SURVEY REPORT

FALKLAND ISLANDS NEW PORT FACILITY: PRELIMINARY PLANT AND BIRD SURVEY OF TEMPORARY LAND SITES

16/02/2022 VERSION 1.1

FALKLAND ISLANDS NEW PORT FACILITY:

PRE-WALK OVER SURVEY OF TERRESTRIAL BUILDING SITE

VERSION CONTROL

VERSION	REVIEWED BY	DATE
1.0	Ryan Irvine, Paul Brewin	16 Feb 2022
1.1	Paul Brewin, Paul Brickle	16 Feb 2022

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Cover photo: View facing east-north-east of acid grassland at Area 2.

ABOUT SAERI (FALKLANDS) LTD

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SAERI split into two with the main body of work housed in a Charitable Incorporated Organisation (SAERI) registered in England and Wales (and acknowledged on the Register of Charities in the Falkland Islands) and a company limited by shares, SAERI (Falklands) Limited (SFL), registered in the Falkland Islands. SFL has been in operation since July 2017. SFL was created to support the needs of the parent charity by providing it with a source of unrestricted funding to assist with its core costs. Its clients include local and international governments, industries, and others through carrying out Environmental Impact Assessment, Environmental Baseline Surveys, Environment Baseline Description, Risk Assessments, applied fisheries science, fisheries management advice and stock assessments. SAERI has also worked at assessing fishery management opportunities for UKOTs as part of Natural Capital Project funded by the UK Government. SFL has undertaken a number of projects including Development and Exploration EIAs for the petroleum industry, off shore and inshore environmental surveys for baseline descriptions and has undertaken fisheries consultancy in the Caribbean and in the Falkland Islands.

Ryan Irvine has over 20 years of environmental survey experience in ornithological and habitat and phase 1 surveys in the UK for different types of projects including habitat restoration, farmland surveys and on industrial EIAs. Ryan has been working in the Falklands as a naturalist and surveyor since 2020 across a wide range of mainland and island locations, and working with local specialists in those marine and terrestrial environments.

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1. INTRODUCTION

In association with the Falkland New Port Facility (NPF) project, BAM Nuttall required terrestrial protected species surveys to be conducted on proposed sites for temporary development of accommodation and various operations. This survey contributes to the wider Environmental Impact Assessment (EIA) of the NPF project.

It is understood by BAM Nuttall that the timing of the survey is (16 Feb) is sub-optimal for a detailed plant surveys due to few flowering plants at this time of year, or bird surveys due to being past the nesting period for birds. With this in mind, this survey is designed to pick up any 'red flags' that will inform planning in advance of development. These surveys precede a more detailed ecological assessment ahead of planned works.

2. SITES

Sites plans provided in pdf format were;

Area 1 – South side of By-Pass Rd opposite Sulivan St and Hansen Hill

BAS2051-BNL-CE-LS-SP-WA-0002-P07.pdf

Areas 2, 4, 5 – South side of By-Pass Rd opposite Chandlery and FIC Warehouse

BAS2051-BNL-CE-LS-SP-WA-0015 P02.pdf

Area 9 – Coastel Rd east of the Coastels and narrow footpath extending west to FIPASS Rd

BAS2051-BNL-CE-LS-SP-WA-0012 P03.pdf

Site plans were digitised by SFL and overlayed on maps in QGIS (v 3.22.1).

3. METHODS

Surveys were conducted over 15-16 February, 2022. Survey conditions 15 Feb were heavily overcast, strong north-westerly winds, scattered showers. Conditions on 16 Feb were partly cloudy, sunny, light easterly winds. A standardised continuous walk-over method was used consisting of transects of variable distances apart and spot observations of interest. The survey often extended beyond the prescribed boundary in order to gain broader context; only species within the prescribed boundaries are reported. The survey track and way points were recorded using GPS (WGS84). Plant identifications were made using Upson & Lewis (2014) *Updated Vascular Plant Checklist and Atlas for the Falkland Islands*.

4. RESULTS

No protected plants were recorded within the survey boundary. No nesting birds were observed.

4.1. AREA 9

The survey track for Area 9 is shown in Figure 1. A total of 55 species were recorded, comprising 36 native species and 19 introduced species. The area is heavily eroded along coastal path. The main site is mainly dwarf scrub heath consisting of diddledee, Christmas bush, white grass and small ferns. There are two military bunkers in the middle area of the site. Slight erosion/degradation from past land use. Weather conditions were poor, rain and strong winds, and the time of year was not ideal with very little flowering. No pale maidens, vanilla daisy's or dusty millers were observed but they are known by the surveyor to be in the area; a survey at the right time of year should record these. A full list of observed species is shown in Table 1.

The only probable breeding bird species noted was a grass wren *Cistothorus platensis falklandicus*. The time of year and weather conditions were not conducive to a thorough survey and it should be repeated in the spring.

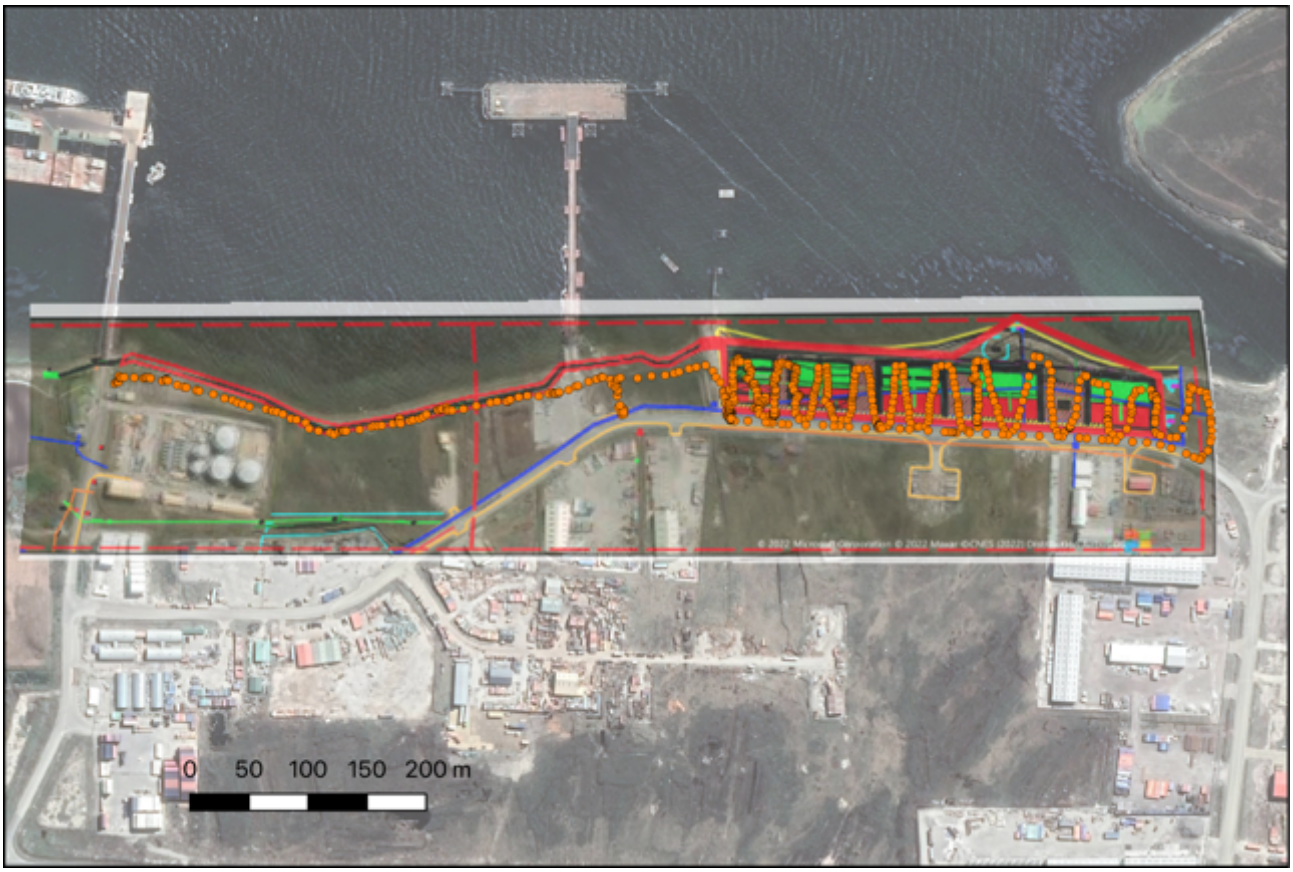

Figure 1. Survey track for Area 9.

Table 1. List of observed plant species for Area 9.

Species	Origin	Conservation Status
Creeping clubmoss *Austrolycopodium confertum*	Native	Least concern
Tall-fern *Blechnum magellanicum*	Native	Least concern
Small-fern *Blechnum penna-marina*	Native	Least concern
Almond flower *Luzuriaga marginata*	Native	Least concern
Wild celery *Apium austral*	Native	Least concern
Balsam-bog *Bolax gummifera*	Native	Least concern
Soft-camp-bog *Astelia pumila* ?	Native	Least concern
Christmas-bush *Baccharis tricuneata*	Native	Least concern
Daisy *Bellis perennis*	Introduced	
Clubmoss cudweed *Chevreulia lycopodioides*	Native	Least concern
Fachine *Chiliotrichum diffusum*	Native	Least concern
Creeping thistle *Cirsium arvense*	Introduced	
Falkland cudweed *Gamochaeta malvinesis*	Native	Least concern
Antarctic hawkweed *Hieracium antarcticum*	Native	Least concern
Common cat's-ear *Hypochaeris radicata*	Introduced	
Buttonweed *Leptinella scariosa*	Native	Least concern
Orange hawkweed *Pilosella aurantiaca*	Introduced	
Groundsel *Senecio vulgaris*	Introduced	
Marsh Daisy *Symphyotrichum vahlii*	Native	Least concern
Dandelion Taraxacum officinale	Introduced	
Chickweed *Stellaria media*	Introduced	
Native stonecrop *Crassula moschata*	Native	Least concern
Prickly-bog *Oreobolus obtusangulus*	Native	Least concern
Diddle-dee *Empetrum rubrum*	Native	Least concern
Mountainberry *Gaultheria pumila*	Native	Least concern
Pigvine *Gunnera magellanica*	Native	Least concern
Native rush *Juncus scheuchzerioides*	Native	Least concern
Native wood-rush *Luzula alopecurus*	Native	Least concern
Tall rush *Marsippospermum grandiflorum*	Native	Least concern
Brown rush *Rostkovia magellanica*	Native	Least concern
Lesser trefoil *Trifolium dubium*	Introduced	
White clover *Trifolium repens*	Introduced	
Teaberry *Myrteola nummularia*	Native	Least concern
American willowherb *Epilobium ciliatum*	Native	Least concern
Scurvygrass *Oxalis enneaphylla*	Native	Least concern
Native/hybrid boxwood *Veronica elliptica*	Native	Least concern
Thrift *Armeria maritima*	Native	Least concern
Common bent *Agrostis capillaris*	Introduced	

Creeping bent *Agrostis stolonifera*	Introduced	
Marram *Ammophila arenaria*	Introduced	
Cinnamon grass *Anthoxanthum redolens*	Native	Least concern
Wavy hair-grass *Avenella flexuosa*	Native	Least concern
Whitegrass *Cortaderia egmontiana*	Native	Least concern
Cock's-foot *Dactylis glomerata*	Introduced	
Fuegian fescue *Festuca magellanica*	Native	Least concern
Yorkshire fog *Holcus lanatus*	Introduced	
Lyme-grass *Leymus arenarius* ?	Introduced	
Spikey grass *Nicoraepoa robusta*	Native	Least concern
Smooth-stalked meadow-grass *Poa pratensis*	Introduced	
Sheep's sorrel *Rumex acetosella*	Introduced	
Northern dock *Rumex longifolius*	Introduced	
Pimpernel Lysimachia buxifolia	Native	Least concern
Prickly-burr *Acaena magellanica*	Native	Least concern
Heath bedstraw *Galium saxatile*	Introduced	

4.2. AREAS 2, 4, 5.

The survey track for Areas 2, 4, 5 is shown in Figure 2. A total of 29 species were recorded, comprising 20 native species and 9 introduced species. Weather conditions were poor, rain and strong winds, and the time of year was not ideal with very little flowering. The main habitat of the site is acid grassland mainly comprising of whitegrass, diddle-dee, small and tall ferns. The habitat is highly degraded from previous land use with peat cutting scars throughout, tracks over much of the north side and some patches where the turf has been disturbed/turned over recently and areas of rock dumped on the land. There is also numerous areas with abandoned metal and machinery on it. All ponds on the site were dry. A list of observed plant species is shown in Table 2.

Grass wrens and correndera pipit *Anthus correndera grayi* were noted on site and probable breeders as the habitat is suitable. Again, the time of year and weather conditions were not conducive to a thorough survey, and it should be repeated next spring.

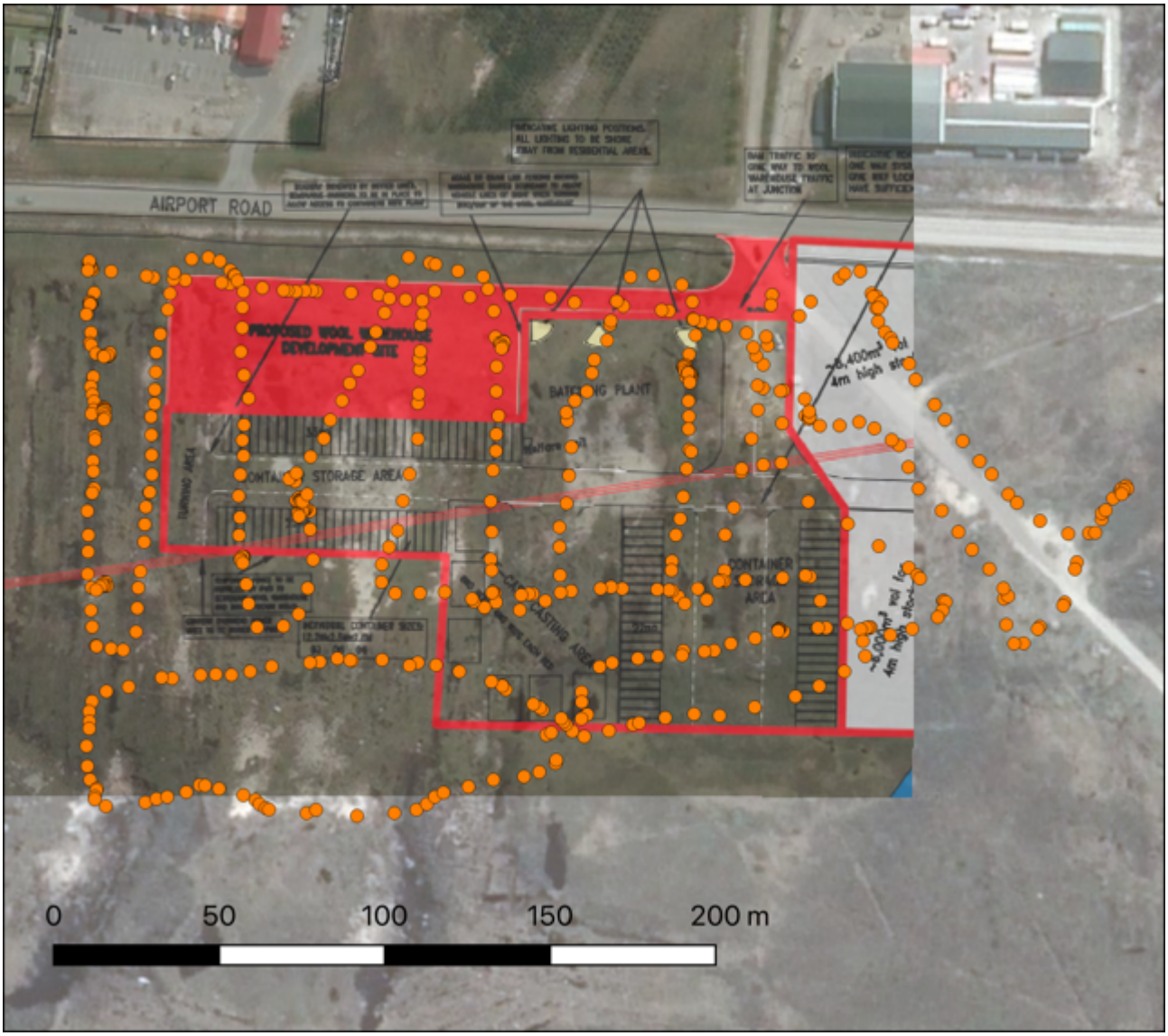

Figure 2. Survey track for Areas 2, 4, 5.

Table 2. List of observed plant species for Area 2,4,5.

Species	Origin	Conservation Status
Tall-fern *Blechnum magellanicum*	Native	Least concern
Small-fern *Blechnum penna-marina*	Native	Least concern
Almond flower *Luzuriaga marginata*	Native	Least concern
Wild celery *Apium austral*	Native	Least concern
Soft-camp-bog *Astelia pumila* ?	Native	Least concern
Christmas-bush *Baccharis tricuneata*	Native	Least concern
Creeping thistle *Cirsium arvense*	Introduced	
Common cat's-ear *Hypochaeris radicata*	Introduced	
Buttonweed *Leptinella scariosa*	Native	Least concern

Orange hawkweed *Pilosella aurantiaca*	Introduced	
Dandelion *Taraxacum officinale*	Introduced	
Prickly-bog *Oreobolus obtusangulus*	Native	Least concern
Diddle-dee *Empetrum rubrum*	Native	Least concern
Pigvine *Gunnera magellanica*	Native	Least concern
Native rush *Juncus scheuchzerioides*	Native	Least concern
Native wood-rush *Luzula alopecurus*	Native	Least concern
Brown rush *Rostkovia magellanica*	Native	Least concern
White clover *Trifolium repens*	Introduced	
Teaberry *Myrteola nummularia*	Native	Least concern
Scurvygrass *Oxalis enneaphylla*	Native	Least concern
Cinnamon grass *Anthoxanthum redolens ?*	Native	Least concern
Wavy hair-grass *Avenella flexuosa*	Native	Least concern
Whitegrass *Cortaderia egmontiana*	Native	Least concern
Cock's-foot *Dactylis glomerata*	Introduced	
Fuegian fescue *Festuca magellanica*	Native	Least concern
Yorkshire fog *Holcus lanatus*	Introduced	
Sheep's sorrel *Rumex acetosella*	Introduced	
Northern dock *Rumex longifolius*	Introduced	
Prickly-burr *Acaena magellanica*	Native	Least concern

4.3. AREA 1

The survey track for Area 1 is shown in Figure 3. A total of 33 species were recorded, comprising 21 native species and 12 introduced species. The habitat is very similar to the Area 2, 4, 5 sites, showing heavily degraded acid grassland. There are many peat cutting scars on the site and large areas of exposed peat and rocky areas.

Of note were a patch of orchids just on the outsider of the north-east boundary. These were desiccated flowers and difficult to identify. Although outsider of the survey boundary, their close proximity to the proposed area may suggest their presence within the proposed area. A list of observed plant species is shown in Table 3.

Grass wrens and correndera pipit *Anthus correndera grayi* were noted on site and probable breeders as the habitat is suitable. Again, the time of year and weather conditions were not conducive to a thorough survey, and it should be repeated next spring.

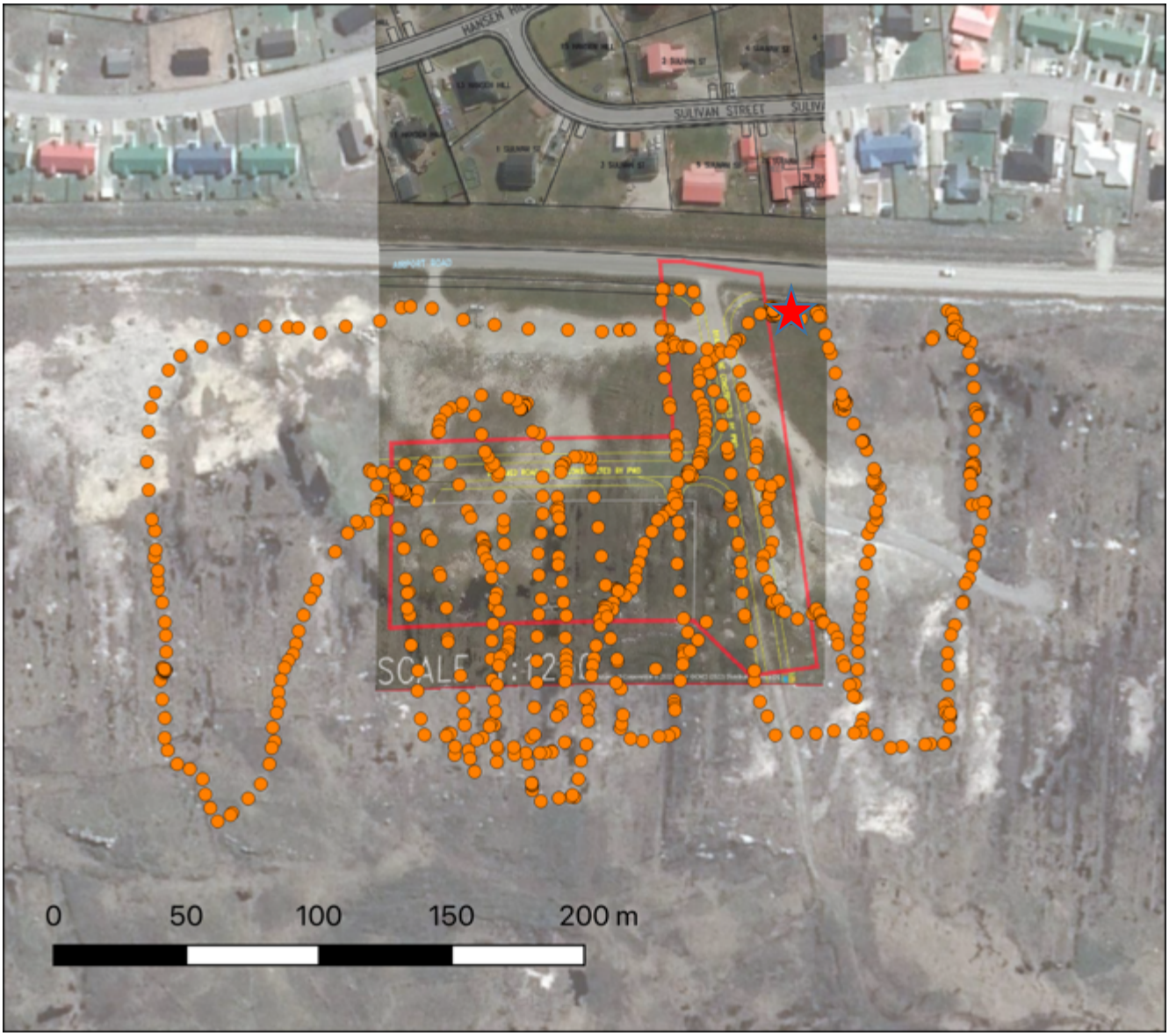

Figure 3. Survey track for Area 1. Waypoint positions of orchid observations are indicated as at the reds star in the north-east of the figure, noting that they are outside of the survey boundary.

Table 3. List of observed plant species for Area 1.

Species	Origin	Conservation Status
Tall-fern *Blechnum magellanicum*	Native	Least concern
Small-fern *Blechnum penna-marina*	Native	Least concern
Almond flower *Luzuriaga marginata*	Native	Least concern
Wild celery *Apium austral*	Native	Least concern

Yarrow *Achillea millefolium millefolium*	Introduced	
Christmas-bush *Baccharis tricuneata*	Native	Least concern
Creeping thistle *Cirsium arvense*	Introduced	
Common cat's-ear *Hypochaeris radicata*	Introduced	
Buttonweed *Leptinella scariosa*	Native	Least concern
Orange hawkweed *Pilosella aurantiaca*	Introduced	
Dandelion Taraxacum officinale	Introduced	
Corn spurrey *Spergula arvensis* ?	Introduced	
Nodding club-rush *Isolepis cernua*	Native	Least concern
Prickly-bog *Oreobolus obtusangulus*	Native	Least concern
Diddle-dee *Empetrum rubrum*	Native	Least concern
Pigvine *Gunnera magellanica*	Native	Least concern
Native rush *Juncus scheuchzerioides*	Native	Least concern
Native wood-rush *Luzula alopecurus*	Native	Least concern
Brown rush *Rostkovia magellanica*	Native	Least concern
White clover *Trifolium repens*	Introduced	
Teaberry *Myrteola nummularia*	Native	Least concern
Scurvygrass *Oxalis enneaphylla*	Native	Least concern
Cinnamon grass *Anthoxanthum redolens ?*	Native	Least concern
Wavy hair-grass *Avenella flexuosa*	Native	Least concern
Whitegrass *Cortaderia egmontiana*	Native	Least concern
Cock's-foot *Dactylis glomerata*	Introduced	
Fuegian fescue *Festuca magellanica*	Native	Least concern
Yorkshire fog *Holcus lanatus*	Introduced	
Sheep's sorrel *Rumex acetosella*	Introduced	
Northern dock *Rumex longifolius*	Introduced	
Arrow-leaved marigold *Psychrophila sagittata*	Native	Least concern
Prickly-burr *Acaena magellanica*	Native	Least concern
Birdsfoot trefoil *Lotus corniculatus* ?	Introduced	

5. RECOMMENDATIONS

A first -order assessment of the proposed sites would suggest that the habitat is potentially not likely to support significant numbers of protected or rare plant or bird species. However, detection was hindered by the time of year; more detailed surveys should be conducted at the appropriate time of year for best detection and confirmation of species' presence or absence.

A protected orchid species may be present near or on the proposed Area 1 site, given that they were observed in close proximity to the Area 1 boundary, and that habitat in the adjacent areas are similar to the habitat within the boundary. These observations should be used to help inform future surveys in the area.

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