

Onshore Wind Energy Supplementary Guidance Stiùireadh Leasachail airson Lùth-Gaoithe Air Tìr

November 2016



1 Introduction	4
Pre-application Advice	6
Socio-economic benefits of onshore wind development	6
2 Highland Spatial Framework	7
3 Community and small-scale development	13
Community Renewable Energy developments	13
Advice for Small-scale Developments	13
Small-scale: Preparing Proposals	13
Small-scale: Planning Applications	14
Small-scale: Visualisation Assessment	14
Domestic Turbines: Permitted Development	15
Other information that may be required	16
4 Key Development Plan Considerations	17
Siting and Design of Wind Turbines and Wind Farms	17
Landscape and Visual Effects	17
Safety and Amenity at Sensitive Locations	20
Safety of Airport, Defence and Emergency Service Operations	21
Operational Efficiency of Other Communications	22
Operational Efficiency of Wind Energy Developments	22
The Natural and Historic Environment	22
The Water Environment	24
Peat	24
Trees and Woodland	25
Tourism and Recreation	26
Public Access	26
Traffic and Transport Interests	27
Electricity and Gas Infrastructure	27
Noise Assessment	27
Borrow Pits	28
Mitigation	29
Construction Environmental Management Plans	29
Restoration Bonds	29
Repowering	30
5 Highland Strategic Capacity	32

5.1	Loch Ness Strategic Capacity	36
5.2	Loch Ness Landscape Sensitivity	36
5.2.1	Key Views	39
5.2.2	Key Routes	42
5.2.3	Landscape Character Area 1	45
5.2.4	Landscape Character Area 2	46
5.2.5	Landscape Character Area 3	47
5.2.6	Landscape Character Area 4	47
5.2.7	Landscape Character Area 5	49
5.2.8	Landscape Character Area 6	50
5.2.9	Landscape Character Area 7	52
5.2.10	Landscape Character Area 8	53
5.2.11	Landscape Character Area 9	54
5.2.12	Landscape Character Area 10	56
5.2.13	Landscape Character Areas 11 & 12	57
5.2.14	Landscape Character Area 13	59
5.2.15	Landscape Character Area 14	60
5.2.16	Landscape Character Area 15	61
5.2.17	Landscape Character Areas 16 & 17	62
5.2.18	Landscape Character Area 18	64
5.2.19	Landscape Character Area 19	65
5.2.20	Landscape Character Area 20	67
6	Glossary	69
7	References	71

1 Introduction

Ro-ràdh

This Supplementary Guidance (SG) sets out how Highland Council will manage onshore wind energy development proposals in line with Section 22 of the [Town and Country Planning \(Scotland\) Act 1997 as amended by the Planning etc. \(Scotland\) Act 2006](#) ⁽¹⁾. Where relevant, key features, aspects or issues related to the topics contained in the Guidance are listed, these lists are informative and not exhaustive, proposals will be assessed by all relevant policies in the [Highland-wide Local Development Plan](#) (HwLDP) ⁽²⁾ (HwLDP).

When the Council deals with planning applications for proposed onshore wind energy developments, including as a statutory consultee to Scottish Government on applications over 50MW capacity, it has regard to the Development Plan (comprising Local Development Plans and Supplementary Guidance) and other material considerations. In particular Policies 67 and 68 of HwLDP deal specifically with renewable energy development and that section of the Plan refers to the Supplementary Guidance. The law states unless material considerations indicate otherwise, an application is to be determined in accordance with the development plan. This SG forms part of the development plan for Highland, supplementing key principles that are set out in policies within the HwLDP .

Scottish Planning Policy 2014 (SPP) states that “planning authorities should set out... a spatial framework identifying those areas that are likely to be most appropriate for onshore wind farms...”, and that “development plans should also set out criteria that will be considered in deciding all applications for wind farms of different scales.” These principles underpin the Council’s approach to planning for onshore wind energy.

Guidance set out in this SG applies to all scales of wind energy development, unless otherwise stated. The general guidance is relevant to both vertical and horizontal axis wind turbines.

Where reference is made to a wind energy proposal or development, this includes all associated infrastructure (for example, access tracks, transformers, turbines and their bases etc.) unless otherwise stated. Applicants are strongly encouraged to provide information on all aspects of their proposal as far as possible at application stage, including information on intentions for connection to the grid, in order that the Council has the fullest understanding of the scheme.

The diagram overleaf indicates the main steps in the planning process where there are interactions with the Council and other stakeholders.

Contact Us

Cuir Fios Thugainn

Email: devplans@highland.gov.uk

Telephone: 01349 886608

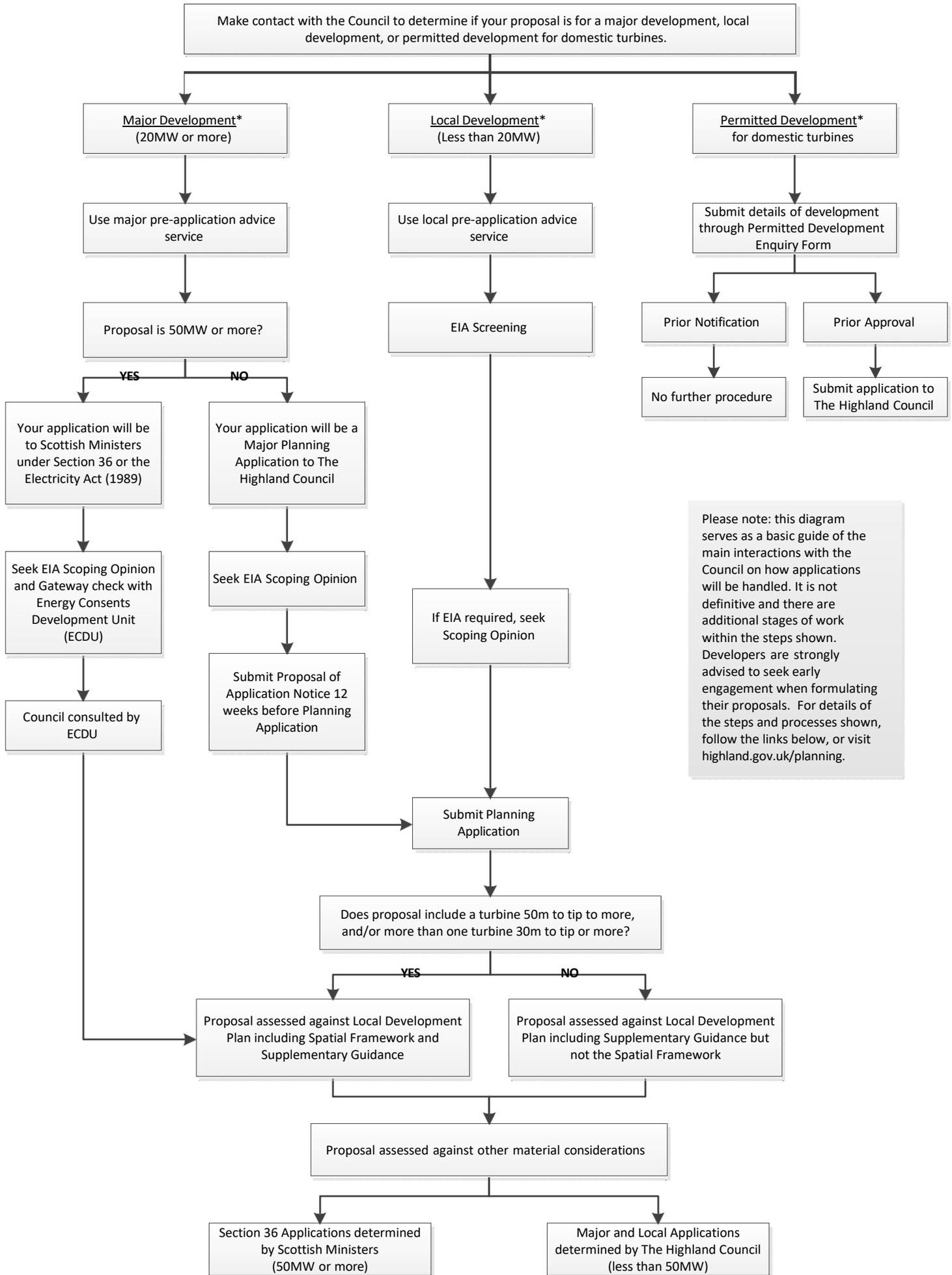
Address:

Development Plans Team
Development & Infrastructure Service
The Highland Council
Glenurquhart Road
Inverness
IV3 5NX

1 <http://www.legislation.gov.uk/ukpga/1997/8/contents>

2 http://www.highland.gov.uk/info/178/local_and_statutory_development_plans/199/highland-wide_local_development_plan

The Planning Process for Onshore Wind Energy Applications



Please note: this diagram serves as a basic guide of the main interactions with the Council on how applications will be handled. It is not definitive and there are additional stages of work within the steps shown. Developers are strongly advised to seek early engagement when formulating their proposals. For details of the steps and processes shown, follow the links below, or visit highland.gov.uk/planning.

* Major Development: http://www.highland.gov.uk/info/180/planning_-_applications_warrants_and_certificates/579/major_developments/2
 Local Development: http://www.highland.gov.uk/info/180/planning_-_applications_warrants_and_certificates/219/planning_guidance_and_advice
 Permitted Development: http://www.highland.gov.uk/downloads/file/3030/guidance_note_for_permitted_development

Pre-application Advice

1.1 The Highland Council offers a pre-application advice service to help applicants submit valid and accurate planning applications. Engaging in pre-application discussion will help avoid delays during the application process.

1.2 By taking advantage of the pre-application advice service applicants with local-scale proposals will receive reliable and up to date advice on key issues from Planning Officers. Applicants with major proposals will receive a pre-application pack outlining the key considerations relevant to their proposal and feedback from Council Officers and other key agencies (e.g. SNH, SEPA etc).

1.3 Applicants are strongly encouraged to use this service as it will help to ensure that the scope of relevant issues related to a proposal are included in any assessments required in support of a planning application. Further advice is available online:

- [Pre-application advice for local developments](#) ⁽³⁾
- [Pre-application advice for major developments](#) ⁽⁴⁾

Socio-economic benefits of onshore wind development

1.4 The National Planning Framework sets out that planning should facilitate a transition to a low carbon economy and onshore wind energy is fundamental to achieving this. Scottish Government's [2020 Routemap for Renewable Energy in Scotland](#) ⁽⁵⁾ sets a range of ambitious targets to derive proportions of heat and energy from renewables. These targets are referred to in SPP, which requires Development Plans to ensure that an area's full potential for electricity and heat from renewable sources is achieved.

1.5 The Highland Council is supportive of renewable energy development and their potential for schemes to deliver effective climate change mitigation, subject to careful balancing with the aspects discussed in this Guidance.

1.6 As well as having potential to address climate change issues, onshore wind energy may also deliver social and economic benefits to communities. This is particularly important in a Highland context where around 44% of the Council area is identified by Highlands and Islands Enterprise as Fragile Areas (2015). Where development can offer means socio-economic benefits, there may be potential to help address Fragile Areas, which are characterised by population decline, under representation of young people, lack of economic opportunities, below average incomes, and problems related to infrastructure and geographic location (Highlands and Islands Enterprise, [Review of Fragile Areas and Employment Action Areas in the Highlands and Islands](#) ⁽⁶⁾, 2015).

1.7 It is essential that in bringing forward proposals, applicants consider all opportunities for how their scheme could benefit local communities and demonstrate how it has potential to deliver social and economic benefits. A key aspect of this will be engaging with local communities to better understand local needs and issues.

1.8 The HwLDP sets out the Council's positive stance towards renewable energy developments and sets out a range of policy considerations. The advice that follows provides a fuller interpretation of HwLDP policies as they relate to onshore wind energy development. The Council will balance these considerations with wider strategic environmental and economic objectives, including sustainable economic growth in Highland, and our contribution to renewable energy targets and tackling climate change.

3 https://self.highland.gov.uk/service/Pre_application_advice_for_local_developments

4 http://www.highland.gov.uk/info/180/planning_-_applications_warrants_and_certificates/579/major_developments/2

5 <http://www.gov.scot/Publications/2011/08/04110353>

6 <http://www.hie.co.uk/common/handlers/download-document.ashx?id=25176545-481d-4be7-a747-0d0e34062df3>

2 Highland Spatial Framework

Frèam Spàsail na Gàidhealtachd airson Leasachadh Lùth-gaoithe Air-cladaich

2.1 The following section sets out the spatial framework for onshore wind energy development that applies to all onshore wind energy development proposals that meet one of the following:

- Individual turbines with a height of 50 metres and above to blade tip;
- More than one turbine with a height of 30 metres and above to blade tip.

2.2 For those developments that the spatial framework applies to, proposals should always take account of it.

2.3 SPP sets out the requirements for safeguarding areas in the three groupings of the spatial framework, these are described below:

- Group 1: Areas where windfarms will not be acceptable;
- Group 2: Areas of significant protection;
- Group 3: Areas with potential for wind farm development.

2.4 There are areas in Highland identified in the Local Development Plan as having a designated settlement edge where the primary land use may not be residential. Such areas may therefore be of lower sensitivity and this should be factored into any assessments and will be taken into account in the decision-making process.

2.5 You can view the Spatial Framework in the maps below. GIS data of the mapping is available, subject to signing a user agreement, by contacting the Council. Applicants should satisfy themselves that they have included all of the most up to date constraints on their site and that these are accounted for in the assessment of any potential impacts.

2.6 Table 1 from SPP (2014) that sets out the detail of the Spatial Framework Groupings is shown below:

Table 1: Spatial Frameworks

<p>Group 1: Areas where wind farms will not be acceptable:</p> <p>National Parks and National Scenic Areas.</p>		
<p>Group 2: Areas of significant protection:</p> <p>Recognising the need for significant protection, in these areas wind farms may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.</p>		
<p>National and international designations:</p> <ul style="list-style-type: none"> • World Heritage Sites; • Natura 2000 and Ramsar sites; • Sites of Special Scientific Interest; • National Nature Reserves; • Sites identified in the Inventory of Gardens and Designed Landscapes; • Sites identified in the Inventory of Historic Battlefields. 	<p>Other nationally important mapped environmental interests:</p> <ul style="list-style-type: none"> • areas of wild land as shown on the 2014 SNH map of wild land areas; • carbon rich soils, deep peat and priority peatland habitat. 	<p>Community separation for consideration of visual impact:</p> <ul style="list-style-type: none"> • an area not exceeding 2km around cities, towns and villages identified on the local development plan with an identified settlement envelope or edge. The extent of the area will be determined by the planning authority based on landform and other features which restrict views out from the settlement.
<p>Group 3: Areas with potential for wind farm development:</p> <p>Beyond groups 1 and 2, wind farms are likely to be acceptable, subject to detailed consideration against identified policy criteria.</p>		

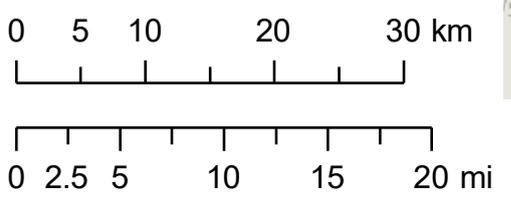
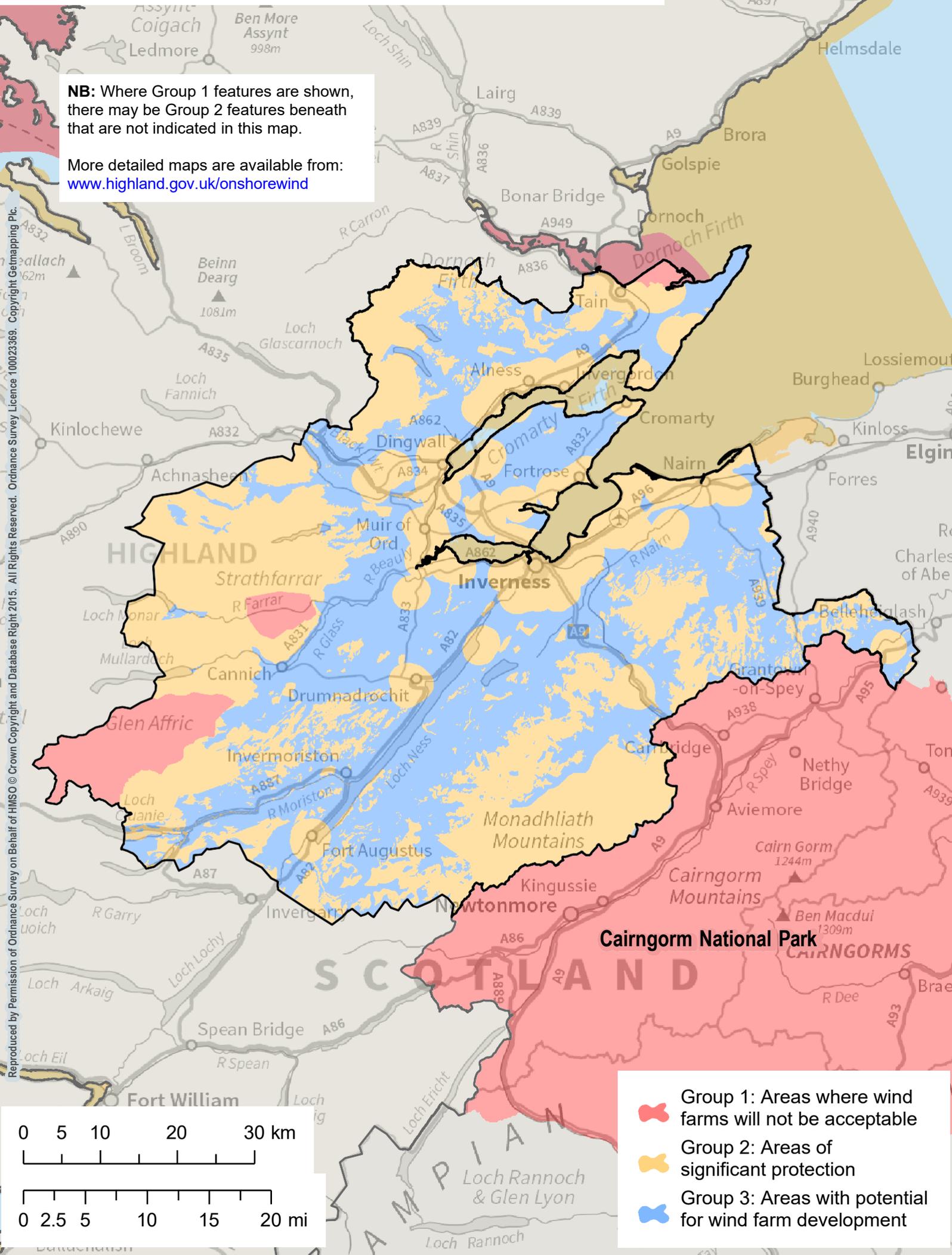
Spatial Framework for Onshore Wind Energy

August 2016 - Inner Moray Firth LDP Area

NB: Where Group 1 features are shown, there may be Group 2 features beneath that are not indicated in this map.

More detailed maps are available from:
www.highland.gov.uk/onshorewind

Reproduced by Permission of Ordnance Survey on Behalf of HMSO © Crown Copyright and Database Right 2015. All Rights Reserved. Ordnance Survey Licence 100023369. Copyright: Getmapping Plc.



-  Group 1: Areas where wind farms will not be acceptable
-  Group 2: Areas of significant protection
-  Group 3: Areas with potential for wind farm development

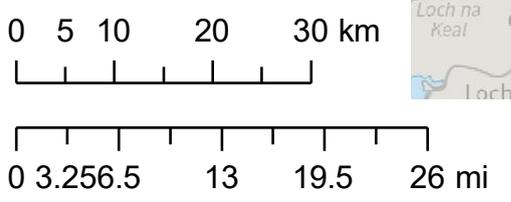
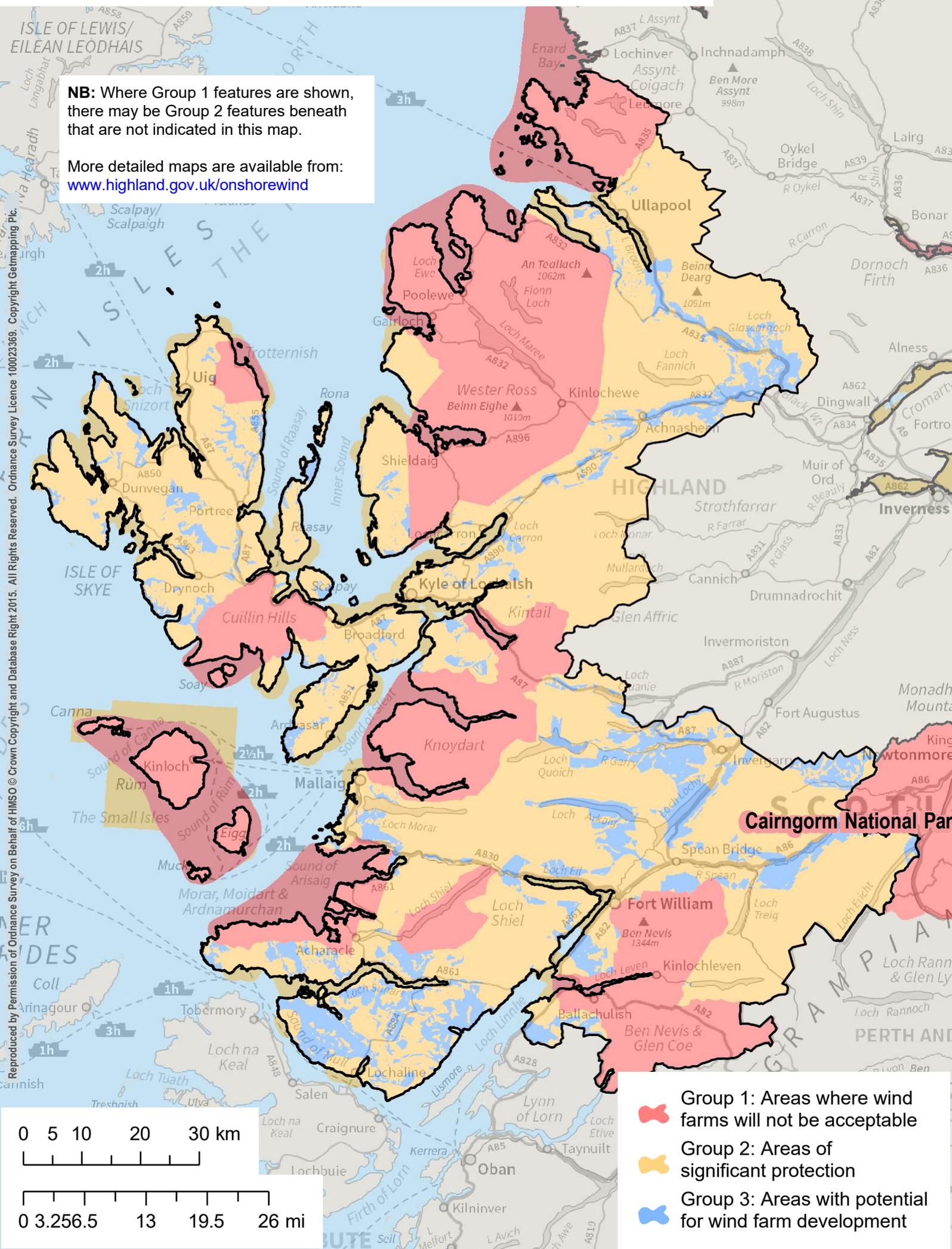
Spatial Framework for Onshore Wind Energy

August 2016 - West Highland and Islands LDP Area

NB: Where Group 1 features are shown, there may be Group 2 features beneath that are not indicated in this map.

More detailed maps are available from:
www.highland.gov.uk/onshorewind

Reproduced by permission of Ordnance Survey on behalf of HMSO © Crown Copyright and Database Right 2015. All Rights Reserved. Ordnance Survey Licence 100023369. Copyright Getmapping Plc.



- Group 1: Areas where wind farms will not be acceptable
- Group 2: Areas of significant protection
- Group 3: Areas with potential for wind farm development

3 Community and small-scale development

Leasachadh Coimhearsnachd agus Meud-beag

3.1 The following section provides advice and guidance about community and small-scale onshore wind energy developments.

Community Renewable Energy developments

3.2 The Scottish Government has ambitious targets for community and locally-owned renewables (at the time of writing, 500 MW by 2020). The HwLDP sets out the Council's support for community renewable energy developments.

3.3 A wide range of models exist whereby a community may develop renewable energy schemes. For a development to be considered a 'community' scheme, appropriate measures must normally be in place for the lifetime of the development for community ownership arrangements and for the power and/or income to go directly to an approved community organisation.

3.4 The Council/ Highlands & Islands Enterprise 'Community Toolkit' and the Scottish Government/ Community Energy Scotland publication '[Community Renewable Energy Toolkit](#)'⁽⁷⁾ provide useful information.

3.5 The Scottish Government's [Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments](#)⁽⁸⁾ may also provide useful information for relevant proposals.

Advice for Small-scale Developments

Small-scale: Preparing Proposals

3.6 All proposals for the installation of a small scale wind turbine will require approval from the Council either through the prior notification process or a planning application. Engaging in pre-application discussion will help avoid delays during the application process and will identify any problems/issues with proposals at an early stage. Further information concerning the Pre- Application Advice Service is available [online](#)⁽⁹⁾.

3.7 Anyone wishing to install a wind turbine should therefore speak to the local planning office of the Council at an early stage in the development process, in order to find out:

- whether or not the proposed development will require Environmental Impact Assessment (as a first step the prospective developer should therefore seek a screening opinion from the local planning office, an EIA screening opinion request form can be accessed [online](#)⁽¹⁰⁾);
- whether or not the proposed development is covered by 'Permitted Development Rights' (a permitted development guidance note can be accessed [online](#)⁽¹¹⁾);
- what type of application will therefore require to be submitted to the Council;
- what information should be submitted as part of the application.

3.8 Scottish Natural Heritage and the Scottish Environment Protection Agency also provide a range of advice and guidance:

3.9 [Assessing the impact of small scale wind energy proposals on the natural heritage](#)⁽¹²⁾

3.10 [Siting and Design of Small Scale Wind Turbines of between 15 and 50 metres in height](#)⁽¹³⁾

3.11 [Micro-renewables and the natural heritage](#)⁽¹⁴⁾

7 <http://www.gov.scot/Publications/2009/03/20155542/0>

8 <http://www.localenergyscotland.org/media/79714/Shared-Ownership-Good-Practice-Principles.pdf>

9 http://www.highland.gov.uk/downloads/file/1385/pre-application_advice_local_development_application_form

10 http://www.highland.gov.uk/downloads/file/10905/eia_screening_opinion_form

11 http://www.highland.gov.uk/downloads/file/3030/guidance_note_for_permitted_development

12 <http://www.snh.gov.uk/planning-and-development/renewable-energy/onshore-wind/generaladvice-and-information/>

13 <http://www.snh.gov.uk/planning-and-development/renewable%20ACenergy/onshore-wind/landscape-impacts-guidance/>

14 <http://www.snh.gov.uk/planning-and-development/renewable%20ACenergy/micro-renewables/>

[3.12 Appendix 1 of SEPA Standing Advice for planning authorities and developers on development management consultations](#) ⁽¹⁵⁾

Small-scale: Planning Applications

3.13 Applications for planning permission or for prior notification/prior approval can be made online through the ePlanning Portal; alternatively the respective application forms and guidance notes are available from Council Offices and can be downloaded [online](#) ⁽¹⁶⁾

3.14 This Supplementary Guidance should be read in conjunction with the relevant application form and guidance notes when preparing a proposal for submission.

3.15 In the case of applications for planning permission for wind turbine(s), please note that applications for Planning Permission in Principle will not be encouraged as detailed information is required for the assessment of such applications.

3.16 The following are the minimum requirements for applications for planning permission or for prior notification/prior approval in respect of wind turbine(s), and in the case of Full Planning Applications their validation is dependent upon these requirements being met:

- The appropriate completed application form (including landowner certificate in the case of Planning applications);
- Plan sufficient to identify the land to which the application relates – the application site must be outlined in red and must include all development associated with the wind turbine/s e.g. access, roads/tracks, borrow pits, transmission routes, cabins etc. Any other land owned by or within the control of the applicant must be outlined in blue;
- Plan showing the situation of the land in relation to the locality and in particular in relation to neighbouring land;
- Such other plans and drawings as are necessary to describe the development; and the appropriate fee, which is as follows:
 - In the case of planning applications – development involving wind turbines is classed as the erection, alteration or replacement of plant or machinery and the planning application fee is £401 for each 0.1ha of the site area, subject to a maximum of £20,055 (fees at May 2016).
 - In the case of prior notification/approval applications – £78 (fees at May 2016).

3.17 In order to avoid delays, applicants are requested to submit the following at the time of submission of the application as this information is required to enable us to assess the application:

- Make, model, output and tower height of the proposed turbine(s);
- Elevation drawings of the turbine(s);
- Visual assessment/visualisations (incl. photos of the site from primary view points e.g. roads, paths etc.); and
- Noise assessment/information where required by and in accordance with the relevant details contained in this Guidance.

Small-scale: Visualisation Assessment

3.18 The following guidelines outline when we will require visualisations to be lodged in support of proposals for small-scale wind turbines.

3.19 There may, however, be occasions where applications fall outwith the below criteria, but visualisations are nonetheless considered necessary; you are therefore advised to seek guidance from the relevant Local Planning Office at an early stage prior to submitting a planning application.

15 <http://www.sepa.org.uk/media/136130/sepa-standing-advice-for-%C2%ACplanning-authorities-and-developers-on-development-management-consultations.pdf>

16 http://www.highland.gov.uk/info/180/planning_-_applications_warrants_and_certificates/143/planning_permission.

3.20 In all cases where visualisations are required, they must comply with the Council's [Visualisation Standards for Wind Energy Developments](#) ⁽¹⁷⁾. Scottish Natural Heritage's visualisation guidelines should also be referred to.

3.21 Visualisations will be required in support of proposals for small-scale wind turbine(s), if:

- two or more turbines are proposed; or
- the hub height of the turbine would exceed 15m, measured from the ground to the uppermost point of the hub; or
- the turbine(s) would be located within a 'Sensitive Area' as defined in section 2 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 (being Sites of Special Scientific Interest; Land subject to Nature Conservation Orders; International Conservation Sites; National Scenic Areas; World Heritage Sites; Scheduled Monuments; National Parks) or, in terms of local/regional landscape features, a Special Landscape Area (SLA), wild land areas or an area designated as having important Views Over Open Water; or
- the turbine(s) would be located outwith the 'Sensitive Areas' and local/regional landscape features listed above, but could have significant impact on their safeguarded interests where relevant in terms of landscape and views; or
- the turbine(s) would be located within, or within the general visual envelope/setting of, a Conservation Area or Category A listed building.

3.22 Applicants will be expected to provide a Zone of Theoretical Visibility (ZTV) for their scheme at an early stage, which will help to identify the requirements for visualisations and ensure that the requirements are relevant and proportionate to the particular case, including an appropriate set of viewpoints being identified.

3.23 To enable assessment of the potential cumulative impact of the proposal, visualisations should in particular include all other relevant wind turbines, be they existing, consented or subject of an application yet to be determined. Where cumulative impact is likely to be a significant issue to determination of the proposal, additional visualisations may be required.

Domestic Turbines: Permitted Development

3.24 For the purposes of defining if a proposal is a Permitted Development under the [Town and Country Planning \(General Permitted Development\) \(Scotland\) Order 1992 \(as amended\)](#) ⁽¹⁸⁾ a turbine will be considered to be domestic where:

- its primary purpose is to power a domestic property;
- its total installed capacity is not more than 6KW; and
- the annual output of electricity exported to the grid does not exceed the total energy requirements of the domestic property by more than 25%.

3.25 Class 6G of the Order provides for the installation, alteration or replacement of a free standing wind turbine within the curtilage of a dwelling in certain cases without the need for a planning application. One of the conditions that must be met is that the turbine is used only for the purposes of producing electricity or heat for domestic consumption using microgeneration equipment. However development is not permitted under the Order and a planning application is required if:

- it would result in the presence within the curtilage of a dwelling of more than one free standing wind turbine; or
- the wind turbine would be situated less than 100m from the curtilage of another dwelling; or
- the site is located within: a conservation area; a world heritage site; a site of special scientific interest; a site of archaeological interest; or within the curtilage of a listed building.

3.26 Wind turbines attached to buildings have no permitted development rights and therefore require planning permission.

17 http://www.highland.gov.uk/downloads/file/12880/visualisation_standards_for_wind_energy_developments

18 <http://www.legislation.gov.uk/>

3.27 Wind turbine proposals which are permitted development do however require the submission of an application for prior notification in respect of the design and size of the proposed wind turbine, and a determination as to whether our prior approval is required in respect of the siting and external appearance of the turbine.

Other information that may be required

3.28 Advert fee – We are required to place a notice in a local newspaper where there are no premises on neighbouring land to which a neighbour notification can be sent. The advert fee is £110 and we will advise if this is required (fees at May 2016).

3.29 A Design Statement must be submitted with planning applications for wind turbines which are located within: a world heritage site; a conservation area; a historic garden or designed landscape; a national scenic area; a site of a scheduled monument; or the curtilage of a Category A listed building.

3.30 It should be noted that the above is not exhaustive as requirements for additional information vary on a case by case basis. You are advised to seek pre-application advice so that any additional requirements can be identified at an early stage. For example you may need to carry out surveys, assessments or consultations for potential impacts on designated areas (such as European nature conservation sites), species and habitats, the water environment, peatland, landscape, aviation and defence interests or in terms of shadow flicker or flood risk. You may also be required to prepare plans for environmental management or mitigation in relation to the impacts of your development. We may refer you to other policy or guidance of the Council and/or that of external national organisations, such as those referred to elsewhere in this document.

3.31 Environmental Impact Assessment (EIA) – Environmental Impact Assessment (EIA) is designed to identify the likely significant environmental effects of certain types of development, before planning applications are determined. This helps us to understand the predicted environmental effects of a proposal and to identify the potential for reducing, avoiding or offsetting any adverse impacts, before a planning application is determined.

3.32 All proposals for wind turbines within the following 'sensitive areas' require to be screened for the need for EIA: Sites of Special Scientific Interest; Land subject to Nature Conservation Orders; International Conservation Sites; National Scenic Areas; World Heritage Sites; Scheduled Monuments; National Parks.

3.33 Proposals for wind turbines not located within 'sensitive areas' which involve more than 2 turbines, or where the hub height of any turbine or height of any other structure exceeds 15m also require to be screened for the need for EIA. Screening for the need for EIA should be carried out prior to the submission of a planning application. Further information can be obtained from your local planning office. Where screening determines that an EIA is required, the EIA should be subject of a scoping to identify the matters to be covered in the Environmental Statement. This will help to ensure that the EIA carried out is fit for purpose, relevant and proportionate.

3.34 It should be noted that proposals for any wind turbine which requires EIA will require submission of a planning application and is not permitted development. The planning application should be accompanied by the Environmental Statement. Also it should be noted that a higher advert fee is required for an application accompanied by an EIA.

4 Key Development Plan Considerations

Prìomh Bheachdachaidhean a' Phlana Leasachaidh

4.1 This section sets out how important features and assets identified in HwLDP are expected to be safeguarded in relation to onshore wind energy development.

4.2 Where smaller and larger scale wind energy developments are referred to, these generally follow the definitions below, but may vary depending on a range of factors that will be taken into account on a case by case basis:

- Smaller-scale wind energy development- generally turbines below 30m to blade tip
- Larger-scale wind energy development- generally turbines of 30m or above to blade tip

Siting and Design of Wind Turbines and Wind Farms

4.3 Sensitive siting and design plays an important part in making wind energy developments an accepted feature of the environment. The optimum position for a turbine will depend on individual circumstances and will be influenced by the size and type of turbine and its surrounding environment.

4.4 HwLDP sets out our specific expectations for safeguarding important natural environment features, some of which relate to the high quality landscapes of Highland. HwLDP also sets out our expectations for the proportionate landscape assessment of development proposals. These policies are relevant to wind energy development and particularly the siting and design of schemes.

4.5 The operational efficiency of a windfarm, whilst key for commercial and energy generation reasons, is a matter for developers. However the Council does expect these considerations to be balanced with adequate mitigation of adverse impacts, siting and design of schemes is a key aspect of such mitigation.

4.6 Design and layout of access tracks and other infrastructure will also be an important consideration in terms of the overall impact of a scheme and developers are expected to provide details of these aspects of the development. This includes associated infrastructure like plans for connecting the scheme to the electricity transmission grid (whilst it is acknowledged that such information is not always available, or subject to change, the Council strongly encourage this information to be provided in order to consider the scheme in its entirety).

4.7 The evolution of the design of a scheme provides useful information for assessing applications. Developers are encouraged to illustrate and explain the steps taken in developing the design and layout of their project, for example how it has responded through iterations to any issues that have been identified through that process.

4.8 SNH have guidance on [Siting and designing windfarms in the landscape \(2014\)](#) ⁽¹⁹⁾ and guidance on [siting and design for turbines at the lower height ranges \(2012\)](#) ⁽²⁰⁾, and these should be referred to when designing schemes.

4.9 The cumulative impact (which includes but is not limited to landscape and visual impacts, including on residential amenity) of an increasing number of wind turbines within a locality in Highland is a matter that the Council monitor. There are particular pressure areas for wind energy development in Highland that are addressed in the 5 'Highland Strategic Capacity' section of this guidance.

Landscape and Visual Effects

4.10 All proposals should seek to avoid significant adverse landscape and visual effects individually and cumulatively, taking into account other built and permitted proposals as well as valid planning applications not yet determined (the weight apportioned to each will reflect their position in the planning process).

19 <http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=2128>

20 <http://www.snh.gov.uk/docs/A675507.pdf>

4.11 The following key aspects may be relevant in the assessment of a proposal and should be taken into account when preparing an application. They are not tests, but rather highlight where there may be key issues to consider:

- National Parks, National Scenic Areas and mapped wild land areas;
- Special Landscape Areas ([including their citations](#) ⁽²¹⁾);
- The capacity of the local landscape character (as defined within a Landscape Character Assessment) to accommodate the proposal;
- 2km from residential buildings and boundaries of settlements (mapped, where relevant)
- Important public views (this includes considering impacts to popular viewpoints, the adopted road network, key and designated tourist routes, public footpaths, core paths and other recognised visitor locations).

4.12 The scope of assessments required to address the key aspects above should be agreed with the Council at the earliest opportunity, for example through the Council's 'Pre-application Advice' service. This may include, for example, confirmation that there are residential properties in the vicinity of a proposal and/ or important public views that should be assessed for visual amenity within a landscape and visual assessment, taking into account the sensitivity of visual receptors.

4.13 Applicants should also seek to engage with local community groups to help identify locally valued features and assets, for example, by engaging with Community Councils and local interest groups.

4.14 Where effects are unavoidable, appropriate mitigation will be required to overcome or otherwise minimise impacts. For example, this may include:

- Careful siting of turbines to seek to reduce overall impact of the scheme;
- Amending turbine configurations, including hub height, rotor diameter, and blade rotation speed;
- Adjusting the number of turbines;
- Considering turbine colour, including any variation from the typical off-white/ pale grey colours;
- Design and arrangement of any lighting required to minimise its impact;
- Undergrounding of any power lines connecting individual turbines to any on-site sub-station;
- Undergrounding or sensitive treatment of those power lines connecting any wind farm sub- station to the electricity distribution system;
- Arrangements for any transformers for individual turbines (the Council expects these to be accommodated and enclosed within the turbine mast in order to reduce the landscape and visual impact of the development);
- Length, route, visibility and methods and materials used in the construction of access tracks.

4.15 The Council has [Visualisation Standards for Wind Energy Developments \(2015\)](#) ⁽²²⁾ and developers will be expected to follow these in preparing their submission. These differ from guidance by SNH in their publication [Visual Representation of Windfarms](#) ⁽²³⁾ (2014); but, the Council's standards do not seek additional information, rather the information to be presented in a particular way. Developers are encouraged to discuss and confirm intentions for the preparation of visualisations with the Council in advance of preparing their submission.

4.16 The following criteria set out key landscape and visual aspects that the Council will use as a framework and focus for assessing proposals, including discussions with applicants. Applicants are strongly encouraged to seek 'Pre-application Advice' to help identify what criteria are relevant to their proposal.

4.17 The criteria do not set absolute requirements but seek to ensure that developers are aware of key constraints to development. It is the Council's expectation that applicants will site and design schemes to avoid significant adverse impacts in order that they reflect the criteria below. The assessment will be based on the characteristics of the proposal and its surrounding area (e.g. existing turbine scale, density, landscape character etc.):

21 http://www.highland.gov.uk/download/downloads/id/2937/assessment_of_highland_special_landscape_areas.pdf

22 http://www.highland.gov.uk/download/downloads/id/12880/visualisation_standards_for_wind_energy_developments.pdf

23 <http://www.snh.gov.uk/publications/heritagemanagement/visual%20representation%20of%20wind%20farms%20-%20version%2021%20-%20December%202014.pdf>

Criterion 1	Measure
Relationship between Settlements/Key locations and wider landscape respected.	The extent to which the proposal contributes to perception of settlements or key locations being encircled by wind energy development
Development should seek to achieve a threshold where:	Turbines are not visually prominent in the majority of views within or from settlements/Key Locations or from the majority of its access routes.

Criterion 2	Measure
Key Gateway locations and routes are respected	The extent to which the proposal reduces or detracts from the transitional experience of key Gateway Locations and routes.
Development should seek to achieve a threshold where:	Wind Turbines or other infrastructure do not overwhelm or otherwise detract from landscape characteristics which contribute the distinctive transitional experience found at key gateway locations and routes.

Criterion 3	Measure
Valued natural and cultural landmarks are respected	The extent to which the proposal affects the fabric and setting of valued natural and cultural landmarks
Development should seek to achieve a threshold where:	The development does not, by its presence, diminish the prominence of the landmark or disrupt its relationship to its setting.

Criterion 4	Measure
The amenity of key recreational routes and ways is respected.	The extent to which the proposal affects the amenity of key recreational routes and ways (e.g. Core Paths, Munros and Corbetts, Long Distance Routes etc.)
Development should seek to achieve a threshold where:	Wind Turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of key routes and ways.

Criterion 5	Measure
The amenity of transport routes is respected	The extent to which the proposal affects the amenity of transport routes (tourist routes as well as rail, ferry routes and local road access)
Development should seek to achieve a threshold where:	Wind Turbines or other infrastructure do not overwhelm or otherwise significantly detract from the visual appeal of transport routes

Criterion 6	Measure
The existing pattern of Wind Energy Development is respected.	<p>The degree to which the proposal fits with the existing pattern of nearby wind energy development, considerations include:</p> <ul style="list-style-type: none"> • Turbine height and proportions, • density and spacing of turbines within developments, • density and spacing of developments, • typical relationship of development to the landscape. • previously instituted mitigation measures • Planning Authority stated aims for development of area

Development should seek to achieve a threshold where:	The proposal contributes positively to existing pattern or objectives for development in the area.
---	--

Criterion 7	Measure
The need for separation between developments and/or clusters is respected	The extent to which the proposal maintains or affects the spaces between existing developments and/ or clusters
Development should seek to achieve a threshold where:	The proposal maintains appropriate and effective separation between developments and/ or clusters

Criterion 8	Measure
The perception of landscape scale and distance is respected	The extent to which the proposal maintains or affects receptors' existing perception of landscape scale and distance.
Development should seek to achieve a threshold where:	The proposal maintains the apparent landscape scale and/or distance in the receptors' perception.

Criterion 9	Measure
Landscape setting of nearby wind energy developments is respected	The extent to which the landscape setting of nearby wind energy developments is affected by the proposal.
Development should seek to achieve a threshold where:	Proposal relates well to the existing landscape setting and does not increase the perceived visual prominence of surrounding wind turbines.

Criterion 10	Measure
Distinctiveness of Landscape character is respected	The extent to which a proposal affects the distinction between neighbouring landscape character types, in areas where the variety of character is important to the appreciation of the landscape.
Development should seek to achieve a threshold where:	Integrity and variety of Landscape Character Areas are maintained.

Safety and Amenity at Sensitive Locations

4.18 A range of issues that are afforded policy provision in HwLDP are set out below that specifically address the potential effects of wind energy developments on safety and residential amenity.

4.19 The Council considers all residential buildings to be particularly sensitive to wind energy development. Where larger scale developments are proposed within 2km of residential buildings and settlements, applicants will be expected to clearly demonstrate how potential impacts on amenity have been avoided or mitigated.

4.20 Impacts to communities' amenity should be assessed at a range of receptor locations including residential properties, work places and recognised visitor sites. This should include consideration of receptors outwith any defined settlement boundary.

4.21 The following issues will be taken into consideration when assessing proposals, the scope of assessments required should be agreed with the Council as early in the planning process as possible.

- a. **Safety:** All proposals should seek to avoid significant adverse effects on the safety of any residential or regularly occupied property including: noise pollution, ice throw in winter conditions, shadow flicker or shadow throw. It may be appropriate to set back turbines from such properties or implement turbine shut-down when necessary, although significant separation will normally be expected in any case. The Council encourage schemes to be designed in order that turbines are proposed to be sited at least a minimum distance equivalent to twice the height of the turbine to blade tip from public roads and railways. This is to ensure adequate safety to road and rail from turbine collapse and to limit any potential impact of distraction caused to users (including cyclists, horse riders, pedestrians etc.). This distance will also retain the ability for micro-siting that would result in the turbines being constructed closer to the public road or railway whilst still maintaining a sufficient set back distance.
- b. **Landscape and visual impacts:** All proposals should seek to avoid or mitigate impacts on landscape and visual amenity. The principles that will guide assessment of these issues are set out in the section on 'Landscape and Visual Effects'
- c. **Noise:** The Council consider noise as a particularly sensitive issue. The assessment methods used and key guiding principles that will form the basis of noise assessment are set out in the section on 'Noise Assessment'.
- d. **Shadow flicker, and blade glint, glare and light effects:** Wind energy schemes should always be designed to avoid causing shadow flicker, blade glint, glare and light effects to any regularly occupied buildings not associated with the development. Where this cannot be achieved, the Council will expect wind energy developments to be located a minimum distance of 11 times the blade diameter of the turbine(s) from any regularly occupied buildings not associated with the development. Within a distance less than 11 times the blade diameter, a shadow flicker assessment will be required. The Council may support a scheme that relies on mitigation, where it is deemed to be effective. In such instances turbine shutdown systems will be the required mitigation. The increase in distance from the widely accepted 10 times rotor diameter to 11 is to account for the northern latitudes of Highland- this is in line with the conclusions of the [DECC Update of UK Shadow Flicker Evidence Base, 2011](#) ⁽²⁴⁾.
- e. **Mitigation by conditions:** The Council may impose planning conditions to ensure adequate mitigation of impacts on amenity at sensitive locations, for example to address: noise levels; traffic management; commissioning and decommissioning arrangements and correction of any electro-magnetic interference. Scottish Government's planning advice discusses these matters further and provides further guidance and assessment methods.

4.22 Due to the potential impacts arising from wind energy developments, the presence of wind turbines may have some limiting effects on the potential to subsequently develop land in the area for other uses. It is therefore important to consider the impact of proposed wind energy development not only on existing land uses but also those permitted or which are included as specific proposals in the Development Plan. The scope of assessment necessary to consider such impacts should be agreed with the Council.

Safety of Airport, Defence and Emergency Service Operations

4.23 All proposals should seek to avoid significant adverse effects, individually and cumulatively, on airport, defence or emergency service operations. This includes flight activity; navigation and surveillance systems; and associated infrastructure.

4.24 A consultation proforma was agreed between the British Wind Energy Association and key aviation consultees such as the Ministry of Defence, National Air Traffic Service and the UK Civil Aviation Authority to initiate a consultation. Applicants are encouraged to engage this process where relevant. Furthermore the MOD also provides advice through their wind energy and aviation helpline number: 0121 311 3847, and through an [online form](#) ⁽²⁵⁾.

24 http://webarchive.nationalarchives.gov.uk/20121217150421/http://www.decc.gov.uk/content/what_we_do/uk_supply/energy_matters/department_of_wind_turbine_shadow_flicker.aspx
 25 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/286293/20131119_consultation_pro-forma.doc

4.25 Developers should make themselves aware of the full extent of the aviation stakeholders in their area who may be affected by their proposal. The CAA general advice continues to be that developers of potential wind farms should engage with aviation stakeholders at the earliest opportunity, using the guidance provided in CAA Publication 764. Any impact on aviation can therefore be mitigated ahead of the formal planning process.

4.26 When designing and siting proposals developers should pay particular regard to:

- MOD 'Safeguarding Extents'
- Health & Safety Executive Safeguarding Zones
- NATS En Route Plc Safeguarding Maps³
- Department of Trade and Industry "Wind Energy and Aviation Interest – Interim Guidance"
- Airport Safeguarding Surfaces
- Private Airfields

Operational Efficiency of Other Communications

4.27 The siting of wind turbines must have regard to radio, TV, telecoms and other communication systems. Developments shall be assessed by consultation with relevant operators. Planning conditions or legal agreements may require developers to correct any electromagnetic interference at their own expense. The Joint Radio Company should be contacted for joint screening for telemetry or microwave links in use by either electricity or gas utilities.

Operational Efficiency of Wind Energy Developments

4.28 The Council expect that wind farms should be efficient. Therefore existing and consented wind farms' operational efficiency should not be compromised by adjacent development proposals. For example:

- where a new adjacent wind farm proposal could reduce the wind resource of the existing or consented scheme;
- where a new adjacent proposal for another type of use, for example a large industrial building, could reduce the wind resource of the existing or consented scheme; or
- where there is an allocated development site for another type of use (e.g. an allocated housing site in an adopted Local Development Plan) that may have the potential to limit the efficiency of the proposal (e.g. by requiring mitigation).

4.29 It is also the Council's expectation that mitigation measures, for example turbine shut down, should be proposed only as a last resort as this has potential to adversely impact on the efficiency of the scheme.

4.30 To find out more about the location of windfarm developments and proposals, applicants should refer to the [Highland Windmap](#) ⁽²⁶⁾ and the Council's [eplanning webpages](#) ⁽²⁷⁾.

The Natural and Historic Environment

4.31 HwLDP policies set out how we manage all development in relation to our rich natural and historic environment. The following list highlights key aspects related to onshore wind:

- a. Any proposal likely to have a significant effect on a European site (Special Area of Conservation or Special Protection Area) should provide sufficient information to enable the Council to carry out an 'appropriate assessment' of its implications for the European site in view of its conservation objectives, in line with the Conservation (Natural habitats &c.) Regulations 1994 as amended. If it cannot be demonstrated that the proposal will not adversely affect the integrity of the site concerned, it can only proceed if there are no alternative solutions and the plan or project must be carried out for imperative reasons of overriding public interest. Where the site concerned hosts a priority species however, the overriding interest must relate to human health, public safety or have beneficial consequences of primary importance to the environment.

26 http://www.highland.gov.uk/info/198/planning_-_long_term_and_area_policies/152/renewable_energy/5

27 <http://wam.highland.gov.uk/wam/>

- b. Developers are reminded that even if their proposal is not within a Natura site, it may still have potential to have an effect on a site, including its qualifying interests, and this should be taken into account in assessing a proposal.
- c. Applicants may refer to relevant SNH guidance, for example their [Guidance on Assessing Connectivity with Special Protection Areas](#) ⁽²⁸⁾ and [Guidance on Assessing the Cumulative Impact of Onshore Wind Energy Developments](#) ⁽²⁹⁾. Where a habitat management plan is necessary developers should consult the SNH guidance: [Good Practice During Windfarm Construction](#) ⁽³⁰⁾.
- d. Proposals should seek to avoid compromising the natural environment resources of Highland. Potential for significant adverse effects on nationally important features must be clearly outweighed by social or economic benefit of national importance.
- e. All proposals must have regard to the Highland [Special Landscape Areas including their citations](#) ⁽³¹⁾ that summarise key characteristics; qualities; sensitivities, and measures for enhancement. These citations will be used to assess impacts of proposals where relevant.
- f. All proposals should seek to avoid significant adverse effects on the siting, context or setting of historic environment assets, including direct physical, indirect or cumulative impact. The Council will have regard to the importance and qualities of the asset, the nature of the impacts, and the effectiveness of any mitigation proposed.
- g. Applicants may refer to relevant Historic Environment Scotland publications including information on [Environmental Impact Assessment and the Historic Environment](#) ⁽³²⁾ and their [Managing Change Guidance Note on Setting](#) ⁽³³⁾, and the Council's [Historic Environment Strategy](#) ⁽³⁴⁾ and [other information](#) ⁽³⁵⁾
- h. Where a proposal is likely to have significant effects on the qualities of a mapped area of wild land, as identified on the SNH Wild Land Areas Map (2014) a wild land assessment shall be required, and should be carried out in line with current [SNH guidance](#) ⁽³⁶⁾. Wind energy developments within mapped areas of wild land are unlikely to be supported unless it can be demonstrated that significant effects on the qualities of these areas can be substantially overcome by siting, design and other mitigation. Development outwith mapped areas of wild land that could have significant effects upon perceptual qualities of the wild land area may also require a wild land assessment.
- i. Onshore Wind Energy developments have potential to impact upon species and habitats, for example by disturbance or collision risk. This may also include cumulative impacts that could have a limiting effect on the potential for future development. Developers should refer to HwLDP policies for details of the protection afforded to species and habitats. Species identified in Schedules 2 and 4 of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (European Protected Species) should seek to avoid any adverse impacts on these species. Where a license is required, the Council must be satisfied that all three tests could be met under Regulation 44.
- j. The Council will give due consideration to the wider natural heritage beyond the confines of designated sites, particularly those listed below, where they are of major importance or contribute to the coherence of the Natura network of European sites:
- Areas of habitats listed in Annex 1 and the habitats of species of community interest listed in Annexes 2, 4 and 5 of the Habitats Directive;
 - Areas which support habitats of naturally occurring wild birds, particularly those on Annex 1 of the Birds Directive, migratory species and birds of conservation concern on the Red and Amber Lists.
- k. Consideration will also be given to species listed in [Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 \(as amended\)](#) ⁽³⁷⁾. Licensing requirements have been added by s. 18 of the Wildlife and Natural Environment (Scotland) Act 2011 inserting s. 16 (3) of the Wildlife and Countryside Act 1981 as amended. Thus where a licence is required the Council will need to be satisfied that (a) undertaking the conduct so

28 <http://www.snh.gov.uk/docs/A994842.pdf>

29 <http://www.snh.gov.uk/docs/A675503.pdf>

30 <http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=1618>

31 http://www.highland.gov.uk/download/downloads/id/2937/assessment_of_highland_special_landscape_areas.pdf

32 <https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/environmental-assessment/our-role-in-environmental-impact-assessment/>

33 <http://www.historic-scotland.gov.uk/setting-2.pdf>

34 http://www.highland.gov.uk/download/downloads/id/11047/highland_historic_environment_strategy.pdf

35 http://www.highland.gov.uk/info/20004/local_history_and_heritage/512/protecting_the_historic_environment

36 <http://www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/landscape-policy-and-guidance/wild-land/mapping/>

37 <http://www.legislation.gov.uk/ukpga/1981/69/contents>

authorised will give rise to, or contribute towards the achievement of, a significant social, economic or environmental benefit, and (b) there is no other satisfactory solution. The Council has [Supplementary Guidance on statutorily protected species](#) ⁽³⁸⁾ and this should be referred to by any prospective developer.

- i. The potential for impacts of any secondary developments such as power lines or transmission stations (for example sub-stations, switching stations etc.) should also be addressed where relevant.

The Water Environment

4.32 Developments should be designed to avoid impacts upon the water environment wherever possible. There should remain a minimum buffer of 50 m between any works and the water environment. Where impacts on the water environment cannot be avoided then developers will be expected to demonstrate how these impacts will be mitigated. The water environment includes ground water, surface water (including water supplies), and groundwater dependent terrestrial ecosystems. The measures proposed to protect the environment during construction should be included in a Construction Environmental Management Plan and detailed Schedule of Mitigation. SEPA's [Planning Guidance on Windfarm Developments](#) ⁽³⁹⁾ provides detailed advice.

4.33 When formulating ideas and designs for the site prior to submitting their planning application, applicants should contact SEPA, Scottish Water and other relevant organisations at an early stage to discuss their proposals and to ensure they meet necessary requirements. This opportunity may be available through the 'Pre-application Advice' service the Council provides.

Peat

4.34 The HwLDP sets out clear expectations about how development should safeguard the peat resource. It is a key asset that requires safeguarding because it plays a central role in climate change mitigation and adaptation through carbon sequestration as well as other greenhouse gases. Wind energy development in Highland is often proposed in areas where peat may be present, to varying extents and to differing levels of sensitivity. The following list sets out key factors to be taken into account when considering a development proposal that has potential to affect peat, it should be included in a Peat Management Plan, within a 'Construction Environmental Management Plans':

- a. Site investigation should begin early in the EIA design process. Where peat is found to be present on site, developers will be expected to provide geotechnical and hydrological information, including information on the risk of landslide and peatslide related to the development.
- b. Peat survey and site assessment should inform the siting and design of wind turbines and all associated infrastructure. Through this assessment, impacts on peat should be avoided, for example, by careful siting of the windfarm components to avoid deep peat, and avoid altering hydrological regimes. Applicants should ensure that the information gathered for such site options is clear, concise and shows detailed mapping of peat depth and all proposed development activities together (e.g. Turbines, access tracks and proposed borrow pits), as well as details of the basic peatland characteristics.
- c. Where relevant, applicants should have regard to the 'carbon rich soils, deep peat and priority peatland habitat (CPP)' map produced by SNH. Classes 1 & 2 on that map are a Group 2 constraint in the Spatial Framework, a nationally important mapped environmental asset. The SNH map is not a definitive guide to the distribution of CPP across Scotland. It indicates where the resource is likely to be found and should be used to guide development away from the most sensitive resources. Therefore, if a proposal is brought forward in an area identified as CPP, and it is found that the development will be located on carbon rich soils, deep peat or priority peatland habitat, it is unlikely to be supported unless it can be demonstrated through the Environmental Impact Assessment process that any significant effects on the qualities of the area(s) can be substantially overcome through siting and design or by suitable mitigation. Impacts must consider all stages from project inception to wind farm operation and decommissioning.
- d. Mitigation of effects on peat and mapped CPP may include construction methods such as the use of floating tracks or piling for turbine foundations. It may also take the form of habitat restoration or habitat improvements, which may be achieved in areas of the site not being developed, and possibly on other

38 http://www.highland.gov.uk/downloads/file/3026/highland_statutorily_protected_species_supplementary_guidance

39 <http://www.sepa.org.uk/media/136117/planning-guidance-on-on-shore-windfarms-developments.pdf>

peatland sites. Proposed restoration and improvements should be presented in a draft Habitat Management Plan that provides sufficient information to demonstrate how proposals will be implemented and managed.

- e. When considering applications, the Council will expect to receive clear information about the whole life carbon balance of the proposal. This can be undertaken, for example, by using a 'Carbon Calculator'. Schemes applying under Section 36 of the Electricity Act (1989) are required to use the [carbon calculator](#) ⁽⁴⁰⁾.

4.35 Proposals on peatland should have regard to the following key publications:

- [Peat Landslide Hazard and Risk Assessments; Best Practice Guide for Proposed Electricity Generation Developments](#) ⁽⁴¹⁾
- [Calculating Carbon Savings from Wind Farms on Scottish Peatlands – A New Approach](#) ⁽⁴²⁾
- [SEPA's Regulatory Position Statement – Developments on Peat](#) ⁽⁴³⁾
- [Good Practice during Windfarm Construction guidance](#) ⁽⁴⁴⁾ (developed by Scottish Renewables, SNH, SEPA and FCS).
- [Peat Hazard and Risk Assessment Guide](#) ⁽⁴⁵⁾, particularly in relation to peat slide/bog burst risk
- [Development on Peatlands: Site Surveys](#) ⁽⁴⁶⁾
- [The Scottish Land Use Strategy](#) ⁽⁴⁷⁾
- [Assessment of Peat Volumes, Reuse of Excavated Peat and Minimisation of Waste](#) ⁽⁴⁸⁾
- [The National Peatland Plan](#) ⁽⁴⁹⁾ and other local management strategies.

Trees and Woodland

4.36 HwLDP sets out how trees and woodland (including commercial forestry plantations) should be managed and safeguarded in relation to development. There are a number of detailed considerations that have to be taken into account. Developers are strongly encouraged to seek early advice from the Council and other key stakeholders, for example through the 'Pre-application Advice'service.

4.37 The following list highlights key issues related to trees and woodland:

- a. Targeting of commercial forestry plantations for windfarm development is becoming more commonplace because such areas are often less constrained by conservation designations and can benefit from existing road infrastructure. Where tree felling is a key component of a proposal, the individual or cumulative effects could result in substantial loss of commercial woodland resources, which is contrary to Scottish Government Policy: [Scottish Forest Strategy \(2006\)](#) ⁽⁵⁰⁾.
- b. The Scottish Government has a policy on the '[Control of Woodland Removal](#)' ⁽⁵¹⁾. Annex B of that policy paper identifies windfarms as being one of the principal causes of woodland removal between 1990 and 2008. It gives criteria for determining the acceptability of woodland removal both with and without a requirement for compensatory planting. Annex C provides broad guidance on meeting acceptability criteria for woodland removal and any prospective developer should demonstrate that their proposal meets the necessary criteria.
- c. Where tree removal is a component of a proposal, developers will be expected to provide information on the fate and use of all felled material and detailed proposals for compensatory planting. Proposals should be in line with the joint SNH, Forestry Commission Scotland and SEPA guidance [Use of Trees Cleared to Facilitate Development on Afforested Land \(2014\)](#) ⁽⁵²⁾.

40 <http://informatics.sepa.org.uk/CarbonCalculator/>

41 <http://www.gov.scot/Publications/2006/12/21162303/0>

42 <http://www.gov.scot/Topics/Business-Industry/Energy/Energy-sources/19185/17852-1/CSavings>

43 https://www.sepa.org.uk/media/143822/peat_position_statement.pdf

44 <http://www.snh.gov.uk/docs/A1168678.pdf>

45 <http://www.gov.scot/Publications/2006/12/21162303/0>

46 <http://www.gov.scot/Topics/Environment/Countryside/Landusestrategy>

47 <http://www.gov.scot/Topics/Environment/Countryside/Landusestrategy>

48 <http://www.gov.scot/Resource/0045/00455955.pdf>

49 <http://www.snh.gov.uk/docs/A1697542.Pdf>

50 <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/forestry-strategy>

51 <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/woodland-expansion/control-of-woodland-removal>

52 http://www.sepa.org.uk/media/143799/use_of_trees_cleared_to_facilitate_development_on_afforested_land_sepa_snh_fcs_guidance_april_2014.pdf

- d. Developers should minimise loss of woodland wherever possible. The Council has a [Highland Forest and Woodland Strategy](#) ⁽⁵³⁾ and [Supplementary Guidance on Trees, Woodlands and Development](#) ⁽⁵⁴⁾ and these should be referred to by prospective developers.
- e. Developers are strongly encouraged to submit any woodland management proposals and, where relevant, details of compensatory planting plans as early as possible. It may be relevant to include details of the potential for impacts, including cumulative impacts, and the scope should be agreed with the Council.

Tourism and Recreation

4.38 Tourism and recreation are important elements in the Highland economy. The Council will have regard to a range of considerations as set out below, the nature and scope of any assessments required should be agreed in advance with the Council and may include a tourism impact assessment:

- relevant research into the potential effects of wind farms on tourism and recreation (for example, Scottish Government's commissioned report into [The economic impacts of wind farms on Scottish tourism](#) ⁽⁵⁵⁾ (2008) and Visit Scotland's [Wind Farm Consumer Research](#) ⁽⁵⁶⁾ (2011));
- the potential for socio-economic benefits to be derived from development proposals, for example, evidence of community benefit discussions. Further information can be found in the section on 'Socio-economic benefits of onshore wind development';
- the potential for effects on industries for which Highland's landscape is important - for example tourism and recreation; and,
- the potential for secondary effects for tourism and recreation, such as a change in land use that causes adverse effects, for example, a change from forestry to a wind farm, or where there are potential benefits like improved public access in the area.

Public Access

4.39 All proposals should seek to avoid significant adverse effects on the quality and quantity of public access. This will include any effect on a route included in a [Core Paths Plan](#) ⁽⁵⁷⁾, an access point to water, wider access rights or Rights of Way as provided by the Scottish Rights of Way Society. The Council will encourage developers to improve path networks and create new opportunities for access. Members of the public access land around wind farms so applicants are encouraged to erect information boards at entrances to sites to make members of the public aware of relevant information and any potential risks.

4.40 SNH provide advice on public access in their [Good practice during windfarm construction guidance](#) ⁽⁵⁸⁾.

4.41 Developers are urged to consider adequate mitigation of any adverse effects. This should include:

- retention of any existing path or water access point while maintaining or enhancing its amenity value; or
- alternative access provision maintaining the same level of amenity, safety and convenience for public use.

4.42 For a proposal classified as a Major Development the Council will require the developer to submit an Access Plan. This should show the existing public, non-motorised public access footpaths, bridleways and cycleways on the site, together with proposed public access provision, both during construction and after completion of the development (including links to existing path networks and to the surrounding area, and access points to water). The right of responsible access must be maintained during construction. SNH's [Guidance for the Preparation of an Outdoor Access Plan](#) ⁽⁵⁹⁾ and The Land Reform (Scotland) Act 2003 should be referred to.

53 http://www.highland.gov.uk/download/downloads/id/891/highland_forest_and_woodland_strategy.pdf

54 http://www.highland.gov.uk/downloads/file/354/trees_woodlands_and_development_supplementary_guidance

55 <http://www.gov.scot/Publications/2008/03/07113554/0>

56 http://www.visitscotland.org/pdf/Windfarm%20Consumer%20Research%20final_docUpdatedx.pdf

57 http://www.highland.gov.uk/info/1457/tourism_and_visitor_attractions/163/paths_in_the_highlands

58 <http://www.snh.gov.uk/docs/A1168678.pdf>

59 <http://www.snh.gov.uk/docs/B639282.pdf>

Traffic and Transport Interests

4.43 All proposals should seek to avoid significant adverse effects on the public road network individually and cumulatively with other built and permitted proposals as well as valid planning applications not yet determined (the weight apportioned to each will reflect their position in the planning process).

4.44 Ideally locations should be chosen where the road network has suitable alignment, width and strength to carry abnormal loads and the construction traffic associated with the scale of the development proposed. In locations where the existing road network does not meet these requirements, the developer may be required to undertake mitigation works to bring the road to a suitable standard before the commencement of works. The suitability of the road network (including mitigation) shall be adequate for the lifetime impact of the development from construction through maintenance and decommissioning.

4.45 The proposals for the use of the public roads and mitigation works will require the approval of the Roads Authority. Developers will be required to enter into a Section 96 (Roads Scotland Act) agreement with the Council to cover damage to the public roads by construction traffic and may be required to provide a bond as surety. Developers should consider measures to reduce the impact of construction traffic on the road network. The passage of the abnormal loads required for the transport of turbine components can be problematic and should be given very early consideration in the planning of projects.

4.46 Developers will be required to undertake a Transport Assessment to establish the transport impacts of the construction traffic associated with the development, the suitability of the existing road network, the impact on existing road users and adjacent communities, and the requirements for any mitigation works. This should include pre-application negotiation with the Roads Authority to agree the extent and nature of necessary strengthening, improvements and other mitigation works. Where trunk roads are to be used for transporting abnormal loads, a trunk roads assessment should be undertaken in consultation with Transport Scotland, further guidance is available from the [Transport Scotland website](#) ⁽⁶⁰⁾. Equally, where temporary or permanent mitigation is proposed to the trunk road network will require to be discussed and agreed with Transport Scotland.

4.47 The Council will seek, where appropriate, to follow a strategic approach to coordinate mitigation works in areas where more than one scheme is permitted. This will maximise the benefits of road improvements to developers as well as other road users. In such instances, developers may be required to undertake mitigation, or contribute towards a larger scheme of works.

4.48 For development of wind farms below 10MW not subject to formal EIA, applicants should refer to Appendix 1 of [SEPA's Standing Advice for Planning](#) ⁽⁶¹⁾ etc. for guidance of the principles SEPA apply to development management. This advice includes information on a range of information, including reference to flooding and pollution from the construction of wind farms and associated infrastructure.

Electricity and Gas Infrastructure

4.49 An appropriate separation distance is required in the vicinity of electricity transmission underground cables, overhead lines and underground gas transmission pipelines. The proposed turbines need to take account of factors beyond the immediate wayleave by providing sufficient distance to safeguard the infrastructure and a sufficient operation and maintenance distance. Other parts of the proposal or activities which the developer intends to undertake may trigger need for consultation with the relevant grid company. Developers are therefore advised to consult the relevant grid company for further advice on whether the work they are intending to undertake has the potential to affect their infrastructure. Developers are also strongly advised that they should obtain their written consent prior to submission of the planning application, this will help to provide a fuller understanding of the constraints present and how the development will overcome them.

Noise Assessment

4.50 For the purposes of noise assessment only, 'large' refers to turbines with a rotor diameter of 16m and above, 'smaller' refers to turbines below that size.

60 [http://www.transport.gov.scot/road/maintenance/prioritising-bridge-maintenance#Abnormal load routing](http://www.transport.gov.scot/road/maintenance/prioritising-bridge-maintenance#Abnormal%20load%20routing)

61 <http://www.sepa.org.uk/media/136130/sepa-standing-advice-for-planning-authorities-and-developers-on-development-management-consultations.pdf>

4.51 The guidance document 'ETSU-R-97 - The assessment & rating of noise from wind farms (ETSU)' is acknowledged by both the UK & the Scottish Governments as representing best practice in terms of the assessment of noise from wind turbines. Since its publication, the Institute of Acoustics has published a [Good Practice Guide \(GPG\) and supplementary guidance notes](#) ⁽⁶²⁾ for the application of ETSU, and has been acknowledged as best practice. ETSU sets out a framework for measuring wind farm noise and suggests acceptable noise levels that balance a reasonable degree of protection for noise sensitive receptors with enabling developers and local authorities to deliver and assess development without being unreasonably burdened. Noise assessments submitted in support of applications for large wind turbines should therefore be undertaken in accordance with ETSU and the GPG as these documents contain the guiding principles upon which the Council will base their assessment.

4.52 The British Wind Energy Association (BWEA) Small Wind Turbine Performance and Safety Standard (2008) is the guide used by the Council in assessing smaller scale wind turbine applications, and which has provided a proportionate and effective framework for assessing smaller turbine noise impacts on sensitive receptors. We will continue to keep under review the appropriateness of this assessment method, and may use an amended method if one becomes available. In the meantime we will continue to use the BWEA approach in respect of smaller wind turbines, where appropriate we will also have regard to ETSU and the GPG.

4.53 In assessing proposals we will include a focus on the following key principles:

- a. Highland Council's expectation is that all proposals will seek to achieve noise limits at sensitive locations that are at the lower end of the range indicated in national guidance, and we may seek limits lower than that in certain circumstances. This is because, in effect, national guidance addresses an average and therefore does not account for Highland's generally lower level of background noise. For example, Highland has a generally low density of development and less noise-generating industry and transport infrastructure, with certain features like motorways not present. The specific limit will depend on area specific factors and applicants are strongly encouraged to engage with the Council at the earliest opportunity to discuss noise limits of their proposal.
- b. Further to the above, the selection of proxy background monitoring locations should also reflect this approach. Monitoring locations should be chosen which have very similar characteristics to the properties they will represent. Where such locations do not exist or cannot be used, the expectation is that monitoring locations with the lowest background levels will be chosen to represent other properties. Applicants are advised to liaise with the Council to discuss monitoring locations prior to installation of equipment.
- c. Where noise from more than one wind turbine development may have a cumulative impact at any noise sensitive location, applicants must ensure this is adequately assessed in accordance with best practice, which includes consideration of both predicted and consented levels.
- d. Research into amplitude modulation is ongoing and currently there is no accepted best practice for measuring, monitoring or setting limits. Should any such guidance become available, Highland Council will expect developers to follow its recommendations.

Borrow Pits

4.54 Aggregate and other mineral resources required for a proposal should be sourced from local quarries, rather than creating borrow pits on-site.

4.55 The Council will only support the use of on-site borrow pits where it can be clearly demonstrated that there are significant environmental or economic benefits compared to obtaining material from local quarries.

4.56 For schemes where borrow pits are supported, information should be provided about what potential environmental impacts may arise if material sourced from borrow pits is found not to be suitable for all required construction activities.

62 <http://www.ioa.org.uk/publications/wind-turbine-noise>

Mitigation

4.57 Where mitigation is to be provided by the developer in response to likely impacts of the development, developers should ensure that it is available throughout the lifetime of the development and the Council will require arrangements to be in place to secure this. Mitigation may include both on-site and off-site measures, which may be covered by management plans, including in '[Construction Environmental Management Plans](#)'. Measures will typically be secured where appropriate by planning conditions or by Section 75 Legal Agreements. The Council will look for developers to provide mitigation plans that set out the mitigation necessary and how it will be delivered.

4.58 The Council will check on the implementation of any required mitigation. This will include site visits where necessary and responding to issues raised by community liaison groups, the public and other stakeholders.

4.59 Should there be changes to a development outwith those permitted by the conditions set with the planning consent, a developer may be asked to submit an application for non-material variation of the planning consent. At this stage the Council will assess whether the variation is non-material (this can include requests for further information e.g. additional visualisations). At the discretion of the Council, enforcement action may be taken, The Council's [Planning Enforcement Charter](#) ⁽⁶³⁾ provides further information.

Construction Environmental Management Plans

4.60 Major developments and developments subject to Environmental Impact Assessment will be expected to follow a robust project environmental management process, following the approach set out in the Council's [Guidance Note for construction environmental management plans](#) ⁽⁶⁴⁾.

4.61 Applicants should engage with the Council as early as possible about plans for the construction of their proposal, for example using the Council's 'Pre-application Advice' Service, this will assist in identifying what relevant elements should be included in the plans.

Restoration Bonds

4.62 The Council will seek assurance that the landowners of a proposed windfarm site can access funds to restore their land at the end of the operational life of the development. The Council will also seek to ensure that funds are available to enable the Council itself to undertake such site restoration if the need arises.

4.63 Where windfarms are concerned, the Council needs to ensure, as far as it can, that there will be robust financial guarantees in place over sufficiently long periods to enable this to be undertaken if required, bearing in mind that windfarm permissions typically span a 25 year period. These should be secured either by bond of caution (Bond) or by irrevocable letter of credit (LoC) from an appropriate bank. Parent Company Guarantees will not be accepted. Bonds/LoCs from major banks are a safer way of securing the Council's interests in these cases. These will be reviewed, typically every five years, to ensure that the value of bond is sufficient to restore the site at the end of the permission.

4.64 Applicants should be clear from the outset about any elements of their proposed scheme that they intend to retain once the site is restored so that these can be factored into any assessments.

4.65 Further information about restoration and decommissioning are included in the following guidance:

- [Heads of Planning Scotland Position Statement on the Operation of Financial Mechanisms to Secure Decommissioning, Restoration and Aftercare of Development Sites](#) ⁽⁶⁵⁾
- [Siting and Designing Wind Farms in the Landscape](#) ⁽⁶⁶⁾

63 http://www.highland.gov.uk/download/downloads/id/1302/our_planning_enforcement_charter.pdf

64 http://www.highland.gov.uk/download/downloads/id/2644/construction_environmental_management_process_for_large_scale_projects.pdf

65 <https://hopscotland.files.wordpress.com/2014/08/hops-6-7-15-position-statement-on-bonds-with-appendices2.pdf>

66 http://www.snh.org.uk/pdfs/strategy/renewables/Guidance_Siting_Designing_wind_farms.pdf

- [Decommissioning and Restoration Plans for on-shore wind farms](#) ⁽⁶⁷⁾
- [Planning for development: What to consider and include in Habitat Management Plans](#) ⁽⁶⁸⁾
- [SNH Commissioned Report 591: Research and guidance on restoration and decommissioning of onshore wind farms](#) ⁽⁶⁹⁾

Repowering

4.66 The Council supports the principle of repowering in appropriate circumstances. Scottish Planning Policy outlines that “areas identified for wind farms should be suitable for use in perpetuity”. Repowering schemes are treated as new planning applications and are therefore assessed on a case-by-case basis, taking into account all of the relevant factors set out in this guidance. However, the site’s existing use as a wind farm will be a material consideration in deciding an application.

4.67 When considering new proposals, the Council will take into account the existing use as a wind farm, the extent to which the new proposals make use of existing infrastructure, and will balance this with all of the development plan considerations set out in HwLDP and this Supplementary Guidance. This will include consideration of the most up to date situation e.g. natural environment, including designations and features identified since the original permission was granted. Applicants for repowering schemes should have regard to the SNH Guidance [Decommissioning and Restoration Plans for on-shore wind farms](#) ⁽⁷⁰⁾.

67 <http://www.snh.gov.uk/docs/A1434319.pdf>

68 <http://www.snh.gov.uk/docs/B1159444.pdf>

69 http://www.snh.org.uk/pdfs/publications/commissioned_reports/591.pdf

70 <http://www.snh.gov.uk/docs/A1434319.pdf>

5 Highland Strategic Capacity

Comas Ro-innleachdail na Gàidhealtachd

5.1 Given the current pressures for development Highland is experiencing, it is important that the Council assess the baseline and provide clear guidance for all stakeholders about Highland's potential for wind energy development.

5.2 The following sets out the method the Highland Council is using to assess the strategic capacity for wind energy development. As part of this approach, we will take into account the generic assessment criteria set out in the section on 'Landscape and Visual Effects'.

5.3 Six areas are included in the study. Loch Ness is complete, and the remaining areas are in progress and will be subject to public consultation prior to inclusion in the Guidance.

- Loch Ness
- Black Isle, surrounding hills and Moray Firth coast (including Dava Moor)
- Caithness
- East and Central Sutherland
- North Coast
- Skye

5.4 Before considering this section of the Guidance, the following points should be noted:

- This section does not introduce additional constraints to those set out in the Spatial Framework for Onshore Wind Energy, nor should it be used as part of a sequential approach to wind farm planning. The study is intended to provide additional strategic considerations that identify sensitivities and potential capacity.
- For clarity, the appraisal of landscape and visual sensitivity shown in the tables for each Landscape Character Area (LCA) only discuss landscape and visual aspects, other factors including a suite of natural and historic features and designations recognised and afforded policy protection in HwLDP are considered in the subsequent stages of mapping strategic capacity, as described in the methodology below.
- LCAs are described and assessed broadly, and therefore the following serves as a guide, assessment of specific proposals will take into account site and proposal-specific factors. Applicants will be expected to demonstrate how their proposals align with the conclusions of the assessments, and if they do not, will be expected to demonstrate why they are still appropriate developments.
- When considering the sensitivity appraisal of one LCA, it is important to consider this alongside neighbouring LCAs and those specifically mentioned in the appraisal. This is because effects of development may reach beyond the individual LCA and the qualities of the wider landscape experienced by visual receptors may comprise several LCAs, therefore the wider context has to be taken into account.

5.5 In order to provide a strategic guide for onshore wind energy, a study was implemented for a range of geographical areas of Highland. This involved identifying landscape characteristics; key valued visual assets; landscape and visual sensitivities, and an indication of the scope for future development. A working group undertook the study, and included Landscape, Development Management and Development Plans Officers from Highland Council, working alongside Officers from Scottish Natural Heritage bringing together their range

of technical and local knowledge and expertise. The work was informed by the guidance provided in [Spatial Planning for Onshore Wind Turbines- natural heritage considerations](#) ⁽⁷¹⁾ (SNH, 2015) as well as other [landscape capacity and sensitivity resources](#) ⁽⁷²⁾.

5.6 The results of the landscape and visual sensitivity appraisal set out key aspects for each study area that The Council will take into consideration when managing planning applications for all scales of onshore wind energy development. It is a guide that provides context for Landscape and Visual Impact Assessment, provides general advice on the likely form of development appropriate in different areas and, in the Strategic Capacity section, identifies scope for development. The study should be referred to alongside the Development Plan and the rest of this Supplementary Guidance.

5.7 Whilst it is essential that Highland contributes to meeting climate change targets, and that socio-economic benefits of wind energy development are realised, this study focused specifically on those aspects that require further clarification, based on experience of planning cases in Highland. Finding the balance between the benefits of a particular scheme and the impacts it may present will be the subject of careful consideration on a case by case basis at the Development Management stage.

5.8 The purpose of this section is to provide guidance about where the Council considers are the least constrained locations for onshore wind energy development within existing pressure areas and to highlight key sensitivities that should be addressed in any onshore wind energy development planning application. This purpose is achieved through a strategic-level assessment of key landscape and visual factors superimposed over national policy and Development Plan policy constraints.

Identifying study areas

5.9 The extensive geographical expanse Highland Council covers requires a focus of resources to those areas facing the greatest pressure for wind energy development. The [Highland Windmap](#) ⁽⁷³⁾ is used to review current wind energy development along with Officer's local knowledge to identify pressure areas. The high-level landscape divisions shown in the SNH mapping of [Landscape variety in Scotland](#) ⁽⁷⁴⁾ (SNH, 2014) are also used to help define study areas based on their distinctiveness and identity, along with relevant Landscape Character Assessments, and prominent landforms that terminate views or clearly define study area extents. While boundaries are identified, reference is also made to views and features outwith the area where they play a significant role within the study area e.g. contributing to setting/ sense of place.

Characterising study areas

5.10 Each study area is considered as a whole, reviewing current and future patterns of wind energy development based on planning application information available at the time of review. The area is then divided into sub-areas, based on SNH Landscape Character Areas, and refined or grouped into larger areas where appropriate. For clarity and ease of use, a reference code and place-specific title is devised to identify individual Landscape Character Areas within the Landscape Character Type.

5.11 Desktop analysis is undertaken to identify potential key routes and key views that capture the essence of an area's particular qualities, and to identify relevant features and landscape designations. This work involves reviewing GIS datasets, aerial imagery and Ordnance Survey mapping.

5.12 Site visits are undertaken by members of the working group. These enable the group to experience the areas and consider particular landscape and visual sensitivities, confirm key routes and key views and achieve consensus on any particular issues.

5.13 Modelling turbine visibility

5.14 A GIS model was developed to provide information to the working group about turbine exposure across Highland. The model used height (to blade tip) data of all consented, constructed and operational turbines overlain on a 50 meter-resolution bare surface digital terrain model. A count of the number of turbines visible

71 <http://www.snh.gov.uk/docs/A1663759.pdf>

72 <http://www.snh.gov.uk/protecting-scotlands-nature/looking-after-landscapes/tools-and-techniques/landscape-capacity-and-sensitivity/>

73 http://www.highland.gov.uk/info/198/planning_-_long_term_and_area_policies/152/renewable_energy/5

74 <http://www.snh.gov.uk/about-scotlands-nature/scotlands-landscapes/landscapes-varieties/>

within a 40 km radius of the centre point of each 50 meter grid cell was then calculated. A correction factor was then applied to these counts for each grid cell to account for the diminishing effect of turbine visibility as distance increases - distance decay (see [Miller, D.R. et al. 2010.](#) ⁽⁷⁵⁾). This modified count of turbines provided a relative measure of turbine exposure that was grouped and expressed as 'Highest, High, Medium, Low and Lowest Exposure'. The GIS results of this model are used during the analysis of study areas.

5.15 Appraising LCAs

5.16 Based on the results of desktop research and fieldwork, an appraisal is undertaken for each Landscape Character Area. A simple table is used to provide a summary for each appraisal.

5.17 The landscape character area and the role it serves in the wider landscape is briefly described.

5.18 Any key views, routes or gateways relevant to the area are identified. For each study area key routes and views are included in a table and information provided on what landscape character areas and visual receptors are relevant to it.

5.19 Landscape sensitivity to large-scale wind farms, small individual turbines and access infrastructure is appraised using a combination of:

- A four-point scoring system;
- Consideration of moderating factors;
- Professional judgement.

5.20 This process is aided by the use of the following record chart that drew upon information from the [West Lothian Landscape Capacity Study](#) ⁽⁷⁶⁾ and the [Cumulative Landscape and Visual Assessment of Wind Energy in Caithness](#) ⁽⁷⁷⁾, as well as discussions during site visits for the Loch Ness Study Area:

75 http://www.highland.gov.uk/download/downloads/d/999/assessment_of_landscape_sensitivity_to_wind_turbine_development_in_highland_summary_report.pdf

76 <http://www.westlothian.gov.uk/media/2513/SPG-Landscape-capacity-Study-for-Wind-Energy-Development-in-West-Lothian/pdf/technical-windenergy.pdf>

77 http://www.highland.gov.uk/downloads/download/830/cumulative_landscape_and_visual_assessment_of_wind_energy_in_caithness

Area Ref, LCT and Name:	
*Scale of 1-4, 1 being most susceptible to change	

SMALL	Landscape Characteristics	Landscape Susceptibility* to Small Scale Wind Developments			
		1	2	3	4
	Landform: apparent scale	Massive	Large	Medium	Small
	Landform complexity	Uniform	Simple	irregular	Intimate or complex
	Land Cover	Uniform	Simple	varied	Intimate or complex
	Habitation	Little or no Built Env	Main Settlement Significant nucleated village	Scattered Housing/ Township	Farmstead/Rural node Significant Industrial site
	Enclosure	Unenclosed	Large 500m+	Medium 200-500m	Small <200m
Moderating Factors:					

LARGE	Landscape Characteristics	Landscape Susceptibility* to Large Scale Wind Developments			
		1	2	3	4
	Landform: apparent scale	small	Moderate	Large	Massive
	Landform complexity	Intimate or complex	irregular	Simple	Uniform
	Land Cover	Intimate or complex	varied	Simple	Uniform
	Habitation	Main Settlement	Significant nucleated village	Scattered Housing/ Township	Little or no Built Env Significant Industrial site
	Enclosure	Small <200m	Medium 200 - 500m	Large 500m+	Unenclosed
Moderating Factors:					

INFRASTRUCTURE	Landscape Characteristics	Landscape Susceptibility* to Access Infrastructure			
		1	2	3	4
	Slopes	Steep and oriented towards key route or settlement	Moderate and oriented towards key route or settlement	Steep and visible from key route or settlement	Other
	Vegetation pattern/ enclosure	Uniform low vegetation cover offering little screening	Variety of vegetation heights giving intermittent screening	Areas of differing vegetation where tracks can be routes along existing boundary lines.	Vegetation cover which can absorb track.
	Presence of existing roads and tracks	None	Few	Some	Extensive
Roadside features w/r to junction formation	Continuous boundary eg.trees/hedge/wall. Existing cross-slope road - extensive retaining works to align junction. Narrow road - needing wider bellmouth .		Level ground, wire stock fencing	Level ground, no boundary structures.	
Moderating Factors:					

5.21 Visual receptor categories for each study area are identified and their sensitivity defined as highest, medium or lower.

5.22 Current wind energy development within the landscape character area is described.

5.23 Based on the appraisal undertaken, a judgement of the likely potential for wind energy development for each Landscape Character Area is recorded.

5.24 As stated by Scottish Government in their [Onshore Wind - Some Questions Answered](#) ⁽⁷⁸⁾ webpage, areas of strategic capacity *are essentially Group 3 areas from the spatial framework*. For each study area, the Spatial Framework Group 3 Area is mapped and the conclusions of each Landscape Character Area's potential for development overlain in a GIS. This provides an indication of areas that may have potential based, on the landscape and visual sensitivity appraisal.

5.25 A further appraisal is then undertaken to identify any other potential constraints to an area being identified as having strategic capacity (e.g. Special Landscape Areas, regularly occupied buildings, and any other relevant features), taking into account the potential for cumulative impacts of identifying areas.

5.26 **Synthesis and conclusions**

5.27 Areas are agreed between Council Officers and the conclusions mapped.

5.28 Unless otherwise stated, where more than one area of strategic capacity is identified in a study area, no judgement is made about which area should be prioritised for development.

5.1 Loch Ness Strategic Capacity

5.29 The Council has appraised the Loch Ness study area and considered its potential strategic capacity. The appraisal concludes that whilst there may be opportunities for further development in the study area, particularly in association with existing schemes, there is no strategic capacity. This is consistent with Scottish Government advice which states that "Areas of strategic capacity are essentially Group 3 areas from the spatial framework ... where it may be desirable to restrict smaller-scale wind turbines to allow larger wind turbines/farms to come forward ... [but such work] should not be used to define individual wind farms as strategic" ("[Onshore Wind Some Questions Answered](#)"). The following factors contributed to the conclusion that there is no strategic capacity in the study area:

- particularly high landscape and visual sensitivities identified;
- a large coverage of Group 2 Spatial Framework features; and
- a majority of Group 3 areas located closer to settlements, residential properties or Special Landscape Areas.

5.2 Loch Ness Landscape Sensitivity

Mothlachd Cruth-tire Loch Nis

5.30 The following tables set out the results of the landscape sensitivity appraisal for the Loch Ness study area.

5.31 Loch Ness and the Great Glen are of substantial natural and cultural heritage interest. The area contains key transport routes, including the A82(T) and Caledonian Canal, important settlements and visitor attractions that are of national and international importance, as well as areas of valued recreation interest, including the well used Great Glen Way.

5.32 The close proximity of the study area to the major population centre of Inverness, and the role of the A82(T) and A9(T) roads that provide relatively easy access make it particularly sensitive to development. An existing pattern of wind energy development exists that is mainly comprised of larger wind farm schemes. There continues to be focused pressure for large scale development in the area.

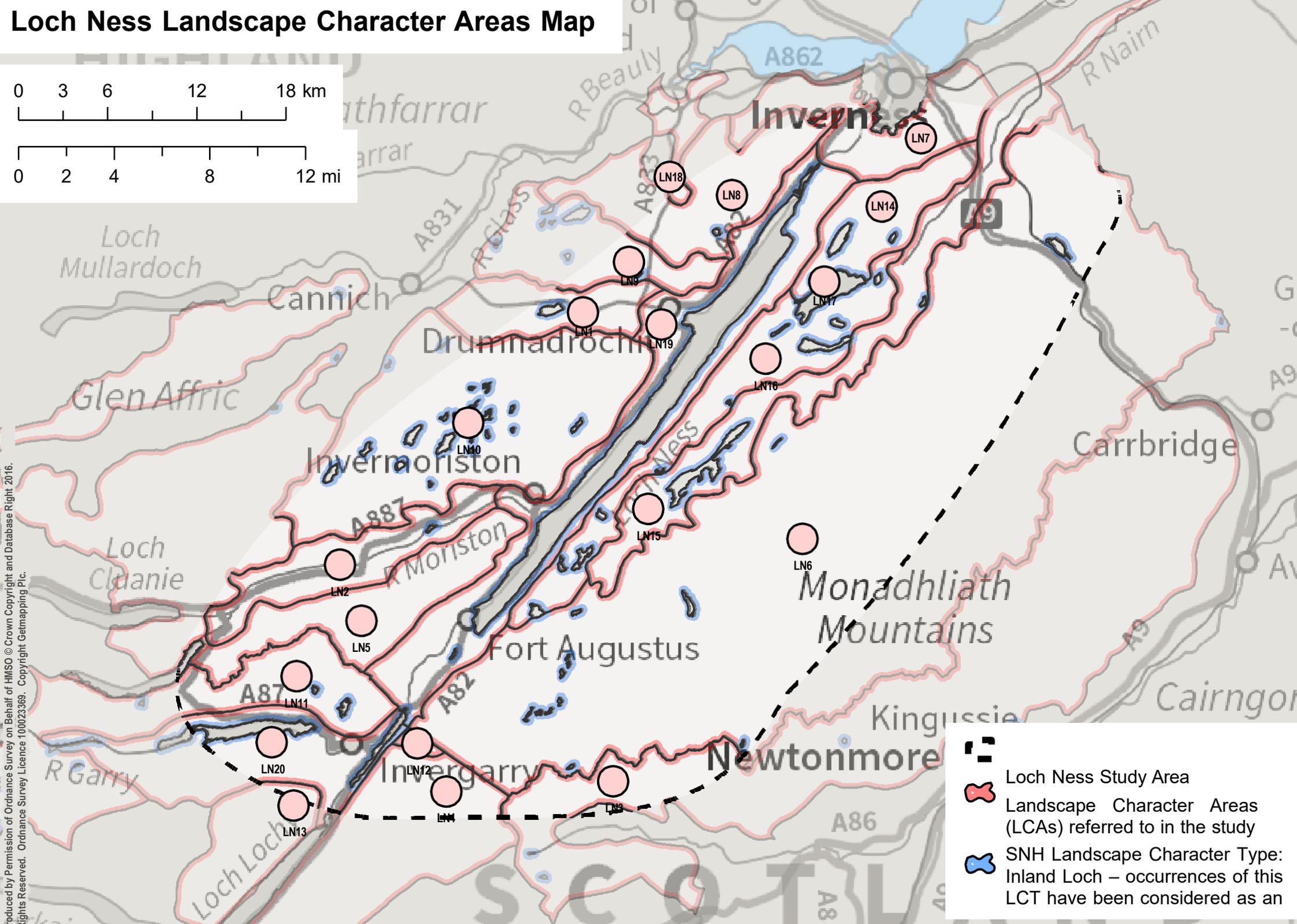
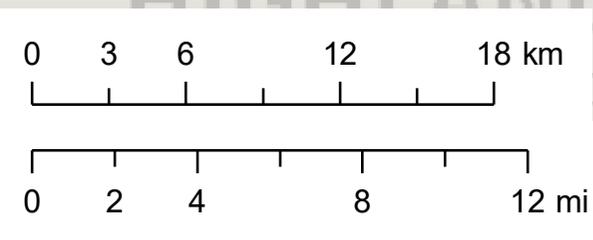
78 <http://www.gov.scot/Topics/Built-Environment/planning/Policy/Subject-Policies/low-carbon-place/Heat-Electricity/renewables-advice/Questions>

5.33 The study area is adjacent to designations of national importance such as the Cairngorm National Park and National Scenic Areas, there are several wild land areas identified and parts of the study area are designated as Special Landscape Areas.

Summary of key findings from landscape and visual sensitivity appraisal

5.34 The area immediately surrounding Loch Ness is unlikely to be appropriate for any form of wind energy development. The straths and land around the loch to the NW, N and NE are only likely to be appropriate for smaller scale individual turbines associated with farm steadings or other rural buildings. The remaining capacity for larger scale development is limited. The study identifies that any remaining capacity for this scale of development should be focused around existing clusters that are generally found in rolling uplands, rugged massif and rocky moorland Landscape Character Types, but only where these are well designed, integrated into the existing pattern of development and do not undo the landscape and visual mitigation agreed for existing schemes. These limitations will help to limit any additional cumulative effect and increase the potential for future development to share existing site infrastructure.

Loch Ness Landscape Character Areas Map



Produced by Permission of Ordnance Survey on Behalf of HMSO © Crown Copyright and Database Right 2016. All Rights Reserved. Ordnance Survey Licence 100023369. Copyright Getmapping Plc.

- Loch Ness Study Area
- Landscape Character Areas (LCAs) referred to in the study
- SNH Landscape Character Type: Inland Loch – occurrences of this LCT have been considered as an

integ
ral
part
of
their
host
LCA

5.2.1 Key Views

Name	Description	Locations Available	Description of Value/Significance	LCAs important to the integrity of views
Loch Ness West	End-to-end views over Loch Ness looking southwest.	Loch End Aldourie Castle Designed Landscape Dores Beach and An Torr on Loch Ness	Iconic views, much used in promotions for the area, which reveal the scale of the Loch and Great Glen. The apparent recession of the loch's parallel shores to a vanishing point giving the impression of infinity (the point at which parallel lines meet) enhances the perceived scale of the landscape.	19 - Broad Steep Sided Glen 16- Farmed and Wooded Foothills 6 - Rolling Uplands (south Western end only) 11, 12- Rocky Moorland 4 - Smooth Moorland Ridges 5 - Rugged Massif 10- Rocky Moorland Plateau (SE edge only)
Loch Ness East	End-to-end Views over Loch ness looking Northeast	Fort Augustus Abbey Caledonian Canal, Ft Augustus On Loch Ness	View is also emblematic of, if not characteristic of, the wider Highlands.	19- Broad Steep-sided Glen 9, 10- Rocky Moorland Plateau (SE edge only) 8 - Rocky Moorland Plateau with Woodland (SE Edge only) 7 - Rolling Farmland and Woodland 14- Flat Moorland Plateau with Woodland 16- Farmed and Wooded Foothills (NW edge only)
Urquhart Castle from Loch	Water-level views looking up at Castle. Angle limits visibility of LCAs beyond the Broad Steep Sided Glen/immediate Great Glen slopes and Wooded Glen/Glen Urquhart	On Loch Ness	Views are of classic composition, conforming closely to the ideal of the 'picturesque' as described by Gilpin. Composition is quintessentially Highland in its combination of Loch and steep rugged slopes forming a backdrop to a ruined castle. The view is readily accessible to people touring the GG by water, be in a traverse of the CC or day trips out of Inverness.	1 - Wooded Glen 9, 10- Rocky Moorland Plateau (specifically boundaries with 1 and 20. 19- Broad, Steep-sided Glen

Urquhart Castle Land based	Generally elevated views looking towards the castle from above. Results in views where castle is partially or completely back dropped by water. Extent of Broad Steep Sided Glen included in angle of view limited by shortness of view.	Within Historic Scotland site at Urquhart Castle A82 above Castle. Autumn/Winter some views from A82 across Urquhart Bay. Mostly obscured by trees.	The view is less classically picturesque than that available from the water, but is highly valued for the scenic composition, the relative novelty of the viewpoint being superior to the castle.	19- Broad Steep-sided Glen 9, 10- Rocky Moorland Plateau (SE edge only) 8 - Rocky Moorland Plateau with Woodland (SE Edge only) 7 - Rolling Farmland and Woodland 14- Flat Moorland Plateau with Woodland 16- Farmed and Wooded Foothills (NW edge only)
Loch Ness from Urquhart Castle	Views primarily towards the North east and Urquhart Bay.	Primarily from Grant Tower or path from Visitor centre	This is a high impact view which gains its value from a combination of its scenic composition and its rarity value. Elevated views over large lochs are often only accessible by hillwalking, these 'high reward' views are available to casual visitors.	20 - Broad Steep Sided Glen 9 - Rocky Moorland Plateau 8 - Rocky Moorland Plateau with Woodland 7 - Rolling Farmland and Woodland 14- Flat Moorland Plateau with Woodland 16- Farmed and Wooded Foothills (NW edge only)
Great Glen from Meall Fuar-mhonaidh	Principal views are NE and SW up and down the Great Glen	Summit Meall Fuar-mhonaidh	Unique perspective of the Great Glen, accessible to both tourists and locals, popular climb.	NB While Rolling Uplands are highly visible from this location, they do not form part of the main direction of view. View SW: 10-Rocky Moorland Plateau 20- Broad Steep Sided Glen 5 - Rugged Massif 11, 12- Rocky Moorland 21- Broad Forested Strath 4 - Smooth Moorland Ridges 13- Interlocking, Sweeping Peaks View NE: 8 - Rocky Moorland Plateau with Woodland 9, 10-Rocky Moorland Plateau 14-Flat Moorland Plateau with Woodland 19- Broad Steep Sided Glen

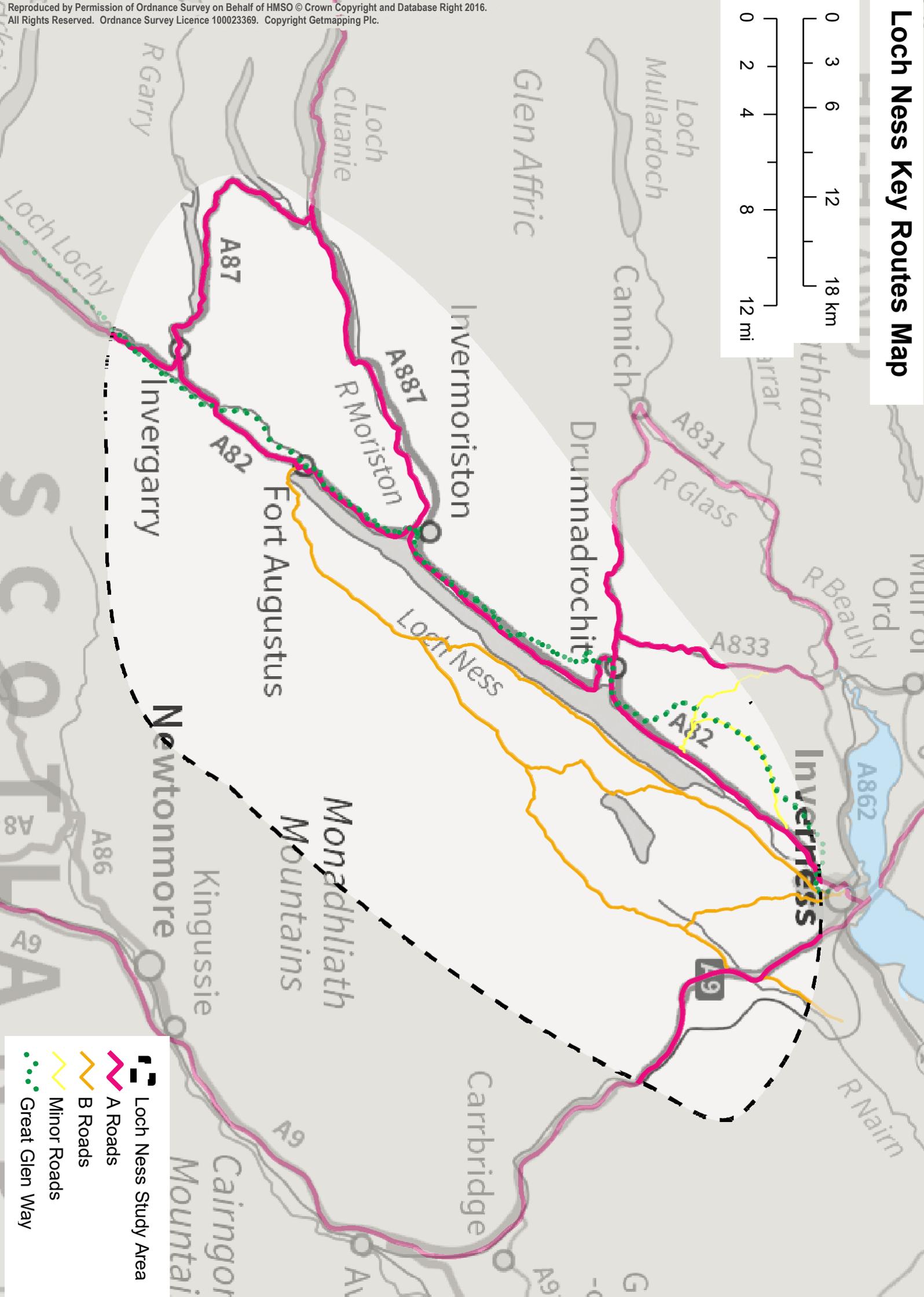
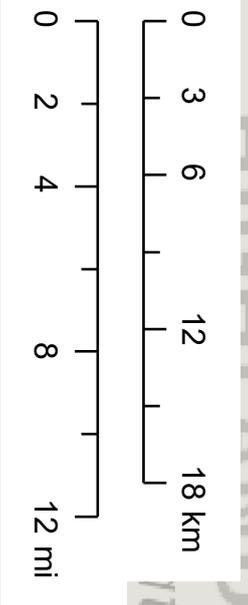
Loch Tarff, 'Local Hero' location	View over range of LCTs looking West North West	Passing Place east of Loch Tarff	Very scenic, something of a 'cult interest' location?	16- Farmed and Wooded Foothills 5 - Rugged Massif 11- Rocky Moorland 13- Interlocking Sweeping Peaks
A87 Viewpoint above Loch Garry	Panoramic views, easily accessible by tourists. Across the Great Glen, east to the rolling uplands, west to rugged massifs and sweeping interlocking peaks mostly outwith Study area	A87 Viewpoint, possibly nearby Heritage Trail at Daingean	Marked on OS. Opportunity for motorists to take in the panoramic views of the Great Glen and Western hills with L Garry in the middle-ground looking like a map of Scotland	21- Broad Forested Strath 13- Interlocking Sweeping Peaks 4 - Smooth Moorland Ridges 6 - Rolling Uplands
A887T Views west	Not a 'point view' but a corridor from which the sequence of westward views forms a significant transitional experience which cannot be pinpointed to one 'Gateway location'.	A887T Views west from points west of Achlain	Important to the experience in transition in scale and character of landscape across the watershed	5- Rugged Massif 2 - Wooded Glen 10- Rocky Moorland Plateau

5.2.2 Key Routes

Route Name/ Number	LCAs passed through/Bordered	Receptors
A82 T	Broad Steep Sided Glen	Local residents People from wider highland area Tourists
B862 Stratherrick	Broad Steep Sided Glen Farmed and Wooded Foothills Rolling Uplands Farmed Straths Flat Moorland Plateau with Woodland	Local Residents Recreational users from wider highland area Tourists
B851 Strathnaim and Loch Ness side	Farmed Straths	Local Residents Recreational users from wider highland area Tourists
A9 T	Rolling Uplands Farmed Straths Flat Moorland Plateau with Woodland Rolling Farmland and Woodland	Local residents People from wider highland area Tourists
A833 Glen Convinth	Wooded Glens Rocky Moorland Plateau Rocky moorland plateau with Woodland	Local Residents Recreational users from wider highland area Tourists
A831 Glen Urquhart	Broad Steep-sided Glen Wooded Glens	Local Residents Recreational users from wider highland area Tourists
A887 T Glen Moriston	Broad Steep-sided Glen Wooded Glens	Local Residents Recreational users from wider highland area Tourists
A87 T above Loch Garry	Rocky Moorland Broad Forested Strath	Local Residents Recreational users from wider highland area Tourists
B861 Tombreck-Inverness	Farmed Straths Flat Moorland Plateau with Woodland Rolling Farmland and Woodland	Local Residents Recreational users from wider highland area
B852-South Loch Ness shore	Broad Steep-sided Glen Farmed and Wooded foothills	Local Residents Recreational users from wider highland area Tourists
Dunain-Blackfold-Abriachan	Rolling Farmland and Woodland Rocky Moorland Plateau with Woodland Broad Steepsided Glen	Local Residents Recreational users from wider highland area Tourists

Minor Road - Caiplich (UC1072)	Broad Steep Sided Glen Rocky Moorland Plateau with Woodland	Local Residents
Minor Road - Bunloit	Broad Steep-sided Glen	Local Residents Recreational users from wider highland area Tourists
Great Glen Way	Broad Steep Sided Glen Rocky Moorland Plateau Rocky Moorland Plateau with Woodland	Recreational users
Great Glen Canoe Trail (closer to shores than routes used by larger and commercial craft)	Inland Loch with some portage over Broad Steep Sided Glen LCT	Recreational users
Caledonian Canal and lochs - Open water	Inland Loch Broad Steep Sided Glen LCT	Recreational users

Loch Ness Key Routes Map



- Loch Ness Study Area
- A Roads
- B Roads
- Minor Roads
- Great Glen Way

5.2.3 Landscape Character Area 1

LN1: Glen Urquhart, Wooded Glen

Description of Landscape Role	The glen forms the corridor by which the A831 enters and exits the Great Glen, allowing people to move between Strathglass and Loch Ness. The glen becomes narrower and steeper sided as it descends towards Loch Ness, limiting outward views and contributing to the sense of arrival on reaching the <i>broad, steep-sided glen LCA</i> and the <i>Loch Ness and Duntelchaig SLA</i> .		
Key Views	The LCA is not visible from the bulk of the Great Glen, the boundary with the <i>broad, steep-sided glen LCA</i> may form part of the backdrop to views of <i>Urquhart Castle from Loch Ness</i> .		
Key Routes	<ul style="list-style-type: none"> A831 Glen Urquhart from Milton to Bearnock/Braefield - Visibility is restricted to the interior of the glen, where wooded slopes are seen across the narrow cultivated glen floor. 		
Gateways	The glen forms a transitional corridor, contributing to a gateway sense of arrival at Drumnadrochit, where the landform opens out to the <i>broad, steep-sided glen LCA</i> and the <i>Loch Ness and Duntelchaig SLA</i> .		
Landscape Sensitivity	The landscape is heavily influenced by human activity and habitation. Woodland in the glen creates spaces of human scale and an intimate small scale landscape. The landscape is also sensitive to development in adjacent LCAs where turbines close to the boundary may compromise the perceived scale of the landscape and, if occupying opposing sites above the LCA, may create an adverse effect of appearing to surround and overwhelm the space.		
	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change		
	Large Scale WFs	Small individual	Access infrastructure
	1	3	3
Sensitive Visual Receptors	Highest Sensitivity	Residents of immediate locality People at Key Viewpoints Visitors/tourists including cyclists and walkers	
	Medium	Residents of wider region People using Key Routes	
	Lower	Users of other routes People engaged on work	
Current Wind Energy Development	Access track for Bhlaraidh Wind Farm		

Potential for wind energy development	<p>No scope for Large or Medium turbines, singly or in groups.</p> <p>Scope for:</p> <ul style="list-style-type: none"> • Micro and small scale turbines strongly associated with existing buildings/land use, therefore avoiding higher ground. • typical appropriate group size:- up to 3 • Well sited access track development which exploits existing routes on glen slopes.
---------------------------------------	---

5.2.4 Landscape Character Area 2

LN2: Glen Moriston, Wooded Glen

Description of Landscape Role	The glen forms the corridor by which the A887T enters and exits the Great Glen, ultimately connecting the east and west coasts. The glen is sparsely populated.																			
Key Views	<i>A887T Views west</i>																			
Key Routes	<i>A887T Glen Moriston</i> -Visibility is restricted to the interior of the glen, where wooded slopes are seen across the narrow cultivated glen floor.																			
Gateways	Transitional corridor between A887 and A7 at Bun Loyne Junction and Achlain: Not a 'point view' but a corridor from which the sequence of westward views forms a significant transitional experience which cannot be pinpointed to one 'Gateway location'.																			
Landscape Sensitivity	<p>1. The lower reaches of the glen: east of Torgyle Bridge landscape is heavily influenced by human activity and habitation. Woodland in the glen creates spaces of human scale and an intimate small scale landscape.</p> <table border="1" data-bbox="525 1312 1342 1525"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3</td> <td>3</td> </tr> </tbody> </table> <p>2. Upper reaches west of Torgyle Bridge: more open and the cultivated and inhabited character drops away giving a perception of larger scale landscapes and vaster distances.</p> <table border="1" data-bbox="525 1671 1342 1883"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	3	3	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	2	3
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change																				
Large Scale Wind Farms	Small individual	Access infrastructure																		
1	3	3																		
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change																				
Large Scale Wind Farms	Small individual	Access infrastructure																		
1	2	3																		
Sensitive Visual Receptors	Highest Sensitivity	<ul style="list-style-type: none"> • Residents of immediate locality (the majority of properties on the Tomcrasky road approximately half a kilometre north of the A887T or east of Torgyle Bridge). 																		

		<ul style="list-style-type: none"> • People at Key Viewpoints • Visitors/tourists including cyclists and walkers
	Medium	<ul style="list-style-type: none"> • Residents of wider region • People using Key Routes
	Lower	<ul style="list-style-type: none"> • Users of other routes • People engaged on work
Current Wind Energy Development	Beinneun Wind Farm access, existing visibility of turbines in <i>Rugged Massif/Rocky Moorland Landscape</i> south of LCA.	
Potential for wind energy development	<p>No scope for Large or Medium turbines, singly or in groups.</p> <p>Scope for:</p> <ul style="list-style-type: none"> • Micro and small scale turbines strongly associated with existing buildings/land use, therefore avoiding higher ground. <ul style="list-style-type: none"> • typical appropriate group size:- up to 3 • Well sited access track development which exploits existing routes on glen slopes. 	

5.2.5 Landscape Character Area 3

5.35 Please note, a small part of LN 3 was included for practical purposes but is not representative of the landscape character area as a whole and largely falls into different viewsheds and therefore an appraisal was not carried out.

5.2.6 Landscape Character Area 4

LN4: South east side of Great Glen south of Loch Oich, Smooth Moorland Ridges.

Description of Landscape Role	Area forms a transition from study area south to the rest of the Great Glen. Seen as part of layered landscape to south-east when seen from A87/ ridge to north of Loch Garry.
Key Views	<ul style="list-style-type: none"> • May form part of backdrop in <i>Loch Ness West</i> • Part of views down the Great Glen from Meall Fuar-mhonaidh
Key Routes	<ul style="list-style-type: none"> • A87 above Loch Garry - LCA Seen as part of layered landscape to south-east when seen from A87/ ridge to north of Loch Garry. • A82 T Great Glen around Loch Oich, Broad Forested Strath.- LCA viewed from glen floor at 90 degrees to direction of travel. Roadside trees generally limit views for travellers.
Gateways	N/A
Landscape Sensitivity	Partially covered by Loch Lochy and Loch Oich SLA, with intervisibility with Loch Ness SLA. Important to the integrity of the form of the Great Glen.

	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change	
	Large Scale Wind Farms	Small individual Access infrastructure
	2 (due to potential effect on perceived integrity of Great Glen)	3 2
Sensitive Visual Receptors	Highest Sensitivity	Residents of immediate locality People at Key Viewpoints Visitors/tourists including cyclists and walkers
	Medium	Residents of wider region, People using Key Routes
	Lower	Users of other routes People engaged on work
Current Wind Energy Development	No consents	
Potential for wind energy development	<p>No scope for Large or Medium turbines, singly or in groups.</p> <p>Scope for:</p> <ul style="list-style-type: none"> • Micro and small scale turbines strongly associated with existing buildings/land use, therefore avoiding higher ground. <ul style="list-style-type: none"> • typical appropriate group size:- up to 3 • Well sited access track development which exploits existing routes on glen slopes • The boundaries between Smooth Moorland Ridges and Rolling Uplands LCA6 are not clear on the ground. There may be scope for continuation of the development pattern appropriate to the Rolling Uplands in the boundary area which lies within the Study Area. 	

5.2.7 Landscape Character Area 5

LN5: Ridge between Fort Augustus and Glen Moriston, including Beinn Loinne and slopes above Tomcrasky, Rugged Massif.

Description of Landscape Role	<p>The section of the LCA within the Study Area is the eastern spur, running between Glen Moriston and the Great Glen, of a much larger extent of the LCT which extends west onto Skye and north to Strathfarrar. The spur forms the northern edge of the Great Glen above the southern end of Loch Ness and Fort Augustus.</p> <p>The area contributes to a perception of vast scale and distance in the landscape and provides a visual link to the wider landscape characters further to the west.</p>										
Key Views	<ul style="list-style-type: none"> • <i>Great Glen from Meall Fuar-mhonaidh</i> (defines the north edge of the glen in views west). • <i>Loch Tarff, 'Local Hero' location</i> (forms part of middle distance leading to Sweeping Interlocking Peaks). • <i>Loch Ness West</i> (defines north edge of Great Glen). 										
Key Routes	<ul style="list-style-type: none"> • A887-Glen Moriston • A87 - above Loch Loyne • A82 - Aberchalder/Ft Augustus • B862 - Loch Tarff and west 										
Gateways	A87 - above Loch Loyne										
Landscape Value and Sensitivity	<p>The LCA runs from the <i>Loch Ness and Duntelchaig SLA</i> to the <i>Moidart, Morar and Glen Shiel SLA</i>, though most of the LCA within the study area is not designated. Much of the wider Landscape Character Type (LCT) is covered by NSA and SLA designation and further development within the Study Area portion of the LCA is likely to be highly visible from popular peaks within the designations.</p> <table border="1" data-bbox="525 1382 1342 1597"> <thead> <tr> <th colspan="3" data-bbox="525 1382 1342 1473">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th data-bbox="525 1473 847 1534">Large Scale Wind Farms</th> <th data-bbox="847 1473 1064 1534">Small individual</th> <th data-bbox="1064 1473 1342 1534">Access infrastructure</th> </tr> </thead> <tbody> <tr> <td data-bbox="525 1534 847 1597">1</td> <td data-bbox="847 1534 1064 1597">1</td> <td data-bbox="1064 1534 1342 1597">2</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	1	2
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
1	1	2									
Sensitive Visual Receptors	Highest Sensitivity	<p>Residents of immediate locality</p> <p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers</p>									
	Medium	<p>Residents of wider region,</p> <p>People using Key Routes</p>									
	Lower	Users of other routes									

		People engaged on work
Current Wind Energy Development	Beinneun/Millennium Wind Farms cluster forms around the boundary between Rugged Massif and Rocky Moorland, mostly on south facing slopes with some west facing. Development occupies elevated sites above key routes through glens	
Potential for wind energy development	Some scope for limited additional development at scale of existing schemes, where it can be shown to improve the visual relationship of existing schemes, and where existing access infrastructure can be shared.	

5.2.8 Landscape Character Area 6

LN6: Monadhliath ridge and tops, Rolling Uplands.

Description of Landscape Role	<p>The most extensive landscape in the Study Area.</p> <p>External views are mostly from elevated viewpoints north of Loch Ness where it presents a multi-layered receding landscape, giving an impression of vast extent.</p> <p>From within LCA itself views are varied in character according to elevation.</p>
Key Views	<ul style="list-style-type: none"> • <i>Loch Ness West</i> <p>(Most of LCA is obscured by intervening LCAs and topography, but southern end sweeps down to meet <i>the Broad, Steep Sided Glen LCA</i> and frames the central portion of long views).</p> <ul style="list-style-type: none"> • <i>Great Glen from Meall Fuar-mhonaidh</i> <p>(Forms a sweeping receding landscape to the south).</p>
Key Routes	<ul style="list-style-type: none"> • B862 Stratherrick- much of the LCA is screened from the road by landform, but there is potential for development located on slopes above LCA15 Farmed Straths or on the plateau beyond to have prominence to the south of the road. • A9 - The road passes through the LCA in the north of the study area giving some views towards existing developments, and long views of development in the LCA are received outwith the study area, travelling south from Tore. Additional development may be seen in association with existing development
Gateways	N/A
Landscape Sensitivity	<p>LCA is generally visible from either within the LCA or from more distant elevated vantage points. The height of existing schemes means that development on the ground may be visible where the ground level itself is not, making distinctions between developments indistinct. Therefore, maintaining space between the developments is important to prevent coalescence.</p> <p>Although the LCA is large, it forms a strong contrast to the Rugged and Rocky LCTs which oppose it across the Great Glen. That contrast has a value, which should be protected by ensuring that wind energy development on the elevated ground on both sides of the Great Glen remains inferior in scale and extent to the landscape character and does not diminish their apparent distinctiveness or the effect of the Great Glen as a great natural boundary.</p>
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">Degree of Landscape Character Sensitivity</div>	

	Scale of 1-4, 1 being most susceptible to change	
	Large Scale Wind Farms	Small individual Access infrastructure
	2-3 Generally the LCT has a lower sensitivity, this LCA is rated higher in recognition of existing density of development.	1 3 from east side 2 from west side
Sensitive Visual Receptors	Highest Sensitivity	People at Key Viewpoints Visitors/tourists including cyclists and walkers
	Medium	Residents of wider region People using Key Routes
	Lower	Users of other routes People engaged on work
Current Wind Energy Development	Development consists broadly of: <ul style="list-style-type: none"> • large windfarms set 2.5-3km back from <i>Rolling Uplands Boundary with Farmed Straths LCAs</i>. • Generally the layout is deeper in the axis perpendicular to the Great Glen than the parallel axis. • Tend to be contained within shallow 'bowls' in the landscape which are visible from within the LCA but not in more distant views • Earlier developments appear at a regular spacing of 7-10km edge to edge. More recent applications/scoping reduce this spacing. 	
Potential for wind energy development	No scope for small or medium turbines Limited scope for <ul style="list-style-type: none"> • Micro turbines where closely associated with buildings • additional Large turbines within the existing pattern Turbines should: <ul style="list-style-type: none"> • not breach skyline when viewed from north side of Loch Ness. • Be set back from Key Routes • Preserve mitigation established by current schemes • Maintain the landscape setting of each existing scheme. • Avoid coalescence with current positioning • respect spacing and scale of existing development pattern. Development of turbines (all scales) in other locations within the LCA should be avoided to ensure that the scale of the landform is maintained and that perspective - when viewed across the loch in particular - is not adversely affected.	

5.2.9 Landscape Character Area 7

LN7: Inverness hinterland and south slopes of Beauly Firth, Rolling Farmland and Woodland.

Description of Landscape Role	Setting of Inverness Indicative of productivity of land and historic wealth										
Key Views	<ul style="list-style-type: none"> Loch Ness East Urquhart Castle Land based Loch Ness from Urquhart Castle <p>In the Key Views the LCA itself is not clearly distinguished, being distant and not physically prominent, however large scale turbines located in the LCA between Inverness and the Great Glen would tend to become focal in these views.</p>										
Key Routes	<ul style="list-style-type: none"> A9- views across LCA to Inverness, Black Isle and The Aird. Strong sense of arrival in settled landscape after the less populated and cultivated landscapes of the A9 route south of Inverness. B861 Tombreck-Inverness- route passes through LCA between LCA14 Flat Moorland Plateau with Woodland, and Inverness. Dunain - Blackfold - Abriachan: minor road, forming part of The Great Glen Way, long distance route. Partly within LCA but mostly within LCA8, Rocky Moorland Plateau with Woodland. Travelling east, the LCA forms the setting for Inverness. 										
Gateways	A9 at Inshes: Sense of arrival at Inner Moray Firth and Inverness.										
Landscape Value and Sensitivity	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>3</td> <td>4</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	3	4
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
1	3	4									
Sensitive Visual Receptors	Highest Sensitivity	Residents of immediate locality People at Key Viewpoints Visitors/tourists including cyclists and walkers									
	Medium	Residents of wider region, People using Key Routes									
	Lower	Users of other routes People engaged on work									
Current Wind Energy Development	none										

Potential for wind energy development	<p>No scope for Medium or Large turbines</p> <p>Some scope for turbines at following scale:</p> <ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes
---------------------------------------	--

5.2.10 Landscape Character Area 8

LN8: Glen Convinth, Rocky Moorland Plateau with Woodland

Description of Landscape Role	<p>Provides enclosure and definition to Great Glen.</p> <p>The LCA is transitional, carrying one from the space around Inverness or above the Great Glen to Strathglass and Beaully area, moving from one space to another. A place in its own right but distinctly dividing other landscapes.</p>
Key Views	<ul style="list-style-type: none"> • Loch Ness East • Urquhart Castle Land based • Loch Ness from Urquhart Castle <p>From these views only the areas of the LCA which border the <i>Broad Steep Sided Glen LCA</i> are themselves prominent, but large scale development further into the interior of the LCA may affect these views.</p> <ul style="list-style-type: none"> • Great Glen from Meall Fuar-mhonaidh <p>Any development in the LCA would be visible in this area, though not necessarily impinge on the principle directions of view.</p>
Key Routes	<ul style="list-style-type: none"> • A833 Glen Convinth - views within Study Area limited • Dunain - Blackfold - Abriachan/Great Glen Way- views towards Loch ness and Inverness • Minor Road - Caiplich- links A883 and A82 giving views to both sides of the Aird ridge.
Gateways	<p>Abriachan- marks approximate transition of the higher ground of the Aird to the Great Glen when traveling south-east.</p> <p>Moniack Mhor - locally significant gateway area where views open out towards Beaully strath.</p>
Landscape Value and Sensitivity	<p>The LCA provides a valued break in development between Fairburn Wind Farm and the cluster in the Rolling Uplands of the Monadhliath.</p> <p>This respite is of particular value to the Great Glen Way where it helps to prevent a sense of encirclement by development in the areas which experience views across the watershed towards the Beaully Firth as well as the Great Glen.</p>

	<p>Commercial woodland is a key feature in this LCA at present and is represented in broad swathes. Development of the type which has previously been proposed would change the character of the woodland with keyholing and oversailing the plantation with turbines, adding an additional layer of complexity to the landscape.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">2-3</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	2	2-3	3
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
2	2-3	3									
Sensitive Visual Receptors	Highest Sensitivity	<p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers</p>									
	Medium	<p>Residents of wider region</p> <p>People using Key Routes</p>									
	Lower	<p>Users of other routes</p> <p>People engaged on work</p>									
Current Wind Energy Development	None										
Potential for wind energy development	<p>No scope for medium or large scale turbines.</p> <p>Some scope for turbines at following scale:</p> <ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes • Clear of higher ground • Clear of boundary areas with the <i>Broad Steep Sided Glen LCA</i>, particularly in locations where development would impinge on the Key Views. 										

5.2.11 Landscape Character Area 9

LN9: Eskdale Muir through to Meall na h-Eilrig (hill above Drumnadrochit), to the north, Rocky Moorland Plateau.

Description of Landscape Role	Road through gives an intense burst of wilderness experience and some fine elevated views towards other LCTs which seem vast and distant.
Key Views	<ul style="list-style-type: none"> • <i>Loch Ness from Urquhart Castle</i>

	Only in areas east of the A833 would development be likely to impinge directly in the key view.		
Key Routes	<ul style="list-style-type: none"> A833 Glen Convinth -views across plateau, mostly towards north. 		
Gateways			
Landscape Value and Sensitivity	Part of LCA is more settled and influenced by visibility from road, which affects sensitivity.		
	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change		
	Large Scale Wind Farms	Small individual	Access infrastructure
	3 for LCT, 2 for LCA a due to settlement, road access and higher sensitivity of neighbouring types.	2-3	3
Sensitive Visual Receptors	Highest Sensitivity	People at Key Viewpoints Visitors/tourists including cyclists and walkers Residents within the LCA	
	Medium	Residents of wider region People using Key Routes	
	Lower	Users of other routes People engaged on work	
Current Wind Energy Development	None		
Potential for wind energy development	No scope for medium or Large Scale Turbines Some scope for turbines at following scale: <ul style="list-style-type: none"> Micro- typical appropriate group size -single Small - typical appropriate group size -single Turbines should be: <ul style="list-style-type: none"> associated with buildings Set back from Key Routes Clear of higher ground Limited to west of A833 		

5.2.12 Landscape Character Area 10

LN10: Separation of Glen Urquhart and Glen Moriston, Rocky Moorland Plateau.

Description of Landscape Role	<p>No roads through, views from distance or within LCA on foot. Provides middle ground foil to Rugged Massif in views from Meall Fuar-mhonaidh.</p> <p>Adds a sense of vastness to perceptions of distance.</p>										
Key Views	<ul style="list-style-type: none"> • Urquhart Castle from Loch • Urquhart Castle Land based • Loch Ness West • Loch Ness East <p>From these views only the areas of the LCA which border the <i>Broad Steep Sided Glen</i> LCA are themselves prominent, but large scale development further into the interior of the LCA may affect these views.</p> <ul style="list-style-type: none"> • Great Glen from Meall Fuar-mhonaidh <p>Any development in the LCA would be visible in this area, though not necessarily impinge on the principle directions of view.</p>										
Key Routes	<ul style="list-style-type: none"> • Great Glen Way- around Bunloit and Grottaig the route has views into the LCA • A82 around Inver Coille to Invermoriston • A887 around Dundreggan 										
Gateways	N/A										
Landscape Sensitivity	<p>Most of the Landscape Character Area lies outside the SLA designation, Meall Fuar-mhonaidh itself is included and is an attraction in its own right, and affords views of SLA and wider area. The experience of the landscape from the summit of Meall Fuar-Mhonaidh would be degraded if there were a perception of the peak being encircled by development.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	3	2	3
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
3	2	3									
Sensitive Visual Receptors	Highest Sensitivity	<p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers</p>									
	Medium	<p>Residents within the LCA and wider region</p> <p>People using Key Routes</p>									
	Lower	Users of other routes									

		People engaged on work
Current Wind Energy Development	Within Study Area:	Bhlaraidh Wind Farm
	Outwith Study Area:	Corrymony Wind Farm
	While there is a concentration of development forming in this area, there is no clear pattern, beyond presence within the Plateau area. Developments vary in scale of turbines and extent of individual development.	
Potential for wind energy development	<p>No scope for small or medium turbines</p> <p>Limited scope for</p> <ul style="list-style-type: none"> • Micro turbines where closely associated with buildings • additional Large turbines within the existing pattern <p>Turbines should:</p> <ul style="list-style-type: none"> • Be set back from Key Routes • Preserve mitigation established by current schemes • Maintain the landscape setting of each existing scheme. • respect spacing and scale of existing development pattern. • minimise visual confusion from higher ground to the west and north and with Meall Fuar-mhonaidh 	

5.2.13 Landscape Character Areas 11 & 12

LN11: Rocky Moorland, High ground around north and west of Glen Garry.

LN12: Rocky Moorland, Small area above Loch Oich to south.

Description of Landscape Role	<p>Not prominent in the landscape but providing a transition between Rugged Massif and Smooth Moorland types.</p> <p>Its elevated position mean turbines located here may be visible even when their bases are not.</p>
Key Views	<ul style="list-style-type: none"> • <i>Loch Ness West</i> • <i>Great Glen from Meall Fuar-mhonaidh</i> • <i>Loch Tarff, 'Local Hero' location</i> <p>While the LCA does not form a prominent feature in the Key Views, large scale development based within the LCA may do so.</p>
Key Routes	<ul style="list-style-type: none"> • A87- between Loch Loyne and Loch Garry • A887-Glen Moriston. While the LCA5 itself is not visible, development on the boundary ridge with the adjacent LCA5, Rugged Massif would potentially be. • A82-locally

Gateways	A87 - above Loch Loyne			
Landscape Sensitivity	The LCA is important to the setting of Loch Garry and its interaction with other LCTs. The area between Loch Ness and Loch Lochy is significant in the transition of landscape character experienced when moving along the Great Glen.			
	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			
		Large Scale Wind Farms	Small individual	Access infrastructure
	LCA11	2 (The LCT sensitivity would be relatively low due to its large scale and simplicity. The LCA is more sensitive due to existing levels of development).	1	3
	LCA12	1	2-3	2
Sensitive Visual Receptors	Highest Sensitivity	People at Key Viewpoints Visitors/tourists including cyclists and walkers		
	Medium	Residents within the LCA and wider region People using Key Routes		
	Lower	Users of other routes People engaged on work		
Current Wind Energy Development	Developments cluster around the boundary between <i>Rugged Massif and Rocky Moorland</i> , mostly on south facing slopes with some west facing.			
Potential for wind energy development	Some scope for limited additional development at scale of existing schemes, where it can be shown to improve the visual relationship of existing schemes, and where existing access infrastructure can be shared.			

5.2.14 Landscape Character Area 13

LN13: Sweeping Interlocking Peaks, Hills forming enclosure to north of Loch Lochy

Description of Landscape Role	While this LCA is seen most impressively from further west on the A82 as the hills sweep down to the shore of Loch Lochy, they are also significant in layered views into the west from elevated locations in the west of the study area.										
Key Views	<ul style="list-style-type: none"> Loch Tarff, 'Local Hero' location Great Glen from Meall Fuar-mhonaidh A87 Viewpoint above Loch Garry <p>The LCA forms a moderately prominent feature within wide panoramas in the Key Views.</p> <p>Large scale development based within the LCA may become a focus in views and detract from the role the LCA plays in the wider landscape composition.</p>										
Key Routes	<ul style="list-style-type: none"> B862- Loch Tarff, and A87 above Loch Garry <p>See Key Views</p>										
Gateways	A87 - above Loch Loyne										
Landscape Sensitivity	<p>The mountains above Loch Lochy are key to the Special Qualities identified for the Loch Lochy and Loch Oich SLA. And form part of the closure of long views west along Loch Ness.</p> <table border="1" data-bbox="552 1249 1366 1464"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td>1</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	1	1
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
1	1	1									
Sensitive Visual Receptors	Highest Sensitivity	<p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers</p> <p>People using Key Routes</p>									
	Medium	Residents within wider region,									
	Lower	<p>Users of other routes</p> <p>People engaged on work</p>									
Current Wind Energy Development	None										

Potential for wind energy development	No scope for development
---------------------------------------	--------------------------

5.2.15 Landscape Character Area 14

LN14: Flat Moorland Plateau with Woodland, Lochashie, Drummosie and Carr Ban

Description of Landscape Role	Interspersed with small local roads the LCA is important to the perception of Inverness's location at the edge of a vaster, wilder landscape. Seen from elevated locations north of Loch Ness the LCA forms part of the layered landscape which rises from the loch to the Monadhliaths.										
Key Views	<ul style="list-style-type: none"> Loch Ness East Urquhart Castle Land based Loch Ness from Urquhart Castle Great Glen from Meall Fuar-mhonaidh 										
Key Routes	<ul style="list-style-type: none"> B862 Stratherrick - borders western edge at Loch Duntelchaig A9 - cuts through LCA briefly at Drummosie B861 Tombreck-Inverness 										
Gateways	N/A										
Landscape Sensitivity	<p>Views of the LCA from outside its boundaries largely occur from elevated plateau LCAs across the Great Glen and from Inverness. Views from Inverness largely encompass the area of the LCA which is outside the SLA boundary.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	2	3	2
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
2	3	2									
Sensitive Visual Receptors	Highest Sensitivity	<p>Residents within the LCA</p> <p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers</p> <p>People using Key Routes</p>									
	Medium	<p>Residents within wider region</p> <p>People viewing LCA from elevated Plateau Landscape areas across the Loch</p>									
	Lower	<p>Users of other routes</p> <p>People engaged on work</p>									
Current Wind Energy Development	Smaller developments:										

	<p>Easterton of Duntelchaig.</p> <p>No pattern established.</p>
Potential for wind energy development	<p>No scope for medium or large scale turbines.</p> <p>Some scope for turbines at following scale:</p> <ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes • Clear of higher ground • Clear of boundary areas with the <i>Broad Steep Sided Glen LCA</i>, particularly in locations where development would impinge on the Key Views. • Turbines should not breach interim horizons when seen from key view locations.

5.2.16 Landscape Character Area 15

LN15: Farmed Straths, Strath Errick and Strath Nairn

Description of Landscape Role	<p>The Strath character becomes more pronounced to the north east as the strath narrows and deepens and the contrast between the more intense habitation and agriculture with the moorland surrounding moorland and uplands is stronger.</p> <p>The deeper Strath strongly divides the surrounding LCAs while the broader upper strath provides a more subtle transition.</p>						
Key Views	While the views within the strath are of value, the LCA does not play a role in the Key Views previously identified.						
Key Routes	<ul style="list-style-type: none"> • B862 Stratherrick- linear route aligned with and running length of strath, • B851 Strathnairn- linear route aligned with and running length of strath • A9 -Moy/Daviot - crosses Strathnairn 						
Gateways	N/A						
Landscape Sensitivity	<p>The Landscape is mostly small in scale with views contained by the landforms. Land use is intimate in scale.</p> <table border="1" data-bbox="566 1892 1380 2038"> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <td>Large Scale Wind Farms</td> <td>Small individual</td> <td>Access infrastructure</td> </tr> </table>	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change							
Large Scale Wind Farms	Small individual	Access infrastructure					

	1	3-4	2-3
Sensitive Visual Receptors	Highest Sensitivity	Residents within LCA Visitors/tourists including cyclists and walkers People using Key Routes	
	Medium	Residents within wider region	
	Lower	Users of other routes People engaged on work	
Current Wind Energy Development	<p>Large Windfarm access tracks for:</p> <ul style="list-style-type: none"> Dunmaglass Wind Farm Dell Wind Farm Corriegarth Wind Farm <p>Small Category:</p> <ul style="list-style-type: none"> Craggie Farm 		
Potential for wind energy development	<p>No scope for medium or large scale turbines.</p> <p>Some scope for turbines at following scale:</p> <ul style="list-style-type: none"> Micro- typical appropriate group size -single Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> associated with buildings Set back from Key Routes Clear of higher ground Turbines should not breach interim horizons when seen from key view locations. <p>Access Tracks should:</p> <ul style="list-style-type: none"> avoid open slopes share existing infrastructure where possible. 		

5.2.17 Landscape Character Areas 16 & 17

LN16: Farmed and Wooded Foothills, Loch Tarff to Loch Duntelchaig

LN17: Farmed and Wooded Foothills, sliver on the north shore of Duntelchaig

Description of Landscape Role	Part of SLA
-------------------------------	-------------

	Lying above the Broad Steep Sided Glen and below the Rolling Uplands the LCA plays a key role in perception of scale and distance in the landscape. It is seen as a skyline from the Loch shore level and as the middle ground of a complex layered landscape when perceived from plateau locations across the Great Glen.										
Key Views	<ul style="list-style-type: none"> • <i>Urquhart Castle Land based</i> • <i>Loch Tarff, 'Local Hero' location</i> • <i>Loch Ness West</i> • <i>Loch Ness East</i> • <i>Urquhart Castle Land Based</i> • <i>Loch Ness from Urquhart Castle</i> <p>Lying between the <i>Broad, steep-sided Glen LCA</i> and the <i>Rolling Uplands LCA</i> (though separated by the lower lying <i>Farmed Strath LCA</i>), the area forms a significant part of the enclosure of Loch Ness and the Great Glen to the south side.</p>										
Key Routes	<ul style="list-style-type: none"> • B852 - Above Foyers -views within LCA • B851 - Charleston to Kindrummond - views within LCA • Dunain - Blackfold - Abriachan - elevated views across loch showing LCA as part of layered landscape rising from Loch to Monadhliaths. 										
Gateways	N/A										
Landscape Sensitivity	<p>The location of this LCA between the higher ground of the Rolling Uplands and the steep sides of the Great Glen means it can be seen in a range of contrasting relationships to other landscape characters, limiting its ability to absorb development.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">3-4</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	3-4	1
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
1	3-4	1									
Sensitive Visual Receptors	Highest Sensitivity	<p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers , Users of the Great Glen Way</p> <p>People using Key Routes</p> <p>Residents within the LCA</p>									
	Medium	<p>Residents of Plateau level LCAs across the Great Glen</p> <p>Residents within the wider region</p>									
	Lower	<p>Users of other routes</p> <p>People engaged on work</p>									

Current Wind Energy Development	<p>Category Small:</p> <ul style="list-style-type: none"> • Dalcrombie • NE Of Lodge Dores
Potential for wind energy development	<p>No scope for medium or large scale turbines.</p> <p>Some scope for turbines at following scale:</p> <ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes • Clear of higher ground • Turbines should not breach interim horizons when seen from key view locations.

5.2.18 Landscape Character Area 18

LN18: Enclosed Farmland, The Aird

Description of Landscape Role	Almost entirely outside study area, but is surrounded on three sides by the Rocky Moorland Plateau with Woodland. West facing slopes allow views over Glen Convinth and towards crofting settlements in the Beauly river strath.										
Key Views	N/A										
Key Routes	<ul style="list-style-type: none"> • Minor Road - Caiplich • A833 Glen Convinth <p>The routes effectively define the eastern and western extents of the LCA within the Study Area.</p>										
Gateways	Moniak Mhor - locally significant gateway area where views open out towards Beauly strath.										
Landscape Sensitivity	<p>Setting of Beauly and dispersed communities inland and to the coast.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	3	3
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
1	3	3									
Sensitive Visual Receptors	Highest Sensitivity	<p>Residents within the LCA</p> <p>Visitors/tourists including cyclists and walkers</p> <p>People using Key Routes</p>									

	Medium	Residents within the wider region
	Lower	Users of other routes People engaged on work
Current Wind Energy Development	None	
Potential for wind energy development	<p>No scope for medium or large scale turbines.</p> <p>Some scope for turbines at following scale:</p> <ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes • Clear of higher ground 	

5.2.19 Landscape Character Area 19

LN19: Area directly around Loch Ness, Broad Steep-Sided Glen.

Description of Landscape Role	<p>Area directly around Loch Ness and Settled areas at the mouths of the glens Urquhart and Moriston and the area between Fort Augustus and Loch Oich.</p> <p>Part of SLA and provides the immediate setting of Loch Ness and Urquhart Castle.</p> <p>This is the LCA from which most people travelling through the Great Glen will experience the surrounding LCAs.</p>
Key Views	<ul style="list-style-type: none"> • <i>Loch Ness West</i> • <i>Loch Ness East</i> • <i>Urquhart Castle from Loch Ness</i> • <i>Urquhart Castle land based</i> • <i>Loch Ness from Urquhart Castle</i> <p>These views are all available from locations within the LCA, therefore it is essential to their composition and appreciation.</p> <ul style="list-style-type: none"> • Great Glen from Meall Fuar-mhonaidh • A87 Viewpoint above Loch Garry <p>The LCA forms part of the wider, complex scenery from these locations and is important to their integrity.</p>
Key Routes	<ul style="list-style-type: none"> • A82 T- linear route aligned with loch and glen side slopes • B862 Ashie Moor-Scaniport • A831 Glen Urquhart - views of entrance to glen from the west and across glen

	<ul style="list-style-type: none"> A887T Glen Moriston - views of entrance to glen from the west and across glen B852- South Loch Ness shore - primarily views across loch to northern side, but also close views of south side Dunain - Blackfold - Abriachan - elevated views across Great Glen to southern side Minor Road - Caiplich- elevated views across Great Glen to southern side Great Glen Way - views from variety of elevations along northern side of glen. 									
Gateways	<ul style="list-style-type: none"> Loch Dochfour - marking transition between lochside landscapes and LCA7, Rolling Farmland and Woodland. Drumnadrochit - marking transition from LCA1 Wooded Glen, to Broad Wooded Glen Invermoriston - marking transition from LCA2 Wooded Glen, to Broad Wooded Glen Fort Augustus - arrival at Loch Ness from south Dores - arrival at Loch Ness from Inverness hinterland Invergarry - transition into great glen from Glen Garry 									
Landscape Sensitivity	<p>The LCA forms the heart of the SLA and is the essential setting of Loch Ness and the principle settlements around the Loch.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>	Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	1	2	1
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change										
Large Scale Wind Farms	Small individual	Access infrastructure								
1	2	1								
Sensitive Visual Receptors	Highest Sensitivity	Residents within the LCA People at Key Viewpoints Visitors/tourists including cyclists and walkers and boat users People using Key Routes								
	Medium	Residents wider region								
	Lower	Users of other routes People engaged on work								
Current Wind Energy Development	Category Small: <ul style="list-style-type: none"> Drummond, Dores 									
Potential for wind energy development	No scope for medium or large scale turbines. Very Limited scope for <ul style="list-style-type: none"> turbines at following scale: 									

	<ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes • not impinge on Key Views
--	--

5.2.20 Landscape Character Area 20

LN20: Great Glen around Loch Oich, Broad Forested Strath.

Description of Landscape Role	Setting of Loch Garry Middle ground of panoramic views experienced to west from A87										
Key Views	<ul style="list-style-type: none"> • Great Glen from Meall Fuar-mhonaidh <p>Forms part of the wider setting in views of the chain of Lochs west down the Great Glen.</p> <ul style="list-style-type: none"> • A87 Viewpoint above Loch Garry <p>The viewpoint allows people to look down towards Loch Garry and appreciate its resemblance from this angle to a map of Scotland. The Loch is the key focus of the view.</p>										
Key Routes	<ul style="list-style-type: none"> • A82 (T) between Laggan and Aberchalder - views may be limited by roadside vegetation. • A87 above Loch Garry 										
Gateways	<ul style="list-style-type: none"> • A87 - above Loch Loyne • Invergarry - transition into great glen from Glen Garry 										
Landscape Sensitivity	<p>The LCA is important to the setting of Loch Garry and its interaction with other LCTs in the area between Loch Ness and Loch Lochy is significant in the transition of landscape character experienced when moving along the Great Glen.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change</th> </tr> <tr> <th>Large Scale Wind Farms</th> <th>Small individual</th> <th>Access infrastructure</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">2-3</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>		Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change			Large Scale Wind Farms	Small individual	Access infrastructure	2	2-3	3
Degree of Landscape Character Sensitivity Scale of 1-4, 1 being most susceptible to change											
Large Scale Wind Farms	Small individual	Access infrastructure									
2	2-3	3									
Sensitive Visual Receptors	Highest Sensitivity	<p>Residents within the LCA</p> <p>People at Key Viewpoints</p> <p>Visitors/tourists including cyclists and walkers</p>									

		People using Key Routes
	Medium	Residents within the wider region
	Lower	Users of other routes People engaged on work
Current Wind Energy Development	None	
Potential for wind energy development	<p>No scope for medium or large scale turbines.</p> <p>Very Limited scope for</p> <ul style="list-style-type: none"> • turbines at following scale: <ul style="list-style-type: none"> • Micro- typical appropriate group size -single • Small - typical appropriate group size -single <p>Turbines should be:</p> <ul style="list-style-type: none"> • associated with buildings • Set back from Key Routes • not impinge on Key Views 	

6 Glossary

Beag-fhaclair

- **Cluster-** One or more wind energy developments comprising more than one turbine that form a coherent strategic grouping within a landscape.
- **CPP-** Carbon Rich Soil, Deep Peat and Priority Peatland Habitat.
- **Cumulative Impact-** Changes caused by a proposed development in conjunction with other developments (not just similar developments) or as the combined effect of a set of developments, taken together. This includes proposals that have been permitted as well as those that have been submitted and are waiting to be determined.
- **Density**
 - **Turbine density** - typical spacing of turbines within a single development,
 - **Wind Farm Density** - typical spacing of distinct developments within a cluster.
- **SG-** Onshore Wind Energy Supplementary Guidance
- **EIA-** Environmental Impact Assessment
- **HwLDP-** Highland-wide Local Development Plan
- **Key Routes-** An important route that captures the essence of an area's particular qualities.
- **Key Views-** An important view that is experienced from a particular location and capture the essence of an area's particular qualities.
- **Landmark-** A prominent or conspicuous landscape feature, building or other place, often visible over distance, that is of historical, aesthetic or cultural significance.
- **Landscape Setting-** How the development or proposed development sits within the wider landscape.
- **Larger-scale wind energy development-** generally turbines of 30m or above to blade tip
- **LCA-** Landscape Character Area= Geographical areas made up of a particular landscape character type.
- **LCT-** Landscape Character Type= Distinct types of landscape homogeneous in character, and generic in nature, that may occur in different areas , but share similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
- **Pattern-** Consistent characteristics of siting and design of wind developments within a cluster.
- **Smaller-scale wind energy development-** generally turbines below 30m to blade tip
- **Spatial Framework-** A spatial framework identifies those areas that are likely to be most appropriate for onshore wind farms as a guide for developers and communities. Development proposals should take account of the spatial framework. The spatial framework is to be set out in the Council's development plan. National policy says that when Councils prepare their spatial frameworks, they should follow the approach set out in Table 1 of SPP. This involves identifying: Areas where wind farms will not be acceptable; Areas of significant protection; Areas with potential for wind farm development.

- **Strategic Capacity-** The least constrained areas that may be able to accommodate larger-scale onshore wind energy developments. Scottish Government's description is as follows: "Areas of strategic capacity are essentially Group 3 areas from the spatial framework ... where it may be desirable to restrict smaller-scale wind turbines to allow larger wind turbines/farms to come forward ... [but such work] should not be used to define individual wind farms as strategic." (['Onshore Wind Some Questions Answered'](#)).
- **THC-** The Highland Council
- **Visual Receptor-** individuals or defined groups of people that have the potential to be affected by wind energy developments. The visual impact of one or more wind energy developments can be experienced in succession along routes, as well as from individual locations.

7 References

Iomraidhean

Department of Energy and Climate Change. 2011. *Update of UK Shadow Flicker Evidence Base: Final Report.*

Scottish Environment Protection Agency. 2012. *Land Use Planning System: SEPA Guidance Note 8: SEPA standing advice for planning authorities and developers on development management consultations.* V.8

Scottish Environment Protection Agency. 2014. *Land Use Planning System: SEPA Guidance Note 4: Planning guidance on on-shore windfarm developments.* V.7

Scottish Government. 2007. *Peat Landslide Hazard & Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments.*

Scottish Government. 2011. *Scottish Government and Energy saving Trust Commissioned Report: Community Renewable Energy Toolkit.*

Scottish Government. 2013. *Scottish Government Good Practice Principles for Community Benefits from Onshore Renewable Energy Developments.*

Scottish Natural Heritage. 2002. *Visualisation Assessment of Windfarms Best Practice.*

Scottish Natural Heritage. 2010. *A Brief Guide to Preparing an Outdoor Access Plan.*

Scottish Natural Heritage. 2012. *Guidance: Siting and Design of Small Scale Wind Turbines of between 15 and 50 metres in height.*

Scottish Natural Heritage. 2013. *Scottish Natural Heritage Commissioned Report 591: Research and guidance on restoration and decommissioning of onshore wind farms.*

Scottish Natural Heritage. 2013. *Guidance on Assessing Connectivity with Special Protection Areas.* V.2

Scottish Natural Heritage. 2014. *Siting and Designing Windfarms in the landscape.*V.2

Scottish Natural Heritage. 2014. *Visual Representations of Windfarms.* V.2

Scottish Renewables, Scottish Natural Heritage, Scottish Environment Protection Agency, Forestry Commission and Historic Scotland. 2015. *Good practice during wind farm construction.* 3rd Ed.

The Highland Council, Scottish Natural Heritage. 2011. *Assessment of Highland Special Landscape Areas.*

