

Ornithology

Background

Pre-application advice for the proposed Development was requested from the Highland Council and a response provided in March 2019. Key issues relating to impacts on the ornithology, as provided by Scottish Natural Heritage (SNH) and additional relevant advisory bodies are summarised here.

Consultant Experience and Expertise

The technical lead for Ornithology will be Fiona Leckie from NRP. Fiona has degree in Zoology from Aberdeen University and has over 13 years' experience undertaking fieldwork on a number of proposed and existing windfarm sites in Scotland and Northern Ireland. As a project manager Fiona writes tenders and cost estimates for projects; liaises with clients, landowners and field surveyors; provides updates on continuing fieldwork; writes the Technical Reports once fieldwork is complete; and peer-reviews other project managers' reports as part of NRPs internal Quality Assurance mechanisms. Fiona is also part of the team which writes the Ornithology Assessment Chapters for Environmental Statements.

Baseline

The proposed Development occupies a site that is a conifer plantation surrounded by improved and rough-grazing and moorland areas (the Site).

The Site is not covered by any statutorily designated nature conservation site. The nearest designated sites include:

- Caithness and Sutherland Peatlands special protection area (SPA) and Ramsar site. This is approximately 1 km from the application boundary at its closest point and the qualifying interests are breeding birds: black-throated diver, red-throated diver, common scoter, wigeon, dunlin, wood sandpiper, golden plover, greenshank, golden eagle, hen harrier, merlin, short-eared owl and greylag goose.
- Caithness Lochs SPA and Ramsar site. Two component lochs (Loch of Mey and Loch Heilan) are nearby (approximately 1.5 km and 2 km at their nearest point respectively); the qualifying interests are the overwintering bird species: Greenland white-fronted goose, greylag goose and whooper swan.
- North Caithness Cliffs SPA. Three components of the SPA (Stroma, Dunnet Head and Duncansby Head) are nearby (approximately 3.5 km, 5 km and 7.5 km at their nearest points respectively), and the qualifying interests are breeding peregrine, fulmar, guillemot, razorbill, puffin, kittiwake, sandwich tern, arctic tern and seabird colony.
- Loch of Wester Site of Special Scientific Interest. This is approximately 8.5 km south of the application boundary and the qualifying interest is whooper swan that is non-breeding.

The following field-based baseline studies have been undertaken:

- Initial walkover surveys to provide an indication of which breeding bird species might be present on the proposed Development were undertaken during June and July 2017 within a 500 m buffer of the application boundary. A total of 22.75 hours of walkover and scans were undertaken on two days in each month.
- Between October 2017 and April 2018 surveys of goose and swan presence and activity around the proposed Development and the nearby SPA lochs were conducted.
- A full suite of field surveys following SNH Guidance (SNH, 2017¹) commenced in April 2018 and continued until March 2020, providing two full years of surveys. These surveys were completed within the relevant buffers from the proposed Development footprint (500 m, 1 km and 2 km, Figure 8.1²) and included:

¹ SNH Guidance: Recommended bird survey methods to inform impact assessment of onshore wind farms.

² The survey area does not cover the entirety of the Site but does cover the extent of the area where any potential turbines might be sited.

- flight activity surveys from two generic vantage point locations (GVP) (Figure 8.2) with at least 36 hours of watches during each of the breeding seasons (April to August 2018 and 2019) and the non-breeding seasons (September 2018 to March 2019 and September 2019 to March 2020), totalling 288 hours over the two years;
- additional flight activity surveys were carried out during the spring and autumn migration periods for 36 hours from one migration watch point location (MWP) in each season (March to May 2018 and 2019 and September to November 2018 and 2019) to gather information on movements of geese, swans and waders, totalling 144 hours over the two years;
- searches for scarce breeding raptors and owls within suitable habitats within a 2 km survey buffer, where access was granted. Where possible areas with no access permission were watched over. Searches focussed on species most likely to occur in the available habitats, including: hen harrier, merlin, short-eared owl and barn owl, totalling 103 hours over the two years;
- surveys for breeding waders were completed within the small amount of open ground within the 500 m buffer of the proposed Development during 2018;
- further searches of nearby lochs and fields for wintering geese and swans were conducted during October 2018 to April 2019 and October 2019 to March 2020 to add to those from 2017/2018;
- watches for signs of winter roosting by hen harriers were carried out over suitable habitats (where possible) within the 2 km survey buffer during the months of October to March in the winters of 2018/2019 and 2019/2020; and
- during the non-breeding period walkovers within the 500 m buffer were completed to complement the breeding season walkovers.

Please note that the results presented here have not been tailored to the proposed Development layout or turbine heights (as the initial design phase is yet to commence), and so may differ slightly when presented in the final assessment.

Field survey results indicate that there are no scarce birds of conservation concern breeding or roosting within the survey buffers of the Site.

Over the two years of survey, a large number of flights by greylag geese and pink-footed geese were recorded. The majority of these appear to be around the improved grazing fields that lie around 1 km to the north of the proposed Development. Further detailed analysis of the flock sizes and flight elevations will be carried out as part of the assessment process (see below).

A small number of flights by hen harrier were also recorded mainly in the open ground areas that occur in the periphery of the 500m buffer. While a small number of flights by whooper swan were recorded, in similar areas to the geese flights. Golden plover, curlew and dunlin were all recorded in flight and appear to favour the open ground areas.

Potential Effects

A full assessment of the results of the field surveys will be undertaken with regards to the potential effects on birds associated with the construction and operation of the proposed Development, which may include:

- a short-term reduction in breeding or wintering bird populations because of construction disturbance;
- a permanent reduction in breeding or wintering bird populations because of the loss of habitat critical for nesting, roosting or feeding;
- a permanent reduction in breeding or wintering populations because of the loss of individuals through collision with the turbines; and
- cumulative effects with other nearby developments that are operational during the same period, and/or with other developments that pose either a potential collision risk or loss of habitat.

Proposed Assessment Methodology and Approach

Baseline

The results of the surveys along with consultations and desk studies will be used to illustrate the current baseline of the Site.

Assessment of Effects

In assessing whether an effect is significant or not, three factors will be considered:

- the Nature Conservation Importance (NCI) of the species involved;
- the magnitude of the likely effects; and
- the conservation status of the species.

Determining Significance

Following the classification of each species' NCI and consideration of each effect, professional judgement will be used to make a reasoned argument of the likely effect on the conservation status of each potentially affected species. In accordance with the EIA Regulations, each likely effect will be evaluated and classified as either significant or not significant, in the context of the status of, and trends within, regional populations, as defined by SNH Natural Heritage Zones (NHZs). In this case NHZ 2: North Caithness and Orkney.

Mitigation

If any effects are deemed to be significant, necessary measures to mitigate the effects will be presented.

Cumulative Assessment

A cumulative assessment will consider development proposals within the relevant NHZ that are operational during the same period, and/or with other development that pose either a potential collision risk or loss of habitat.

Habitats Regulations Appraisal (HRA)

Due to the proximity of the proposed Development to parts of three SPAs (and two corresponding Ramsar sites), and the species observed during the field surveys, a shadow HRA for the Caithness and Sutherland Peatlands SPA and Ramsar and the Caithness Lochs SPA and Ramsar will be produced to aid the competent authority in their decision on whether there would be any effect on the designated sites.

Issues to be Scoped In or Out

Until the results are examined in detail all effects on all species will be scoped in to the assessment. As no species that are qualifying interests for the North Caithness Cliffs SPA were observed within any of the survey boundaries effects on this site can be scoped out.

Consultees

The consultees below will be approached for information to inform the EIA. These consultees may also be contacted by the Scottish Government regarding the scope of the EIA:

- Scottish Natural Heritage
- The Highland Council

Consultee Questions

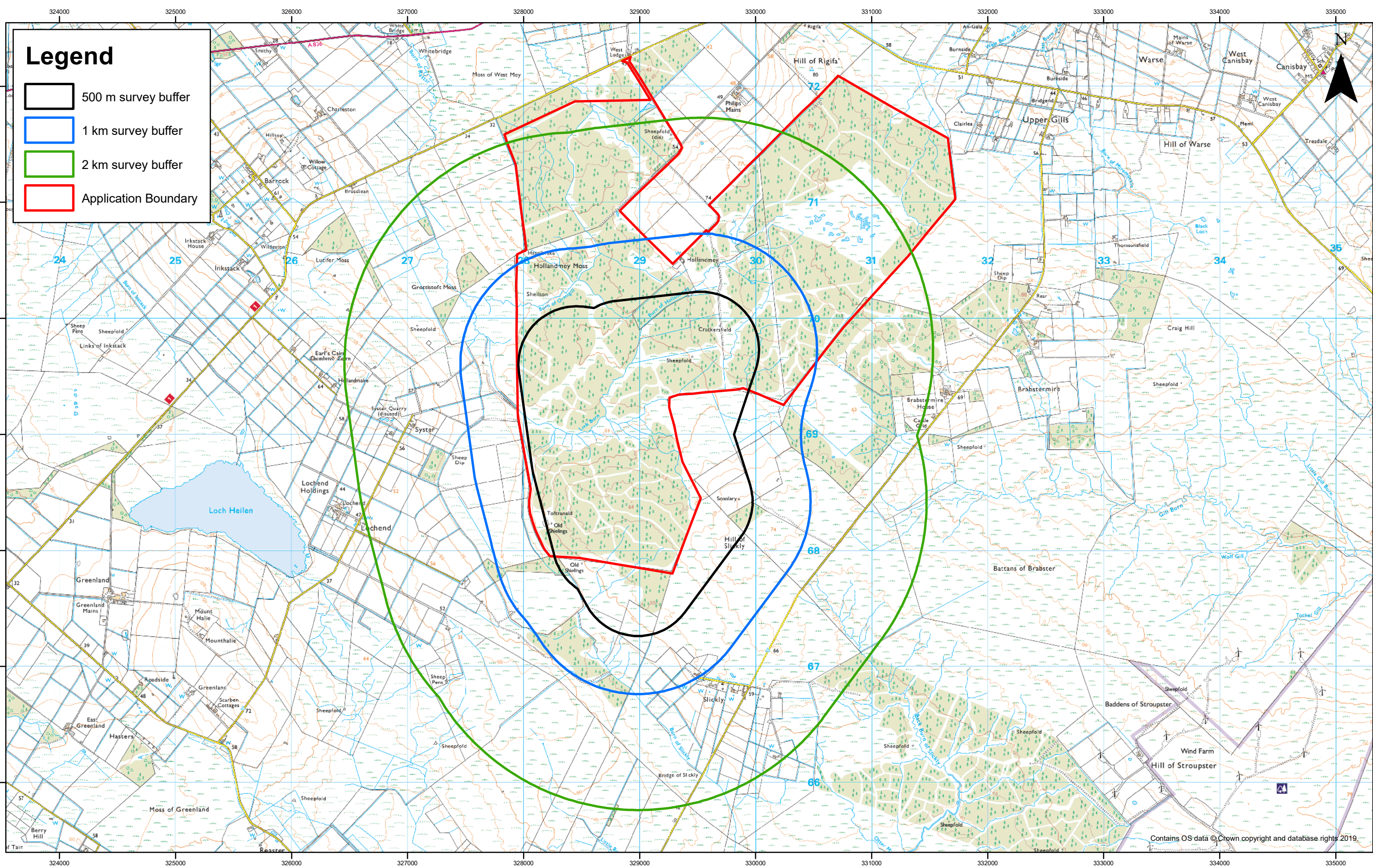
- Do the consultees agree with the proposed approach to the ornithology assessment as set out above?
- Please confirm any additional requirements that you consider should be included in this element of the EIA, which have not been covered in this information note.



Relevant Policy and Guidance

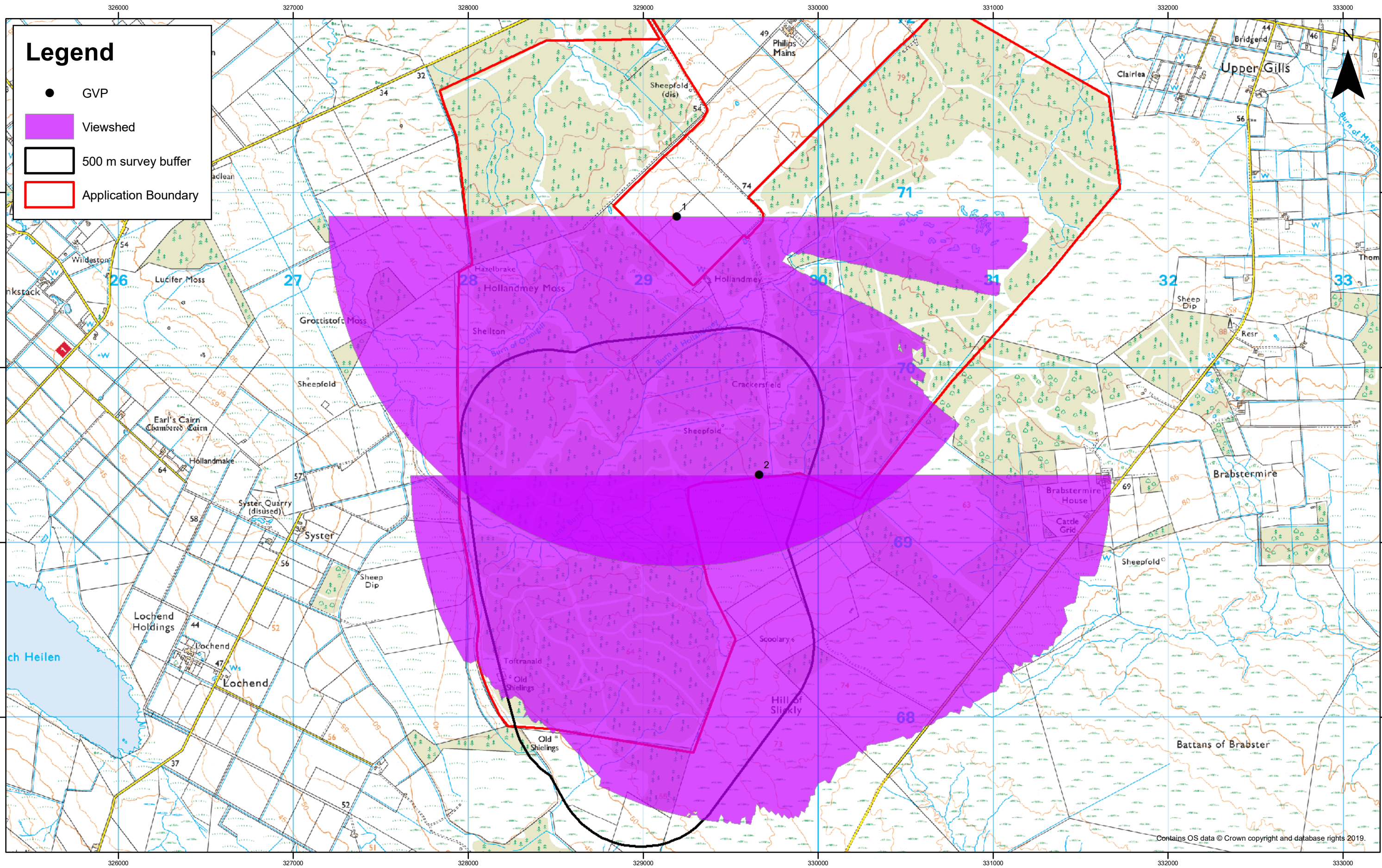
The assessment will be undertaken in line with the following legislation, policy and guidance:


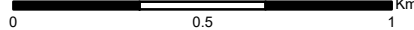
- Environmental Impact Assessment Directive 2014/52/EU.
- Directive 2009/147/EC on the Conservation of Wild Birds (the Birds Directive).
- The Conservation (Natural Habitats, &c) Regulations 1994 (as amended) ('the Habitats Regulations').

- The Wildlife and Countryside Act (as amended).
- The Nature Conservation (Scotland) Act 2004 (as amended).
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.
- Scottish Natural Heritage, (2017). Recommended bird survey methods to inform impact assessment of onshore wind farms.
- Scottish Natural Heritage, (2018). Assessing the significance of impacts on bird populations from onshore wind farms that do not affect protected areas.
- Scottish Natural Heritage, (2016). Assessing Connectivity with Special Protection Areas (SPAs).
- Scottish Natural Heritage, (2017). Use of avoidance rates in the SNH wind farm collision risk model.
- The Highland Council, (2012). Highland-wide Local Development Plan (HwLDP).
- The Highland Council, (2018). Caithness and Sutherland Local Development Plan (CaSPlan).



					1:30,000		Hollandmey Renewable Energy Development Ornithology Survey Buffers	Drg No		
	B	15/07/20	FL	Application boundary updated	Scale @ A3			Rev	B	Datum: OSGB36 Projection: TM
	A	20/05/20	FL	First Issue.	© Crown Copyright 2020. All rights reserved. Ordnance Survey Licence 0100031673.	Date		15/07/20		
	Rev	Date	By	Comment		Figure		8.1		



				1:20,000 Scale @ A3				Hollandmey Renewable Energy Development Vantage Points and Viewsheds		Drg No	
B	15/07/20	FL	Application boundary updated	© Crown Copyright 2020. All rights reserved. Ordnance Survey Licence 0100031673.				Rev		B	Datum: OSGB36 Projection: TM
A	20/05/20	FL	First Issue.					Date		15/07/20	
Rev	Date	By	Comment					Figure		8.2	