



Species Protection Plan: Pine Marten and Red Squirrel

Tangy IV Wind Farm

Report Versions

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Glossary

The following defines some of the terms used throughout this document:

The Development – All aspects of the Tangy IV Wind Farm construction project, including decommissioning of Tangy I and II Wind Farms.

The Employer – The wind farm developer (i.e., SSE Renewables).

The Contractor/Principal Contractor – The Contractor responsible for Civil Infrastructure and the Principal Contractor as defined in the Construction (Design & Management) Regulations 2015.

Aftercare – The definition of aftercare is considered largely synonymous with Restoration, although relates specifically to the requirement for further management effort as informed by post-restoration monitoring. For example, where seeding has been undertaken although subsequent monitoring has determined failure and requirement for additional effort to achieve restoration targets.

Environmental Impact Assessment Report (EIAR) – The document submitted in support of the wind farm planning application which comprehensively describes the site, baseline environmental conditions, potential impacts of the development and prescribed mitigation. The principles outlined in this document form part of the conditions of the Planning Consent.

Decommissioning – Decommissioning is a process including the partial removal of the wind farm components and infrastructure. Decommissioning may extend to the entire wind farm after its natural operational phase or relate to discrete areas of one or more turbines as part of upgrade / replacement works. Decommissioning works will involve similar tasks / impacts as construction works and will be subject to additional detailed proposals to be submitted to the Planning Authority prior to the commencement of the decommissioning works.

Development Run-Off – Run-off from site infrastructure that may contain suspended solids, silt or other organic matter that requires treatment before discharge to the environment.

ECoW – The Environmental/Ecological Clerk of Works is an independent specialist appointed by the Employer. The ECoW monitors compliance of works with regard to environmental and ecological aspects in accordance with relevant planning conditions, applicable regulations, current best practice and prescribed works methods. The ECoW provides advice to the Employer.

Reinstatement – Reinstatement works undertaken during decommissioning aiming to address any development of landscape and habitats as part of the decommissioning works. Reinstatement is undertaken as soon as practical following the decommissioning works in each area, such as the redressing of road and tracks where applicable, turbine bases (and other areas that may be disturbed as a result of the decommissioning process). Re-seeding (conventional or hydroseeding) may be part of reinstatement measures where redressing proves unsuccessful.

Restoration – Restoration works are generally defined as long-term measures aimed to restore the ecological status (comparable to pre-commencement / baseline) of the development, through species and / or habitat management.

1. Introduction

SSE Renewables plan to repower the existing Tangy Wind Farm, Kintyre, Scotland. The 'Works' to facilitate Tangy Wind Farm IV will include construction of 16 new wind turbines, the decommissioning of 22 existing turbines, reinstatement, aftercare and restoration works.

Tangy Wind Farm IV, will be located on land 9 km north-west of Campbeltown, Kintyre, Scotland, hereafter referred to as the "Site", and is shown on a site layout plan produced for the Environmental Impact Assessment (EIA); **Figure 1**. The Site comprises areas of commercial forestry in the north and agricultural grazing in the south, in addition to the existing wind farm. Several small watercourses are present within the Site, many of which have hydrological connectivity to Tangy Loch, located approximately 230 m south-east of the Site at its closest point.

There are no nationally or internationally designated sites within the Site. Tangy Loch and Lussa Loch are part of the Kintyre Goose Roosts Special Protection Area (SPA) and Ramsar Site, both of which are located within 1 km of the Site. Tangy Loch Site of Special Scientific Interest (SSSI) extends across adjacent terrestrial habitat to the Loch directly adjacent to the Site. Lussa Loch SSSI and Tangy Gorse SSSI are within 1 km east and south-west of the Site respectively. None of these designated sites are designated for the presence of red squirrel *Sciurus vulgaris* or pine marten *Martes martes*.

In 2013, a full suite of ecological surveys was undertaken in support of Tangy III, a wind farm within the Site for which planning permission was granted. In 2018, an updated extended Phase 1 habitat survey was undertaken to confirm ecological conditions at the Site. WSP ecologists carried out an ecological walkover survey of the Site in July 2023 and took target notes of any field signs or sightings of red squirrel and pine marten. The survey of the Site identified habitat of suitability to support red squirrel and pine marten (**Figure 2**). To date, no resting places have been identified within the Site. Previous surveys have identified potential scats and feeding signs.

This Species Protection Plan (SPP) has been prepared by WSP UK Ltd. (WSP) on behalf of SSE Renewables to ensure the welfare of red squirrel and pine marten is maintained and the destruction of their dreys and dens during the Works is avoided or minimised as far as reasonably possible. The SPP will be referred to before and during the works by all personnel on Site, with the intention of ensuring legal compliance to legislation afforded to this species (outlined below).

2. Legislative Context

2.1. Red squirrel

Red squirrels and their dreys are protected by the Wildlife and Countryside Act 1981(as amended) and by the Nature Conservation Act 2004. It is an offence to intentionally or recklessly:

- Kill, injure or capture a red squirrel;
- Disturb a red squirrel in a drey; and
- Damage, destroy or obstruct access to a red squirrel drey.

This means that if red squirrels could be affected in these ways by a development, and no action is taken to prevent it, an offence may be committed.

2.2. Pine marten

Pine martens and their dens are protected by the Wildlife and Countryside Act 1981(as amended) and by the Nature Conservation Act 2004. It is an offence to intentionally or recklessly:

- Kill, injure or capture a pine marten;
- Disturb a pine marten in a den; and
- Damage, destroy or obstruct access to a pine marten den.

This means that if pine martens could be affected in these ways by a development, and no action is taken to prevent it, an offence may be committed.

3. Ecology and Field Signs

3.1. Red squirrel

Red squirrels are arboreal rodents found across woodlands in Scotland and the northwest of Scotland. The species range has been however declining in part due to habitat loss, disease and competition from the non-native grey squirrel *Sciurus carolinensis*.

They are opportunistic feeders however their primary diet is composed of seeds and fruits. They have breeding season that runs from February to September during which they may have up to two litters of kits. They produce nesting sites within the canopies of trees which are normally made up of sticks formed into a large spherical structure with an inner layer of softer material. In addition, dreys may be formed within tree cavities and other cavities available to them. Red squirrels will use multiple dreys across the year and will switch dreys including those with kits dependent on food availability, predators, weather and parasite load.

Field signs of red squirrel:

- Feeding signs: stripped cones or clean-cut nuts
- Prints
- Hair
- Dreys

It is not possible to distinguish between field signs of red and grey squirrels in the field therefore further survey is normally required to determine this in areas where the two species are present. Red squirrels can vary in colour and there can be confusion with grey squirrels; adult grey squirrels are much larger and lack ear tufts.

3.2. Pine marten

Pine martens are mustelids found across Scotland primarily in the north and central belt with a population in Dumfries and Galloway. Populations are slowly recovering from historic lows due primarily to persecution, however the species is still rare in Scotland with a population estimate of 3,700 adults.

Pine martens are territorial animals that are found in woodland and scrub habitats however are present in upland and farmland areas as well adjacent to these wooded habitats. They are omnivorous preying on smaller mammals, birds, amphibians and insects as well as berries and nuts. Their territories can extend to 20km². Within these territories they have several resting sites called dens across these areas. These dens can be found within rock piles, hollows in trees, buildings, squirrel dreys and large bird nests.

Pine martens normally have one litter per year with kits being born around March – April and are dependent on their mothers until around August. Their activity is primarily crepuscular and nocturnal.

Field signs of pine marten:

- Prints
- Dens
- Scat
- Hair

To determine the use of a pine marten den or suspected den remote camera traps are normally deployed to record activity of pine marten at these sites. Where scat/hair is found this can also be sent for DNA analysis to confirm the presence/absence of pine marten within an area.

4. Works with Potential to Impact Red Squirrel and Pine Marten

Works on site will include geotechnical investigations (GI), clear felling of forestry areas (including timber removal), construction phases and existing wind farm decommissioning phases. It is anticipated that Works will require the creation of temporary construction compounds, borrow pits and welfare facilities. The hours of work will be between the hours of 7am and 7pm.

Whilst there will likely be no direct impacts to red squirrel or pine marten, any works required within 100m of resting sites (if present) have potential to disturb these species (if present at the time of works), damage a resting site and (although unlikely) injure/kill these species. The ECoW will review works activities and may reduce the disturbance buffer to 30m if no high disturbance works (e.g. pilling, blasting or GI) are proposed. Heavy plant operating within proximity to resting or foraging habitat have potential to kill and injure these species.

5. Mitigation

5.1. Overview

All habitat suitable for red squirrel/pine marten will require a pre-construction survey prior to the commencement of any works to determine the presence/absence of red squirrel dreys and/or pine marten denning sites. Plantation felling works should aim to avoid the red squirrel and pine marten breeding seasons February to September.

Red squirrel

Where potentially active/active dreys are found during the breeding season a 50m buffer should be established between works and the drey. Outwith the breeding season this buffer can be reduced to 5m (NatureScot, 2023a). If it is not possible to avoid felling trees containing dreys or work within the aforementioned buffers further survey should be undertaken to determine if the drey is active and a licence may be required from NatureScot for the disturbance/destruction of said drey dependent on the result of the survey effort.

Dreys can only be destroyed under licence outwith the red squirrel breeding season. To determine the activity level three visual surveys should be undertaken over a minimum of three dawns in suitable weather conditions, where this is not possible a remote camera trap could be positioned near the drey or an endoscope inspection however both would require a survey licence from NatureScot.

Pine marten

Where potentially active/active dens are located during the breeding season a 100m buffer should be established between works and the dens. Outwith the breeding season this buffer can be reduced to 30m (NatureScot, 2023b). If it's not possible to avoid working within the aforementioned buffers the den site should be monitored for a period of time until with reasonable confidence it can be determined to not be in

use. Using camera traps within proximity to potential breeding dens can cause disturbance and therefore would require a licence issued by NatureScot. Where dens are to be lost, compensation may be required as a condition of the licence issued by NatureScot (e.g. erecting breeding boxes to replace lost dens)

5.2. Pre-Construction

An ecologist/ Ecological Clerk of Works (ECoW) will be appointed to oversee the Works. The appointed ecologist will be of at least 'Capable' level in surveying for and advising mitigation for red squirrels and pine marten, as per the Chartered Institute of Ecology and Environmental Management (CIEEM) competency framework (CIEEM, 2019). The appointed ecologist will then undertake and oversee the measures detailed below.

- Prior to commencement of any works, the following will be undertaken:
- The appointed ecologist will do a pre-construction survey of the Site to search for any additional potential drey/den within the relevant buffers;
- This SPP will be made available to all works personnel, with a hard copy available on Site;
- The appointed ecologist will present the information held within this SPP and any other supporting information to works personnel; and
- Where required suitable buffers will be physically marked out on Site by the appointed ecologist surrounding of potential drey/den sites within which no works should take place and no works personnel should enter without prior consent from appointed ecologist.

5.3. During Construction

The following methods will be adhered to during all construction works, to avoid/minimise disturbance impacts on red squirrels and pine martens and to ensure the welfare of red squirrel and pine martens active within the general area.

- A minimum of 100m exclusion zone is to be maintained from all potential den sites and 50m from all potential drey sites throughout construction during the breeding season for red squirrel and pine marten. Reduced to 30m and 5m respectively outwith the breeding season provided that works will not continue into the breeding season. Where this is not possible further survey within the appropriate survey season, and following best practice, will be required to determine activity at the dreys and dens. A licence from NatureScot may be required to permit disturbance or destruction of any identified dreys/dens.
- Licences for the destruction of dreys are not granted for works during the red squirrels breeding season (February to September) when they are most sensitive to disturbance. It is also unlikely that a licence will be granted for the destruction/disturbance of a pine marten breeding den during their breeding season (March to August).
- Any works associated with a NatureScot licence will follow a separate licensed method statement (which may include compensation requirements) and be overseen by the licenced ecologist.
- Construction works in proximity to a den or drey (as set out by the ecologist), will commence no earlier than one hour after sunrise, and end no later than one hour prior to sunset.
- No artificial light should directly illuminate any potential drey/den sites, foraging or commuting red squirrel and pine marten habitat;
- There will be no direct interference with any potential drey/den unless further survey is undertaken and if licenced to do so; and
- No works materials will be left within 30 m of any potential drey/den, nor at a location with potential to block access by red squirrels or pine martens to/from a drey/den site and the wider area;

Should a red squirrel or pine marten be discovered (or suspected) at any time during works, the work must stop immediately, and the appointed ECoW informed. Contact information for the appointed ecologist will be readily available to all personnel and is listed in Table 5-1 below.

Table 5-1 – Contact information for appointed ecologist

Name	Contact number	Email address
Helen Simmons	07393 008681	Helen.simmons@wsp.com
Tracy Kerr	07908 010334	Tracy.Kerr@wsp.com

5.4. Alignment with Project ECoW

It is assumed that the appointed ecologist role will be undertaken by the project ECoW where appropriate, to ensure resource efficiency, and allow a holistic approach to management of environmental/ecological issues on the Site.

5.5. Post-Construction

No post-construction mitigation is anticipated as part of this Development. This will be reviewed throughout the Development by the appointed ecologist.

6. References

CIEEM (2019). Competency Framework [online]. Available at <https://cieem.net/resource/competency-framework/> [Accessed 19/07/2023].

NatureScot (2023a) Standing advice for planning consultations – Red squirrel [online] Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-red-squirrels>

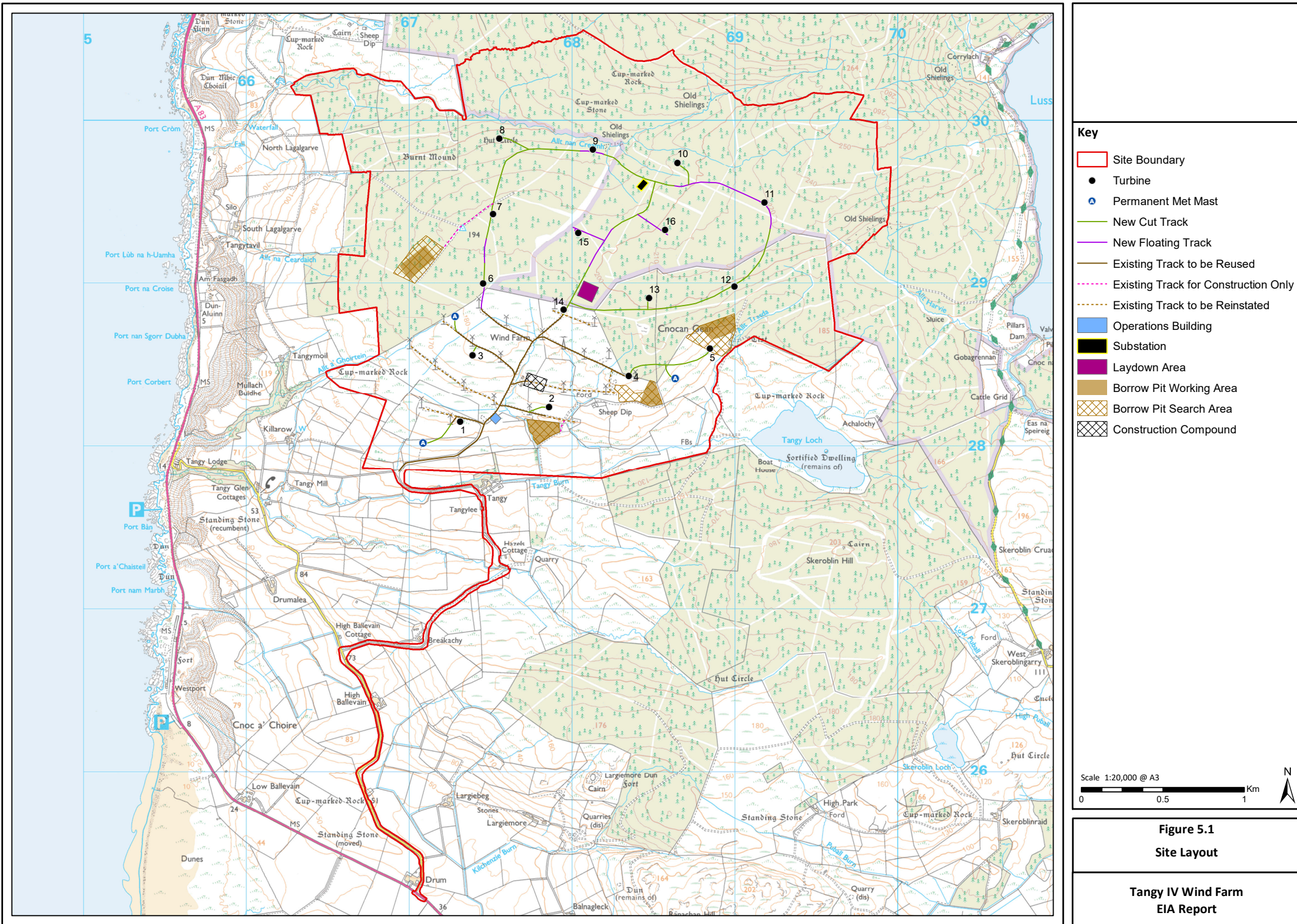
NatureScot (2023b) Standing advice for planning consultations – Pine Martens [online] Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-pine-martens>

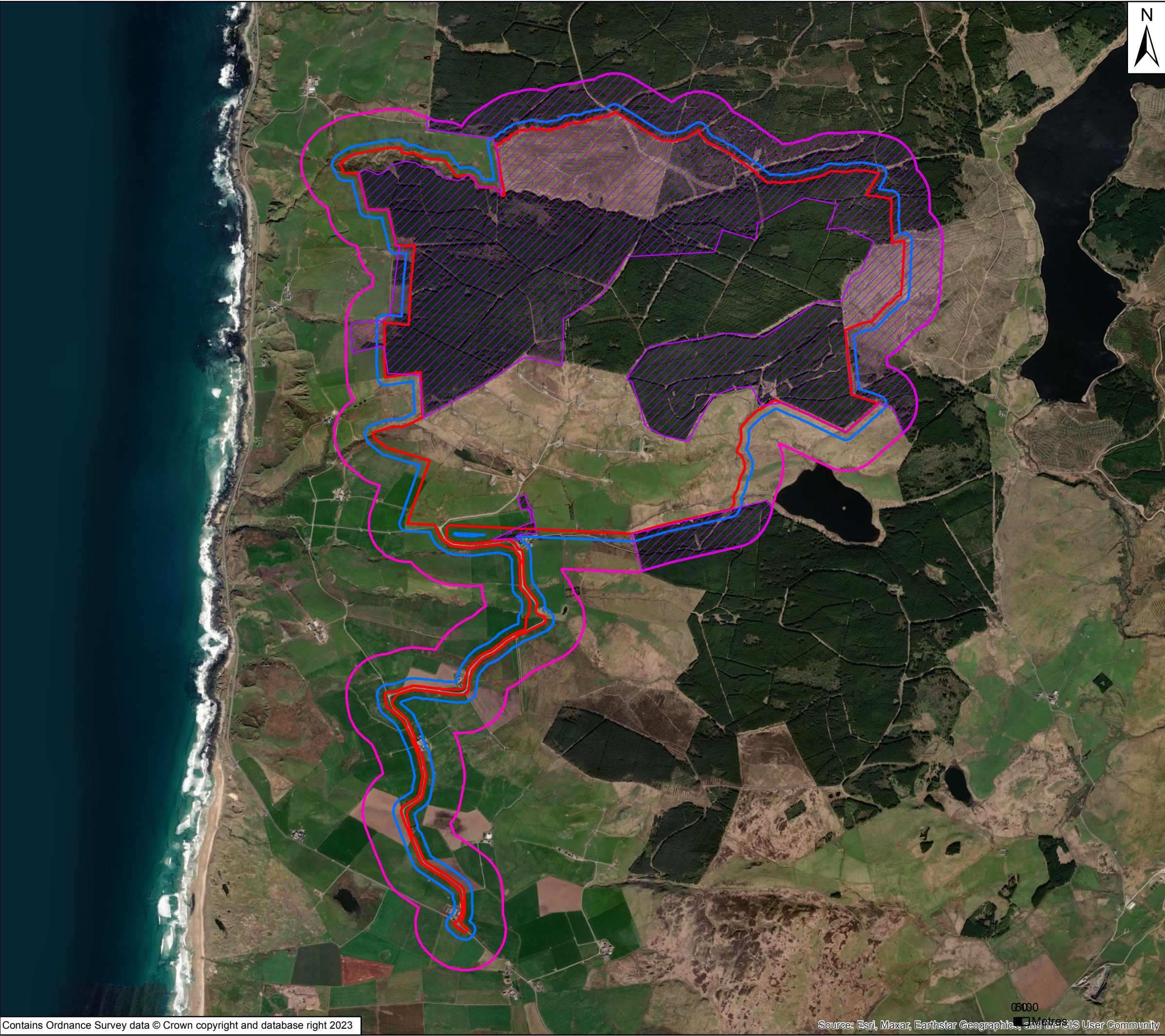
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7. Figures

Figure 1: Site Layout Plan (produced for the EIA; Figure 5.1)

Figure 2: Red Squirrel and Pine Marten Protection Plan





- Key**
- Site Boundary
 - Red Squirrel Survey Buffer - 50m Buffer
 - Pine Marten Survey Buffer - 250m Buffer
 - Suitable Habitat



Client:



Project:

Tangy IV Ecology and Ornithology

Title

Red Squirrel and Pine Marten
Protection Plan
Figure 2

Drawing No:

Layers

Drawn:

KM

Date:

08/09/2023

Checked:

DC

Scale:

24,000 @ A3

Approved:

HS