the RPS are also relevant: Appendix 2 sets out a schedule of threatened, at risk, and rare habitat types (which includes types of wetlands), and Appendix 3 sets out the criteria to assess the significance of the habitat.

It would also be worth taking a look at the stock exclusion regulations, as regulations 16 and 17 specifically exclude stock from natural wetlands and regulations 7 and 8 relate to water crossings for stock. The nature of the farm track is also going to be relevant, as the water crossings relate to a bridge or culvert. However, installing a culvert underneath farm track may result in hydrological changes to the wetland (like with the Te Anau-Manapouri cycle trail), and (depending on how they go about it) putting the farm track into the wetland may actually be reclamation rather than the building of a structure.

Cheers,  
Lauren

**From:** Ryan Hodgson  
**Sent:** Friday, 19 March 2021 8:06 AM  
**To:** Lauren Maciaszek <Lauren.Maciaszek@es.govt.nz>  
**Subject:** FW: wetlands map

Hi Lauren

I have an enquiry regarding regionally significant wetlands mapping. It seems there is a major difference between regionally significant wetlands in the pSWLP and ArcMap. I went for a site visit to a farm that wants to apply for a consent to build a farm track through So Big Swamp at 80 Christie Road, Mossburn. Their Pre-App number is APP-

20211148. However we are struggling to define what the boundary of the wetland actually is considering the difference between Luke's map (from Part B of the pSWLP) and the much larger wetland area of So Big Swamp on ArcMap.

Could you please clarify which map should be used regarding the pSWLP rules, and further to that, what wetland map I should consider when considering the NES rules.

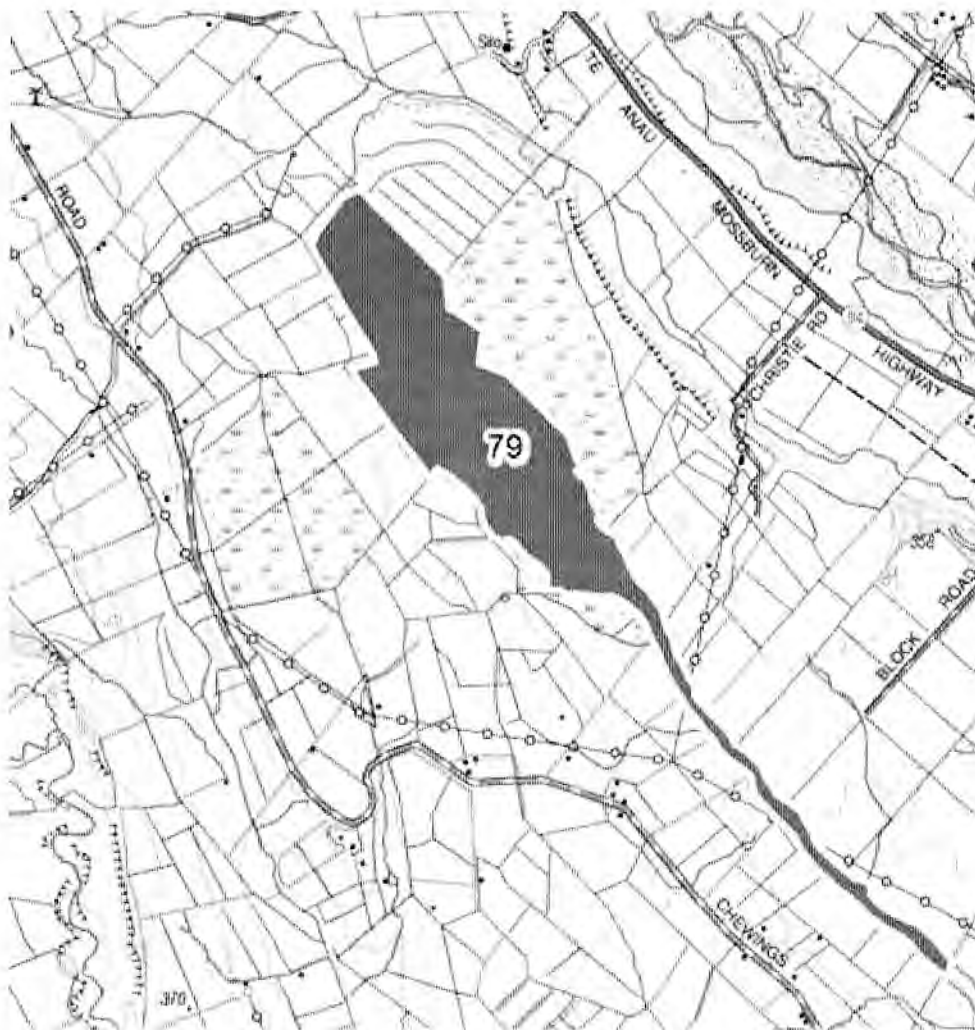
Clarification on all this would be much appreciated.

Cheers,  
Ryan

**From:** McSoriley, Luke [mailto:luke.mcsoriley@wsp.com]  
**Sent:** Thursday, 18 March 2021 4:28 PM  
**To:** Ryan Hodgson <Ryan.Hodgson@es.govt.nz>  
**Cc:** 'craigstalker727@hotmail.com' <craigstalker727@hotmail.com>  
**Subject:** RE: wetlands map

Hi Ryan

Thank you for your e-mail and also for visiting the site with me yesterday.  
As you identify So Big Swamp is listed in Appendix A of the proposed Southland Water & Land Plan which details 'Regionally Significant Wetlands and Sensitive Water Bodies'.  
So Big Swamp is referenced as number 79 on the relevant plan map (Map 16) which is attached and detailed below.



The boundaries of the wetland on Map 16 (the actual regional plan map) appear to be different to the map that was attached to your email yesterday.  
Map 16 does not show as large an area as being part of a 'Regionally Significant Wetland' and the shape is different.

Beacon has a number of different layers that are used for a range of purposes.  
In my mind the definitive map showing the boundary of So Big Swamp as a 'Regionally Significant Wetland' is Map 16 (the actual Plan map).  
Please let me know your thoughts on this?

Regards

**Luke McSoriley**  
Work Group Manager - Planning



T: +64 3 211 3589  
M: +64 27 269 1644  
[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)

WSP  
65 Arena Ave  
Invercargill 9810  
New Zealand

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**From:** Ryan Hodgson <[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz)>  
**Sent:** Wednesday, 17 March 2021 4:22 p.m.  
**To:** 'craigstalker727@hotmail.com' <[craigstalker727@hotmail.com](mailto:craigstalker727@hotmail.com)>; McSoriley, Luke <[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)>  
**Subject:** wetlands map

Hi Craig

See attached our wetlands map. The green area is a mapped Regionally Significant Wetland known as So Big Swamp. It will be of interest to you and Luke that this wetland does encompass some of your paddocks which is a problem.

The blue and yellow areas are also wetlands but are not regionally significant, the yellow area is decreasing in quality as a wetland whereas the blue area has been categorised as not changing.

You can find Beacon here where maps are available for your reference  
<https://maps.es.govt.nz/index.aspx?app=water-and-land&ext=1172305,4826909,1294987,4883091>

Any questions please let me know.

Cheers,  
R

**Ryan Hodgson**  
Consents Officer  
Environment Southland *Te Taiāo Tonga*

P 03 211 5115  
Cnr Price St & North Rd, Private Bag 90116, Invercargill 9840  
[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz) | [www.es.govt.nz](http://www.es.govt.nz) | [facebook.com/enviromentsouthland](https://www.facebook.com/enviromentsouthland)

## McSoriley, Luke

---

**From:** McSoriley, Luke  
**Sent:** Friday, 12 March 2021 1:35 p.m.  
**To:** Ryan Hodgson  
**Cc:** Bruce Halligan  
**Subject:** RE: Wetland Modification

Hi Guys

Thank you for your response.

I will have a read over those additional rules and will provide an analysis.

Will also provide a more detailed explanation on why the prohibited rules of the NES don't apply, as you suggest.

I will be in touch early next week to arrange the visit and yes happy to give you a lift up there.

Thank you

**Luke McSoriley**

Work Group Manager - Planning



T: +64 3 211 3589

M: +64 27 269 1644

luke.mcsoriley@wsp.com

WSP

65 Arena Ave  
Invercargill 9810  
New Zealand

[wsp.com/nz](http://wsp.com/nz)



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**From:** Ryan Hodgson <Ryan.Hodgson@es.govt.nz>

**Sent:** Friday, 12 March 2021 8:37 a.m.

**To:** McSoriley, Luke <luke.mcsoriley@wsp.com>

**Cc:** Bruce Halligan <Bruce.Halligan@es.govt.nz>

**Subject:** RE: Wetland Modification

Hi Luke

Thanks for your email outlining the relevant rules and the hydrological explanation as to why the activity is not draining or partially draining a wetland. In addition to your assessment against the rules you will also need to address the prohibited rules in your analysis with an explanation as to why the activity is not prohibited. This is not limited to the NES either, there are prohibited rules in the pSWLP that may also apply such as Rule 70. See also the stock exclusion rules in the Resource Management (Stock Exclusion) Regulations 2020, specifically Regulations 16 – 18.

Regarding a site visit, I'm happy to head out next week sometime. Let me know a time that suits you and if you like I'd be happy to carpool in to save on time and costs.

Kind Regards,  
Ryan Hodgson

**Ryan Hodgson**

Consents Officer

Environment Southland *Te Taiao Tonga*

P 03 211 5115

Cnr Price St & North Rd, Private Bag 90116, Invercargill 9840

[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz) | [www.es.govt.nz](http://www.es.govt.nz) | [facebook.com/enviromentsouthland](https://facebook.com/enviromentsouthland)

**From:** Bruce Halligan

**Sent:** Thursday, 11 March 2021 4:26 PM

**To:** Ryan Hodgson <[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz)>

**Cc:** 'McSoriley, Luke' <[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)>

**Subject:** FW: Wetland Modification

Hi Ryan, can you please review this please for Luke and also liaise with him on the timing of the site visit . Happy to review your position before sending through to Luke if you would like me to . One thing which would need to be established in any application is explaining why the activity is not prohibited in terms of the NES

Thanks and Regards  
Bruce

**From:** McSoriley, Luke [<mailto:luke.mcsoriley@wsp.com>]

**Sent:** Thursday, 11 March 2021 3:47 PM

**To:** Bruce Halligan <[Bruce.Halligan@es.govt.nz](mailto:Bruce.Halligan@es.govt.nz)>

**Cc:** Ryan Hodgson <[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz)>; 'craigstalker727@hotmail.com' <[craigstalker727@hotmail.com](mailto:craigstalker727@hotmail.com)>

**Subject:** RE: Wetland Modification

Hi Bruce

My whanau are all well thank you and thank you also for the prompt reply.  
That's sounds fine in regard the site visit arrangements.

As you note an application cannot be made for a prohibited activity.  
This was discussed with Aurora and Ryan at the pre-application meeting.  
This meant that we had to confirm the activity status before we could agree to progress an application for the Stalkers.

Detailed below is the section of the draft application detailing the resource consents required.  
Can you please let us know if you have a different interpretation of the relevant plan rules and those of the NES-FW? I appreciate this is an unusual request but I'm hoping we can agree on the applicable rules before an application is lodged.

Whenever new rules and polices come in there is sometimes a period of uncertainty but we have worked through the relevant provisions in detail.

We progressed two applications for wetland modification on behalf of applicants last year prior to the NES-FW coming into effect.

I don't think there have been any changes to the relevant water plan rules (as listed below) since this time.

| RMA Section | Resource Consent Sought | RWP   | pSWLP  | N                               |
|-------------|-------------------------|---|--|---------------------------------|
| 14          |                         | Rule 20 (c) - the diversion of water from any naturally | Rule 4 - any activity that would otherwise contravene Section 14(3) of | Under Part 3, 5 diversion of wa |

|   |   |  |   |   |
|---|---|--|---|---|
|   | The diversion of surface water / groundwater (water permit) | occurring wetland is a <u>discretionary activity</u> . | the RMA and is not classified by the pSWLP as any other class of activity listed in Section 87A of the RMA is a <u>discretionary activity</u> . | wetland is a <u>nc</u> does not have subpart.   |
| 9   | Wetland modification (land use consent)                     | No land use wetland modification rule.                 | Under Rule 74 (c) of the pSWLP wetland modification is a <u>non-complying activity</u> .  | Under Part 3, 5 vegetation clear wetland is a <u>nc</u> does not have subpart.<br><br>Under Part 3, 5 earthworks with <u>non-complying</u> have another s |
| As the activity status is a mix of non-complying and discretionary bundling is appropriate and the overall status of the <u>non-complying</u> . |   |  |   |   |

The NES-FW does have new rules relating to wetlands that are now operative and the relevant rules are listed in the table above.

Attached is the Hydrology Assessment which concludes:

- The track will not result in any water leaving the wetland additional to the current situation, i.e. the track will not cause any drainage of the wetland;
- The track will have no significant effect on water flow patterns within the wetland;

The proposed access will require vegetation removal and earthworks / land disturbance within the wetland and this is a non-complying activity under the NES-FW.

Diversion of water within the wetland is also proposed and this is a non-complying activity under the NES-FW.

The application also proposes wetland restoration which is a permitted activity under the NES-FW.

Earthworks within a natural wetland and the diversion of water in a natural wetland is a prohibited activity if it results or is likely to result in complete or partial drainage of all or part of the natural wetland.

The Hydrology Assessment concludes that the proposed earthworks and diversion of water will not result in complete or partial drainage of all or part of the natural wetland.

As a result in our opinion the activity status is non-complying under the NES-FW.

Happy to discuss this further if council has a different interpretation of these rules.

Regards

**Luke McSoriley**

Work Group Manager - Planning



T: +64 3 211 3589

M: +64 27 269 1644

[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)

WSP

65 Arena Ave  
Invercargill 9810  
New Zealand

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**From:** Bruce Halligan <[Bruce.Halligan@es.govt.nz](mailto:Bruce.Halligan@es.govt.nz)>

**Sent:** Friday, 5 March 2021 1:32 p.m.

**To:** McSoriley, Luke <[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)>

**Cc:** Ryan Hodgson <[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz)>; 'craigstalker727@hotmail.com' <[craigstalker727@hotmail.com](mailto:craigstalker727@hotmail.com)>

**Subject:** FW: Wetland Modification

Greetings Luke, nice to hear from you and hope you and the whanau are well

I am generally aware of this situation, I spoke to Mr Stalker some months back in relation to it in late 2020 ( I think this was Mr Allan Stalker rather than Mr Craig Stalker) . We discussed the provisions of the NES and our planning documents in relation to wetland modifications.

Yes we can certainly arrange a further on-site pre-application meeting if you would like us to, the costs for this will be as per our schedule of fees and charges for staff time and travel involved.

For continuity I will ask Ryan to please liaise with you on arrangements for this . He may also bring another ES staff member if some ecological feedback is sought, as Consents staff are not suitably technically qualified to comment on wetland matters .

As discussed with Mr Stalker in our phone conversation, and also as you indicated below, the application would need to include a hydrology and ecological assessment and demonstrate clearly that the proposed activity is not a prohibited activity that we are legally unable to process/ grant in terms of the NES

Please let me know if you have any issues with the above , if not I will Ryan to contact you

Thanks and Regards

BGH

**Bruce Halligan**

Consents Manager - Acting

Environment Southland *Te Taiao Tonga*

P 03 211 5115

Cnr Price St & North Rd, Private Bag 90116, Invercargill 9840

[Bruce.Halligan@es.govt.nz](mailto:Bruce.Halligan@es.govt.nz) | [www.es.govt.nz](http://www.es.govt.nz) | [facebook.com/enviromentsouthland](https://facebook.com/enviromentsouthland)

**From:** McSoriley, Luke [<mailto:luke.mcsoriley@wsp.com>]

**Sent:** Friday, 5 March 2021 11:24 AM

**To:** Bruce Halligan <[Bruce.Halligan@es.govt.nz](mailto:Bruce.Halligan@es.govt.nz)>; Ryan Hodgson <[Ryan.Hodgson@es.govt.nz](mailto:Ryan.Hodgson@es.govt.nz)>

**Cc:** Craig Stalker <[craigstalker727@hotmail.com](mailto:craigstalker727@hotmail.com)>

**Subject:** RE: Wetland Modification

Hi Bruce

We have a client who is progressing a resource consent application for wetland modification.

The Stalkers own a farm near Mossburn which has a large area of wetland located on it.

The wetland is part of wider So Big wetland area which is owned by DOC and the wetland extends onto both the DOC and Stalker properties.

The Stalkers are proposing construction of a farm access across a narrow section of the DOC wetland to provide a connection to another farm they wish to purchase.

Creation of additional wetland area, protection of the wetland and enhancement of the wetland forms part of the proposal.

Prior to Christmas we had an initial pre-application meeting with Aurora and Ryan.

Since this meeting the Stalkers have completed a hydrology assessment and updated the original Ecological Assessment.

They have also engaged WSP to progress the resource consent application.

The application the Stalkers will lodge is focussed on meeting the key wetland policy of the NPS-FW 2020:  
*Policy 6: There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration is promoted.*

So the intention is to show no net loss of wetland area, increase the area of wetland and protect, enhance and restore it.

Overall the aim is enable construction of an access while also achieving a positive environmental outcome for the wetland.

The ecological and hydrological advice the Stalker's have had indicates that this can be achieved.

The purpose of this e-mail is to ask if it would be possible to arrange a second pre-application meeting at the site? I appreciate this is an unusual request but we think it would be helpful from a processing perspective for council staff to view the site early on.

It would also enable the applicants to outline their proposal in further detail.

I look forward to your response.

Regards

**Luke McSoriley**

Work Group Manager - Planning



T: +64 3 211 3589

M: +64 27 269 1644

[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)

WSP

65 Arena Ave

Invercargill 9810

New Zealand

[wsp.com/nz](http://wsp.com/nz)



Shaping  
the future  
of Aotearoa  
since 1870

**From:** Aurora Grant <[Aurora.Grant@es.govt.nz](mailto:Aurora.Grant@es.govt.nz)>

**Sent:** Monday, 7 December 2020 6:15 p.m.

**To:** McSoriley, Luke <[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)>

**Cc:** Craig Stalker <[craigstalker727@hotmail.com](mailto:craigstalker727@hotmail.com)>

**Subject:** RE: Wetland Modification

Hi Luke,

Sorry for the delay in replying, I have been tied up with a large hearing. How are you placed Thursday 10am for a preapp?

Thanks,

Aurora

Aurora Grant

Consents Manager

Environment Southland *Te Taiao Tonga*



P 03 211 5115

Cnr Price St & North Rd, Private Bag 90116, Invercargill 9840

[Aurora.Grant@es.govt.nz](mailto:Aurora.Grant@es.govt.nz) | [www.es.govt.nz](http://www.es.govt.nz) | [facebook.com/environmentsouthland](https://facebook.com/environmentsouthland)

**From:** McSoriley, Luke [<mailto:luke.mcsoriley@wsp.com>]

**Sent:** Thursday, 26 November 2020 2:46 PM

**To:** Aurora Grant <[Aurora.Grant@es.govt.nz](mailto:Aurora.Grant@es.govt.nz)>

**Cc:** Craig Stalker <[craigstalker727@hotmail.com](mailto:craigstalker727@hotmail.com)>

**Subject:** Wetland Modification

Hi Aurora

We have a client proposing a new farm access to link two farms near Mossburn. The family business plans to purchase an adjoining farm. A new access connecting the two farms is needed and it's a situation where crossing the wetland cannot be avoided. The wetland is the So Big Swamp which is north of Mossburn. The access location is at a narrow part of the wetland and the width of the access would be about 10m. Earthworks and vegetation clearance of approximately 300m<sup>2</sup> would be required but no drainage of the wetland is proposed.

Our client has been discussing the proposal and access arrangements with the Department of Conservation as they jointly own the wetland.

An Ecological Assessment has been completed and I think there may have been some initial discussions with consents staff via a phone call.

Restoration of parts of the wetland and formal protection through a covenant or similar mechanism is likely to be promoted in the application.

The overall intent is to increase the area of wetland, protect it and promote restoration.

They will need resource consent under Rule 74 of the pSWLP and also under Regulation 54 of the NES-FW. Earthworks and vegetation clearance in the wetland to enable construction of the access would be a non-complying activity under these provisions.

Our client has asked us to arrange a pre-application meeting.

Given the discussions yesterday on wetland activities under the FW NPS & NES I thought I would e-mail you directly. Would we be able to arrange a pre-application meeting please?

If you are unavailable that's fine we can meet with any of your staff but I wanted to keep you informed.

I can send through additional information before the meeting.

Regards

**Luke McSoriley**

Work Group Manager - Planning



T: +64 3 211 3589

M: +64 27 269 1644

[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)

WSP

65 Arena Ave

Invercargill 9810

New Zealand

[wsp.com/nz](http://wsp.com/nz)

## McSoriley, Luke

---

**From:** McSoriley, Luke  
**Sent:** Tuesday, 8 December 2020 10:16 a.m.  
**To:** 'Aurora Grant'  
**Cc:** Craig Stalker  
**Subject:** RE: Wetland Modification

Hi Aurora

Thank you for getting back to us. Yes Thursday 10am will work.  
Craig will e-mail some background information through prior to the meeting.

Regards

**Luke McSoriley**  
Work Group Manager - Planning



T: +64 3 211 3589  
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luke.mcsoriley@wsp.com

WSP  
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Shaping  
the future  
of Aotearoa  
since 1870

**From:** Aurora Grant <Aurora.Grant@es.govt.nz>  
**Sent:** Monday, 7 December 2020 6:15 p.m.  
**To:** McSoriley, Luke <luke.mcsoriley@wsp.com>  
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**Subject:** RE: Wetland Modification

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Consents Manager  
Environment Southland *Te Taiao Tonga*

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[Aurora.Grant@es.govt.nz](mailto:Aurora.Grant@es.govt.nz) | [www.es.govt.nz](http://www.es.govt.nz) | [facebook.com/environmentssouthland](https://facebook.com/environmentssouthland)

**From:** McSoriley, Luke [<mailto:luke.mcsoriley@wsp.com>]

**Sent:** Thursday, 26 November 2020 2:46 PM

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The access location is at a narrow part of the wetland and the width of the access would be about 10m.

Earthworks and vegetation clearance of approximately 300m<sup>2</sup> would be required but no drainage of the wetland is proposed.

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WSP

65 Arena Ave

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New Zealand

[wsp.com/nz](http://wsp.com/nz)

## McSoriley, Luke

---

**From:** Craig Stalker <craigstalker727@hotmail.com>  
**Sent:** Tuesday, 8 December 2020 12:40 p.m.  
**To:** McSoriley, Luke  
**Cc:** Aurora Grant  
**Subject:** Re: Wetland Modification  
**Attachments:** 5514 Stalker farm ecological assessment 2020-8-28.pdf; Wet Land Enhancement Proposal.docx

Hi Guys

Thanks for sorting a time for a catch-up.

Please find attached a copy of the ecological assessment report by Kelvin Lloyd and a draft of a proposal that we would like to put forward to both ES and DoC. Lisa Wheeler from DoC is also currently drafting a letter outlining their position and our discussions so far (I will send this through later for you to look at).

We are also looking at getting an engineers and hydrologists assessment undertaken to guarantee that there will be no drainage of the wetland and that the construction has as little impact as possible.

Kelvin Lloyd is available for contact should you have any questions regarding his report on 021 757 303.

Happy reading and we will see you Thursday.

Craig Stalker BVSc

Sent from my iPhone

On 8/12/2020, at 10:16 AM, McSoriley, Luke <luke.mcsoriley@wsp.com> wrote:

Hi Aurora

Thank you for getting back to us. Yes Thursday 10am will work.  
Craig will e-mail some background information through prior to the meeting.

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**Luke McSoriley**  
Work Group Manager - Planning

<image003.jpg>

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M: +64 27 269 1644  
luke.mcsoriley@wsp.com

WSP  
65 Arena Ave  
Invercargill 9810  
New Zealand

**wsp.com/nz**  
<image004.png>

**From:** Aurora Grant <Aurora.Grant@es.govt.nz>  
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**Aurora Grant**

Consents Manager  
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**Cc:** Craig Stalker <craigstalker727@hotmail.com>  
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I can send through additional information before the meeting.

Regards

**Luke McSoriley**

Work Group Manager - Planning

[<image005.jpg>](#)

T: +64 3 211 3589

M: +64 27 269 1644

[luke.mcsoriley@wsp.com](mailto:luke.mcsoriley@wsp.com)

WSP

65 Arena Ave

Invercargill 9810

New Zealand

**wsp.com/nz**

[<image006.jpg>](#)

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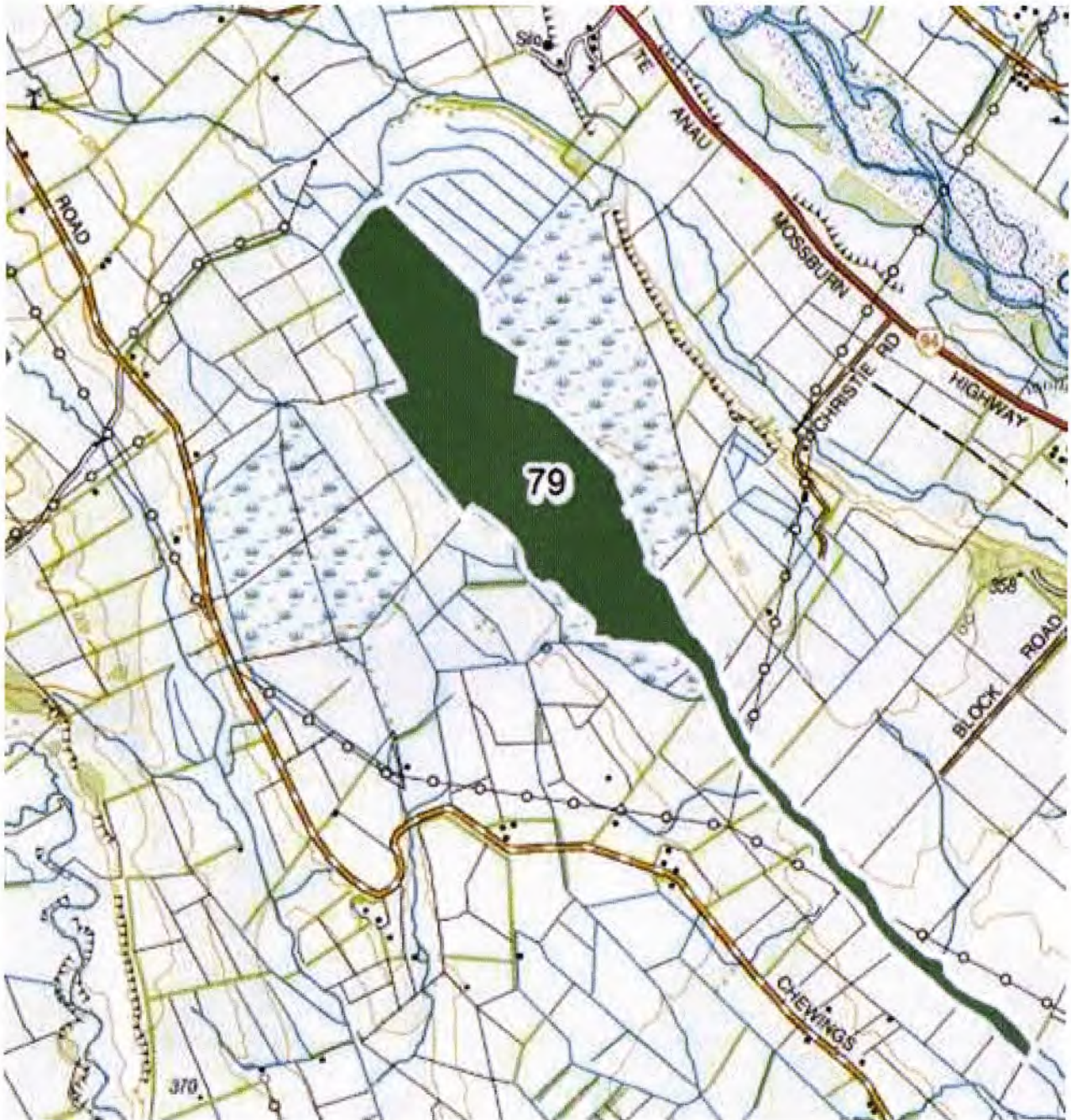
# APPENDIX H

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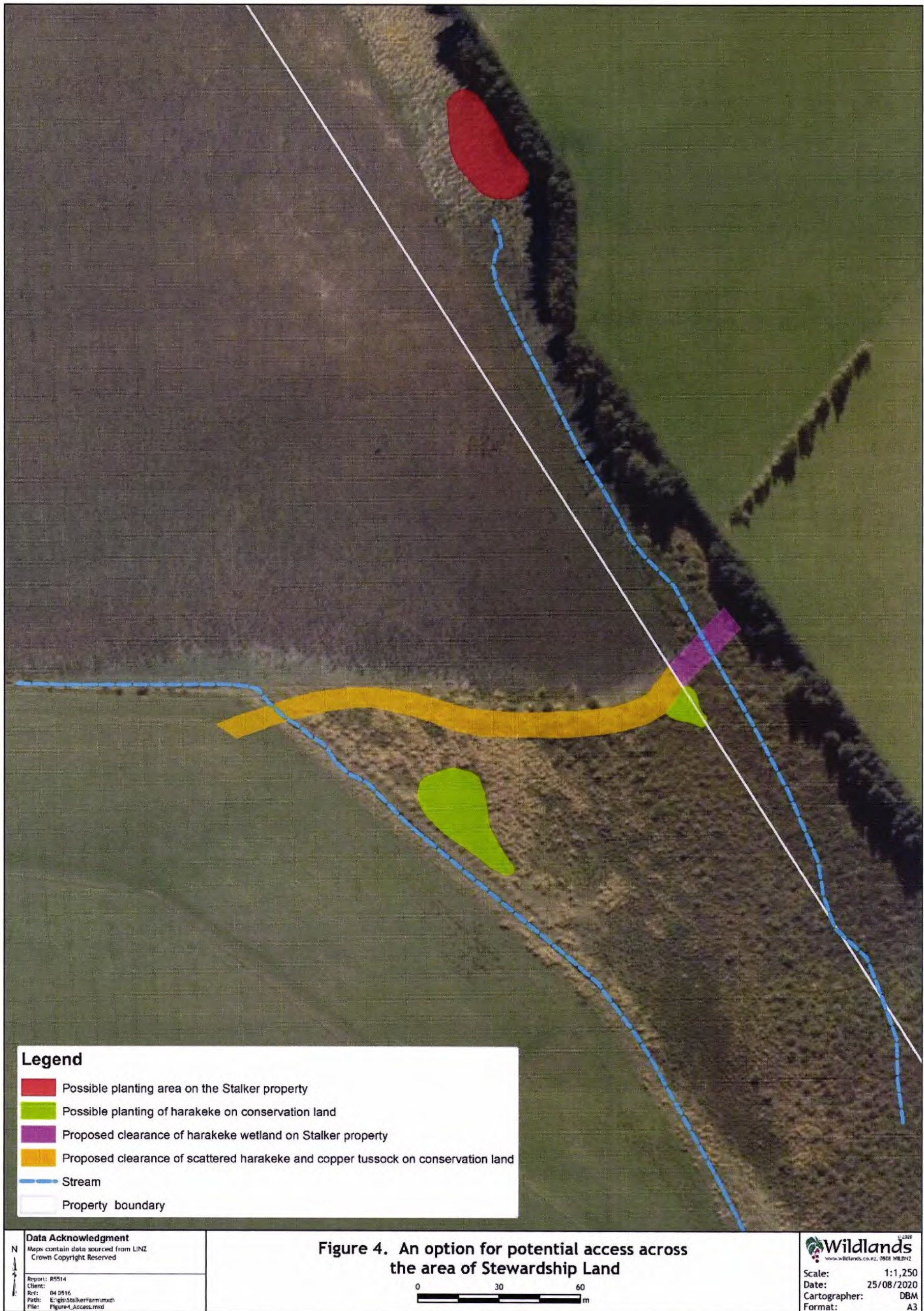
## PLAN MAPS

# So Big Swamp

Appendix A of the proposed Southland Water & Land Plan (Map 16)







# Southland District Plan Maps



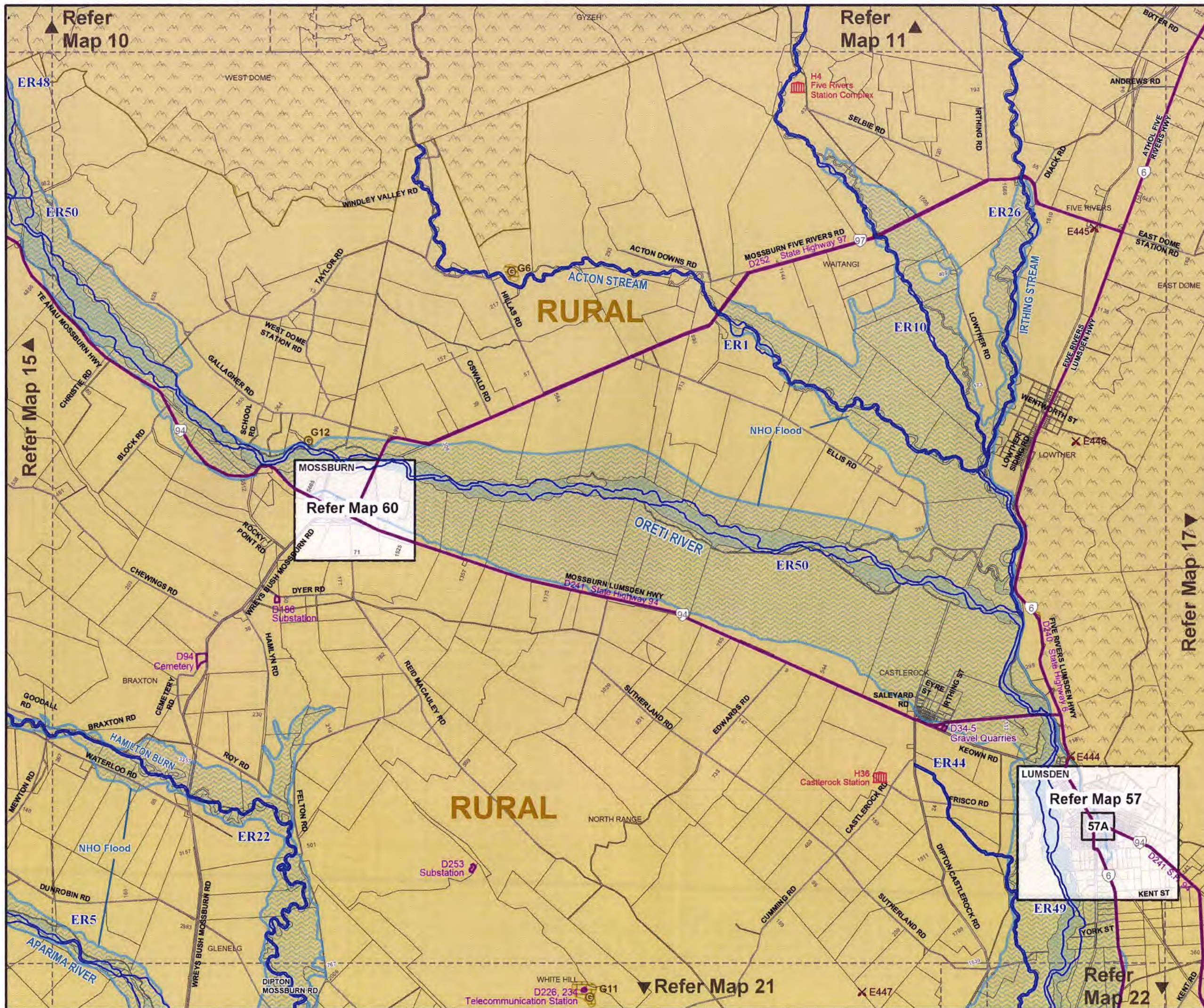
SCALE 1:75,000 @ A3



Please refer overleaf documentation page. If discrepancies exist between this map and the online Plan maps, the online Plan is the authoritative version.

RURAL ZONE

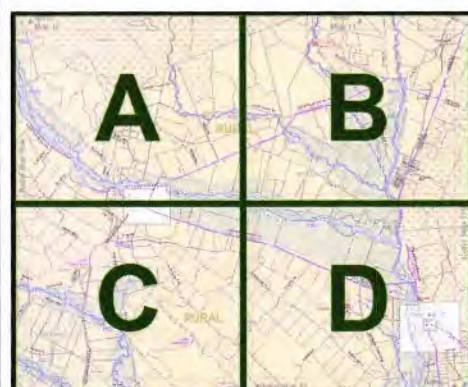
Map 16



# DOCUMENTATION FOR SOUTHLAND DISTRICT PLAN MAP 16

## Legend Index

### Map Quadrants



This Planning Map is divided into four quadrants, as shown left.

The quadrant system is used throughout this page, as part of the planning features index.

## Legend



### Archaeological Sites

Refer District Plan Schedule 5.2

| ID NUMBER | MAP QUADRANT |
|-----------|--------------|
| E444      | D            |
| E446      | B            |
| E445      | B            |
| E447      | D            |



### Designations

Refer District Plan Schedule 5.3

| ID NUMBER | MAP QUADRANT | SUBJECT                      | NOTATION   |
|-----------|--------------|------------------------------|--|
| D34       | D            | Holmesdale Pit #1            | Roding   |
| D35       | D            | Holmesdale Pit #2            | Roding   |
| D94       | C            | Centre Hill Cemetery         | Cemetery   |
| D186      | C            | Mossburn Substation          | Electricity Zone Substation, Depot and Ancillary Purposes        |
| D226      | C            | White Hill Microwave Station | Telecommunication and Radio Communication and Ancillary Purposes |
| D234      | C            | White Hill Microwave Station | Telecommunication and Radio Communication and Ancillary Purposes |
| D240      | B, D         | State Highway 6              | State Highway Purpose  |
| D241      | A, C-D       | State Highway 94             | State Highway Purpose  |
| D252      | A-B          | State Highway 97             | State Highway Purpose  |
| D253      | C            | White Hill Substation        | Electricity Zone Substation and Ancillary Purposes               |



### Esplanade Requirements

Refer District Plan Schedule 5.4

| ID NUMBER | MAP QUADRANT | WATERWAY       | LOCATION  |
|-----------|--------------|----------------|---|
| ER1       | A-B          | Acton Stream   | South of Mossburn Five Rivers Road  |
| ER5       | C            | Aparima River  | North of Hamilton Burn  |
| ER10      | B            | Cromel Stream  | Irthing confluence to DoC estate  |
| ER22      | C            | Hamilton Burn  | Aparima River confluence to DoC estate  |
| ER26      | B-D          | Irthing Stream | Oreti confluence to DoC estate  |
| ER44      | D            | Murray Creek   | Oreti River confluence to Castlerock Dipton Road                              |
| ER48      | A            | Oreti River    | Weydon Burn confluence to source  |
| ER49      | D            | Oreti River    | Mossburn Lumsden Highway Bridge to Riverton Wallacetown Highway (Iron) Bridge |
| ER50      | A-B, D       | Oreti River    | Weydon Burn confluence to Mossburn Lumsden Highway Bridge                     |
| ER81      | A            | Weydon Burn    | Aparima River confluence to DoC estate  |



### Geological Sites and Landforms

Refer District Plan Schedule 5.9

| ID NUMBER | MAP QUADRANT | NAME  |
|-----------|--------------|---|
| G6        | A            | Mossburn serpentinite quarry                                  |
| G11       | C            | White Hill zeolite metamorphism                               |
| G12       | A            | Mossburn Permo-Triassic fossiliferous volcanoclastic sequence |



### Historic Heritage Items

Refer District Plan Schedule 5.2

| ID NUMBER | MAP QUADRANT | NAME  |
|-----------|--------------|---|
| H4        | B            | Five Rivers Station Complex (Cottage, Homestead, Stables, Woolshed) |
| H36       | D            | Castlerock Station Historic Area                                    |



### Natural Hazard Overlay

Flood - Area subject to Actual or Potential Flooding or Inundation

## Zones



Rural

Overlays



Mountain Overlay

## Map Metadata

|                      |                            |
|----------------------|----------------------------|
| Status:              | Operative                  |
| Map Version:         | 6                          |
| Map Created Date:    | 29 November 2017           |
| Author Organisation: | Southland District Council |