



SHETLAND ISLANDS COUNCIL

DRAFT INTERIM PLANNING POLICY

Wind Farm Development



October 2010



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Chapter 1 The Reasons for and Status of this IPP

Background

- 1.1 This Interim Planning Policy (IPP) is prepared against a backdrop of increasing concern regarding climate change and the severe and wide-ranging impact this will have. There is a substantial body of evidence that human activity has resulted in an overall upward trend in global average temperatures and, hence, significant climatic changes due to the release into the atmosphere of CO₂ and other 'greenhouse' gases.

CO₂ reduction targets Context

- 1.2 The Kyoto Protocol (1997) is an international treaty representing the first steps towards an international commitment to tackling climate change by reducing CO₂ emissions. The UK signed the Kyoto Protocol and is on track to exceed its Kyoto target for reducing greenhouse gas emissions. In 2009 The Climate Change (Scotland) Act received Royal Assent. The Act sets in statute the Government Economic Strategy target to reduce Scotland's emissions of greenhouse gases by 80 per cent by 2050.

Renewable Energy Targets Context

- 1.3 The Renewable Energy Directive (Dec 2008) requires that 22% of all energy in the EU is to be generated from renewable sources by 2020, split between member states in a 'burden sharing scheme'. The UK portion in the draft is set out to be 15% of the total energy requirement, which includes energy for transport etc. This represents a ten-fold increase on the previous target and meeting it will not be a trivial task.
- 1.4 In November 2007, the Scottish Government committed in its Government Spending Review that 31% electricity would be generated from renewable sources by 2011 and 50% by 2020. This updated the targets set out in 'Securing a Renewable Future: Scotland's Renewable Energy' (2003), as part of overall strategy for encouraging sustainable development and tackling climate change. The 2020 target equates to 8GW of renewable production as indicated within the National Planning Framework 2 (NPF2).

Shetland Context

- 1.5 The Shetland Islands Council Corporate Plan 2010 – 12 supports the growth of renewable technology both on and offshore. Alongside this there is strong support for community generation schemes.
- 1.6 Burradale in Tingwall, Shetland currently has a turbine in operation that is reported to be the most efficient in energy production within the UK. This indicates that Shetland is well placed to maximise the potential of wind to generate electricity. Accommodating a large amount of wind turbine development while retaining the essential character of Shetland and maintaining the quality of life of residents and visitor amenity will present challenges. The Council is committed to further development, but this should be appropriate in terms of scale and situation, and needs to carefully consider and address negative impacts and maximise potential gain. Development that is unable to satisfy stringent criteria will not be permitted.
- 1.7 The Consultative Draft Marine Spatial Plan 3rd Edition (recently under consultation from 22 March 2010 until 14 June 2010) has been developed at the NAFC Marine Centre through the Scottish Sustainable Marine Environment Initiative (SSMEI). The Shetland Marine Spatial Plan brings together authoritative spatial data on the marine and coastal environment and its various uses. It establishes an overarching policy framework to guide the placement of activity, from marine renewable energy to aquaculture. The Plan has benefited from extensive consultation with a wide range of stakeholders since its inception in 2006; this included public consultation to a wide range of stakeholders and a trial implementation. The implementation of the Marine Plan aims to deliver the key benefits of providing a plan-led approach to the management of the sea around Shetland, facilitating a more integrated and better informed decision making process regarding the future distribution of use of space and resources enabling long-term protection and use of the marine environment. Shetland Islands Council will take the policies on marine planning into account in the preparation of the Local Development Plan. They may also be material to decisions on individual planning applications.

Status

Although this Interim Planning Policy is not itself part of the statutory Plan (Shetland Structure Plan 2000 and Shetland Local Plan 2004) it responds to national objectives contained within:

SPP	Scottish Planning Policy (2010)
PAN45	Renewable Energy Technologies (2002) Annex 2 -Spatial Frameworks & Supplementary Guidance for Wind Farms (2008)
PAN84	Reducing Carbon Emissions in New Development (2008)
NPF2	National Planning Framework for Scotland 2 (2008)

All of the above documents have been published since the adoption of the current statutory Plan. This Interim Planning Policy Document should be read and interpreted in the context of the statutory Plan, the above documents and other national legislation, policy and guidance.

Following adoption by the Shetland Islands Council this Interim Planning Policy will be the latest statement of Council Policy with regard to certain wind farm development (see below) and will therefore be a material consideration for all development of this nature.

Relationship to other Shetland Planning Policy Documents at the time of Publication

The other key Shetland Islands Council statement of planning policy regarding Wind Turbines is contained within the Interim Planning Policy Document:

“Towards Sustainable Construction and Better Design in Shetland” (2009)

In the document referred to above, policies SPG 6 and SPG 7 are intended to apply to aerogeneration schemes that require planning permission until the total generating capacity of a wind farm reaches 20 megawatts. At this level of capacity and beyond the policies and spatial framework in the document you are now reading should be applied.

Wind turbines of any generating capacity may require an Environmental Impact Assessment and the principles and tests contained in this document may be used as a guide to inform the Council if further information is required from an applicant.

Please Note, the Shetland Islands Council is not the determining authority for some wind farm applications, as explained on page13 paragraph 3.5 of this document.

Chapter 2 Spatial Framework & The Spatial Policies

Overview

- 2 This chapter sets out a Spatial Framework against which all proposals for wind energy development of or exceeding 20 megawatts in generating capacity will be initially assessed. The Spatial Framework has two components; the Spatial Planning Policies which set out broad criteria for assessing wind farm proposals and the Spatial Maps which help guide developers and the community to appropriate locations by broadly defining areas of opportunity for wind farm development and areas of significant constraint.
- 2.1 This chapter should be read in conjunction with Chapters 4 and 5 of the Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands (2009), prepared for the Council by Land Use Consultants. This study is not policy but is to be read as a background paper to this IPP. The Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands provides more detailed information on the characteristics of Landscape Character Areas and gives a view as to the sensitivity (low, moderate or high sensitivity) to wind farm development.
- 2.2 In preparing this IPP, the Council has been mindful to ensure that policies seek to protect international and national natural heritage designations, avoid potential cumulative impacts of wind farm development and consider constraints to wind farm development such as: the historic environment; areas designated for their regional and local natural heritage value; tourism and recreational interests; communities; aviation and defence interests; broadcasting installations; project viability; grid capacity issues and the need to incorporate buffers around communities and historic designations.

2.3 Spatial Maps

The Spatial Maps are set out as follows: Some maps and data provided by Land Use Consultants (2009).

- **Landscape Sensitivity** (Map 1 Appendix 2)
These maps show areas of low, medium and high sensitivity
- **Areas to be Afforded Significant Protection** (Map 2 Appendix 2)
In these areas are sites that are designated for their national or international landscape or natural heritage value. They also contain areas where the cumulative impact of existing and consented wind farms limits further development
- **Areas of Likely Significant Constraint** (Map 3 Appendix 2)
Where proposals will be considered on their individual merits against identified criteria

- **Broad Areas of Search** (Map 4 Appendix 2)
Areas of low sensitivity landscape that are relatively large and free from significant areas of protection or constraint that are proposed as areas of search, subject to detailed consideration against identified criteria
- 2.4 Appendix 2 outlines the methodology and approach for the sieve mapping exercise and identification of 'Areas of Likely Significant Constraint' and 'Broad Areas of Search'. The maps provide a useful tool to the site selection process and serve to guide wind energy development to appropriate locations. They also provide vital information concerning protected and constrained sites and aid consultation with the relevant statutory bodies.
- 2.5 The purpose of identifying 'Areas of Likely Significant Constraint' is to alert developers and the community to possible significant constraints and to steer wind farm development away from such areas in the first instance. It is likely that proposals in the constrained areas will be unable to satisfy development management criteria set out in Appendix 1 of this IPP. Advice should be sought from relevant statutory bodies as to the precise nature of the constraint, and any possible mitigation that may reduce and/or offset negative impacts associated with wind farm proposals. The existence of a constraint does not necessarily imply a blanket restriction on wind energy development. However, applicants must demonstrate that the proposal will not lead to unacceptable impacts. In the constrained areas, smaller turbines and smaller scale wind farm development may be able to satisfy development criteria set out in Appendix 1.
- 2.6 It is intended that the maps included in this document will be periodically updated as new information becomes available or as landscape capacity limits are reached. This also includes information that may be gathered during the preparation of the Local Development Plan.

2.7 Spatial Policies

- 2.8 The Spatial Policies listed below are supported by Development Criteria, which are set out in Appendix 1
- 2.9 Applications for on-shore wind farm development of or above 20MW and off-shore wind farm development up to 1MW will be considered against the following Spatial Policies:
- **Spatial Policy 1 (LDP WED SP1)** – the policy specifically relates to offshore wind energy development up to 1MW. Proposals of this nature will be subject to consideration against Spatial Policy 1 and the Draft Shetland Spatial Marine Plan. They may also be subject in future to the emerging National and Regional Marine Plans for Scotland, which are being devised as required by the Marine (Scotland) Act 2010.
 - **Spatial Policy 2 (LDP WED SP2)** - the policy relates to on-shore wind energy development and aims to protect areas of national or international

significance such as National Scenic Areas (NSA); Special Protection Areas (SPA); Special Areas of Conservation (SAC); National Nature Reserves (NNR); Sites of Special Scientific Interest (SSSI) and Ramsar sites. It applies primarily to applications for onshore wind farm development, although onshore elements of large offshore proposals will be subject to this policy. Also some national designations such as SPAs extend into the sea around the designated area, and therefore any marine application affecting such areas must be subject to an appropriate assessment by the planning authority of the implications for the site's conservation objectives.

- **Spatial Policy 3 (LDP WED SP3)** – the policy relates to on-shore wind energy development and aims to encourage wind farm development of all scales provided it does not cause significant adverse environmental or amenity impacts. Through accompanying spatial maps, the policy directs developers and the community to the most appropriate locations for wind farm development.

**Policy LDP WED SP1
Off-Shore Wind Energy Development**

Proposals for off-shore wind energy development will be assessed using the guidance contained within the Works Licence Policy and Shetland Marine Spatial Plan to determine whether or not a works licence will be granted.

On-shore components of such development will be subject to the provisions set out in the remainder of this IPP, and any other valid planning considerations.

Assessments of cumulative impacts will consider impacts from development both on-shore and off-shore, and will include impacts from existing development, development that has permission to proceed but has not yet been effected, and current applications for development in the area.

2.10 The Zetland County Council Act (1974) provides for Shetland Islands Council to grant works licences for offshore development out to a 12 mile (territorial) limit. In the case of offshore proposals for wind energy development, Shetland Islands Council will seek to apply the guidance contained in the Shetland Marine Spatial Plan. This document has been drafted under the SSMEI initiative and is a pilot project to inform future marine planning policy and test new management framework options for Scotland's marine and coastal environment. As such it is not fully incorporated into Council Policy but represents the best guidance currently available in Shetland against which to assess applications for works licences for offshore wind energy development in the sea around Shetland.

2.11 Offshore development of 1MW and above will be determined under The Electricity Act 1989 (Requirement of Consent for Offshore Generating Stations

(Scotland) Order 2002) by Marine Scotland. Shetland Islands Council will be consulted as an interested public body. The Shetland Marine Spatial Plan will in such circumstances form the basis for the Council's submission. A works licence from the Shetland Islands Council will also be a requirement.

- 2.12 In either case there may be landward supporting infrastructure that will require planning consent. These will be assessed against the Spatial Policies below and the Development Criteria (Appendix 1), as well as any other relevant policy in the current Development Plan.
- 2.13 Consideration will be given to the likely cumulative impacts when aggregated with all other development in the area whether this is onshore or offshore as described in the Development Criteria.
- 2.14 Spatial Plan Policy LDP WED SP1 conforms to SPP and PAN 45 (Annex 2) and supports the following:

Structure Plan Policies: SP ENG2, SP ENG3, SP ENG4, SP CST2 and;

Local Plan Policies: LP ENG6, LP ENG7, LP ENG8 and LP ENG11.

Policy LDP WED SP2

The Areas to be Afforded Significant Protection

The areas highlighted in Map 2: Areas to be Afforded Significant Protection are considered to be of high sensitivity to wind energy development and its associated infrastructure, and consequently are to be afforded significant protection.

It is thought unlikely that large scale wind energy development will be able to be accommodated in any of the above areas due to the nature of the constraints, and such development is, in principle, directed elsewhere.

Therefore wind energy development and any associated infrastructure will only be permitted in these areas if it can be demonstrated that the scheme meets the requirements of Scottish Planning Policy and:

- *There will be no adverse affect on the underlying objectives or overall integrity of the designation of the area within which the proposed site lies;*
- *No reasonable alternative site exists; and*
- *The requirements of the Development Criteria as set out in Appendix 1 are able to be satisfied.*

- 2.15 The purpose of this policy is to direct large-scale developments away from those areas that are protected for their natural heritage. However, SPP (2010) and indeed the current Local Plan does not rule out developments in these areas completely. Considerable supporting information nonetheless will be required in order to demonstrate that proposals for large-scale wind energy development in these areas and the implications for any scheme on the site's conservation objectives will have to be appropriately assessed. The requirements for assessment of national and European sites are set out in SPP (2010) and should also be guided by the development management criteria in this document.
- 2.16 The areas to be afforded significant protection are primarily those with international and national designation for their importance to natural heritage conservation. These areas are protected by the following legislation, and include:
- Ramsar sites,
 - SPAs and SACs (Natura 2000 sites) (including candidate areas)
 - National Scenic Area;
 - Sites of Special Scientific Interest (including GEOLOGICAL CONSERVATION REVIEW sites);
 - National Nature Reserves
- 2.17 If a development is likely to have a significant impact on an area designated for natural heritage value the Shetland Islands Council will undertake an Appropriate Assessment of the implications of the proposed development on the conservation objectives for which the site is designated.
- 2.18 SPP provides advice on the protection of designated landscapes and National Scenic Areas. Further advice is provided in Scottish Natural Heritage's (SNH) guidance note: *Identifying the Special Qualities of Scotland's National Scenic Areas*. National Scenic Areas (NSA) are shown on Map 2 and will be afforded significant protection.
- 2.19 **Map 2: Areas to be Afforded Significant Protection** will be periodically revised and areas that are considered to be at their limit for wind energy development will be added to the areas to be afforded significant protection. This is to prevent unacceptable cumulative impacts resulting from further wind energy development in such areas. When considering which areas are at their limit, the Council will include existing wind energy developments, wind energy development for which an extant permission or licence exists, and current applications for wind energy development, whether these be on-shore or off-shore.
- 2.20 Spatial Plan Policy LDP WED SP2 conforms with SPP and PAN 45 (Annex 2) and supports the following:
- Structure Plan Policies:** SP ENG2, SP ENG3, SP ENG4, GDS4, SP NE2, SP NE4, SP NE5, SP NE6, SP NE7, SP NE8, SP NE9 and SP CST1 and;
- Local Plan Policies:** LP ENG6, LP ENG7, LP ENG8, LP ENG11, LP NE10, LP NE11 and LP NE13.

**Policy LDP WED SP3
All Other Areas.**

Outside of the Areas to be Afforded Significant Protection (which are subject to LDP WED SP2) proposals for wind energy development will be encouraged in principle, subject to assessment against the Development Criteria as set out in Appendix 1 of this document.

The maps provided to support this policy are intended to assist those considering putting forward proposals for wind farm development to assess the issues that need to be addressed. They are designed to identify areas of least known constraint and areas of most known constraint.

Developers are advised to seek early advice regarding the scope and extent of the supporting information that they should submit. Applicants should be aware that further information or changes to schemes may be required if evidence comes to light of constraints not shown here, because data gaps exist and new constraints may arise after publication.

- 2.21 In order to guide development searches the following areas have been mapped according to the sieving methodology and mapping exercise as set out in Map 4 Broad Areas of Search and Appendix 2.

A. The Broad Area of Search:

These are areas where wind energy development and its associated infrastructure are thought most likely able to satisfy the Development Criteria as set out in Appendix 1.

B. Areas of Likely Significant Constraint:

Opportunities for wind energy development are heavily constrained in these areas. Due to the nature of the constraints, it is unlikely that proposals for large scale wind energy development and its associated infrastructure will be able to satisfy SPP or the Development Criteria as set out in Appendix 1.

C. Areas not otherwise marked

The provisions of LDP WED SP3 will be applied to proposals for wind energy development in these areas, subject to further information coming forward that may mean that constraints are more significant than are currently known.

- 2.22 The Broad Area of Search is not intended to be prescriptive, nor is it to be used as a sequential test against which to assess applications. The purpose of identifying a Broad Area of Search is to indicate the area where it is most likely that large scale (greater than 20MW) wind energy development is most likely to be able to meet the Development Criteria as set out in Appendix 1.
- 2.23 **Map 4 highlights the Broad Area of Search** and indicates the extent of Areas of Likely Significant Constraint along with those Areas to be Afforded Significant Protection.
- 2.24 The purpose of identifying Areas of Likely Significant Constraint is to indicate areas that are considered to be significantly constrained, and steer developers away from these in the first instance. It is likely that in these areas, and for a range of different reasons, some of the development management criteria will be difficult to satisfy. Advice should be sought from the relevant statutory and advisory bodies as to the nature of the constraint, its geographical extent and the sorts of mitigations that may reduce and/or offset negative impacts that would be associated with a particular wind energy development proposal. It is emphasised that the existence of a constraint does not necessarily imply a blanket restriction on wind energy development. However, it must be demonstrated that the proposal will not lead to unacceptable impacts. In these areas, it is more likely that smaller turbines will be able to satisfy the criteria in Appendix 1.
- 2.25 It is important to emphasise that we think very few areas (if any) of Shetland are completely 'unconstrained' with respect to large-scale wind energy development.
- 2.26 Spatial Plan Policy LDP WED SP3 conforms with SPP and PAN 45 (Annex 2) and supports the following:
- Structure Plan Policies:** SP ENG2, SP ENG3, SP ENG4, GDS4, SP NE1, SP NE2, SP NE4, SP NE5, SP NE6, SP NE7, SP NE8, SP NE9 and SP CST1 and;
- Local Plan Policies:** LP ENG6, LP ENG7, LP ENG8, LP ENG11, LP NE10, LP NE11 and LP NE13.

Chapter 3 Development Management.

Overview

- 3.1 This chapter sets out the Development Management Policy, and is supported by the Development Management Criteria, as shown in Appendix 1.
- 3.2 All wind farm development schemes over 20 megawatts in generating capacity should be assessed using the Development Management Criteria and relevant policies in the document.
- 3.3 All proposals for on-shore wind energy development and infrastructure above Mean Low Water Springs (MLWS) for off-shore wind energy development will be assessed against this policy, except in the specific cases referred to in Policies WED SP2 and WED SP3.
- 3.4 Policy concerning domestic aerogenerators and those serving community facilities (under 20 megawatts in capacity) is provided within the Council's Interim Planning Policy: Towards Sustainable Construction and Better Design (2009). However, the principles, policies, tests and criteria in the document you are now reading may be used as guidance to inform the Council as to the kind of information required to be provided for schemes of less than 20 megawatts in generating capacity. This is particularly the case for larger schemes that near this capacity or those that require an Environmental Impact Assessment.
- 3.5 The process for determining whether or not wind energy developments should be allowed to take place is two tier. Shetland Islands Council is the determining authority for applications for on-shore wind energy developments up to 50MW in size, and offshore wind energy developments up to 1 MW in size. These will be assessed against the provisions of this IPP and/ or the Shetland Spatial Marine Plan as appropriate. In the case of larger developments, applications are determined by the Scottish Government under s36 of the Electricity (Scotland) Act 1989. Terrestrial applications are made to The Energy Consents Unit, whilst those offshore are considered by Marine Scotland; Shetland Islands Council is then consulted as an interested party in both cases. This policy and/or the Shetland Spatial Marine Plan as appropriate will be used to inform the Council's position when forming the consultation response. Applications that receive consent are deemed to also have been granted planning permission under section 57 of the Town and Country Planning (Scotland) Regulations 1997, if required. A works licence granted by the Shetland Islands Council will continue to be required for offshore developments.
- 3.6 It is likely that applications for wind energy developments will be subject to the requirements of the Environmental Impact Assessment (Scotland) Regulations 1999. Developers are encouraged to seek advice from the Planning Authority as soon as possible on the requirement for Environmental Impact Assessment (EIA) for a particular proposal, and in any event the level of supporting information that will be required.

Policy WED DM1

Development Management Policy

Proposals for on shore wind energy development and any associated infrastructure will be assessed against the Development Management Criteria (Appendix 1), any relevant policy in the current development plan, and any other material planning consideration.

The Development Management Criteria covers the following 10 topic areas:

- Biodiversity
- Geodiversity
- Landscape and Visual Impact
- Historic and Archaeological Environment
- Impact on Water Resources
- Impact on Quality of Life and Amenity
- Availability of Grid Connection
- Peat and Soil disturbance
- Waste
- Aviation

- 3.7 In all cases the cumulative impact will be a material consideration, and studies will be required to be submitted in order that these may be assessed.
- 3.8 Ancillary development associated with on-shore and off-shore wind energy development can have significant and widespread impact. It is important that all issues are considered at the time of assessing the application; therefore details of any ancillary development must be submitted with the application. In some cases separate applications may be required for certain aspects of the overall development. Additionally some of these works may be required to be subject to EIA under the 1999 Regulations.
- 3.9 Details of the ancillary works themselves, along with details of how it is proposed that their development areas will be reinstated after they are no longer required for operational reasons, should be given in full.
- 3.10 In general, all on-site mitigation and off-site compensatory measures required will be secured through Section 75 and other legal agreements and/or planning conditions.
- 3.11 Development Management Policy WED DM1 conforms with SPP and PAN 45 (Annex 2) and supports the following:

Structure Plan Policies: SP ENG2, SP ENG3, SP ENG4, GDS4, SP NE2, SP NE4, SP NE5, SP NE6, SP NE7, SP NE8, SP NE9 and SP CST1 and **Local Plan Policies:** LP ENG6, LP ENG7, LP ENG8, LP ENG11, LP NE10, LP NE11 and LP NE13.

Glossary and References

Terms used in this document:

Development Plan: Currently this consists of the Structure Plan (2000) and the Local Plan (2004). The planning system is currently undergoing a major change due to new legislation. A Local Development Plan will replace these documents, which will be prepared as the result of a review of the current Local and Structure Plans.

Scottish Planning Policy: Statement of the Scottish Government's policy on nationally important land use planning matters.

Planning Advice Note: Statements produced by the Scottish Government to give clarity and further advice and guidance on Scottish Planning Policy.

Interim Planning Policy: Policy that is in addition to the current Development Plan. Once adopted, Interim Planning Policy is the latest statement of Council policy and becomes a material consideration when assessing development applications.

Offshore: In the sea (at any distance from the land).

SNH: Scottish Natural Heritage.

SSSI: Site of Special Scientific Interest.

SAC: Special Area for Conservation.

SPA: Special Protection Area.

NSA: National Scenic Area.

NNR: National Nature Reserve.

Ramsar: A term adopted following an international conference, held in 1971 in Ramsar in Iran, to identify wetland sites of international importance.

DTI: Department of Trade and Industry.

BERR: Department of Business, Enterprise and Regulatory Reform

BIS: (Department for Business, Innovation and Skills)

Biodiversity: The variety of life forms we see around us

Geodiversity: Term used to describe a variety of earth materials, forms and processes that constitute and shape the landscape.

Geomorphology: Term used to describe the study of landforms, their classification, origin, development, and history

Megawatts (MW): Unit of power equal to one million watts

Gigawatts (GW): Unit of power equal to one billion watts

References:

Legislation

Directive on Renewable Energy 2009/28/EC

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:en:PDF>
Habitats Directive 92/43/EEC

http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm

Birds Directive 2009/147/EC

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:020:0007:0025:EN:PDF>

Planning etc. (Scotland) Act 2006

<http://www.opsi.gov.uk/legislation/scotland/acts2006/20060017.htm>

Town and Country Planning (Scotland) Act 1997

<http://www.opsi.gov.uk/acts/acts1997/1997008.htm>

Zetland County Council Act 1974

http://www.opsi.gov.uk/acts/localact1974/pdf/ukla_19740008_en.pdf

The Climate Change (Scotland) Act 2009

[climate change scotland act 2009 - Google Search](#)

The Electricity (Scotland) Act 1989

[Electricity Act 1989 \(c. 29\)](#)

The Town and Country Planning (Development Management) (Scotland) Regulations 2008

[The Town and Country Planning \(Development Management Procedure\) \(Scotland\)](#)

[Regulations 2008 No. 432](#)

The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009

[The Town and Country Planning \(Hierarchy of Developments\) \(Scotland\) Regulations 2009 No.](#)

Environmental Impact Assessment (Scotland) Regulations 1999

<http://www.opsi.gov.uk/legislation/scotland/ssi1999/19990001.htm>

Circulars

Circular 1/2009: Development Planning

<http://www.scotland.gov.uk/Publications/2009/02/13153723/0>

Circular 8/2007: The Environmental Impact Assessment (Scotland) Regulations 1999

<http://www.scotland.gov.uk/Publications/2007/11/30082353/0>

SDD Circular 18/1986 The Use of Conditions in Planning Permissions

<http://www.scotland.gov.uk/Publications/1998/02/circular-4-1998/circular-4-1998->

Scottish Government Policy

Scottish Planning Policy

[Scottish Planning Policy](#)

National Planning Framework 2 (NPF2)

[National Planning Framework for Scotland 2](#)

Climate Change Delivery Plan 2009

[Climate Change Delivery Plan: Meeting Scotland's Statutory Climate Change Targets](#)

Towards a Low Carbon Economy for Scotland 2010

[Towards a Low Carbon Economy for Scotland: Discussion Paper](#)

Renewables Action Plan 2010

[Renewables Action Plan](#)

Strategic Locational Guidance for Onshore Wind Farms in Respect of the Natural Heritage

[Onshore wind energy - Scottish Natural Heritage](#)

Marine Renewable Energy and the Natural Heritage

[Offshore wind energy - Scottish Natural Heritage](#)

Scottish Government Guidance

PAN 42: Archaeology

<http://www.scotland.gov.uk/Publications/1994/01/17081/21711>

PAN 56: Planning for Noise (1999)

<http://www.scotland.gov.uk/Publications/1999/04/PAN56>

PAN 45: Renewable Energy Technologies

<http://www.scotland.gov.uk/Publications/2002/02/pan45/pan-45>

PAN 45 Annex 2: Spatial Frameworks and Supplementary Planning Guidance for Windfarms

<http://www.scotland.gov.uk/Publications/2008/11/12125039/0>

PAN 60: Planning for Natural Heritage

<http://www.scotland.gov.uk/Publications/2000/08/pan60-root/pan60>

PAN 58: Environmental Impact Assessment

<http://www.scotland.gov.uk/Publications/1999/10/pan58-root/pan58>

Section 36 Scoping Opinion Guidance

[Section 36 Scoping guidelines - April 2010](#)

Monitoring the impact of onshore wind farms on birds - January 2009

<http://www.snh.gov.uk/docs/C205416.pdf>

Shetland Islands Council

Shetland Structure Plan (2000)

Shetland Local Plan (2004)

Interim Planning Policy Towards Sustainable Construction and Better Design in Shetland

Interim Planning Policy Minerals

<http://www.shetland.gov.uk/developmentplans/>

Shetland Islands Council Supplementary Planning Guidance: Public Safety and Safeguarding Consultation Zones within Shetland

<http://www.shetland.gov.uk/planning/documents/DraftSupplementaryPlanningGuidance.pdf>

A Marine Spatial Plan for the Shetland Islands (Draft) 2009

<http://www.nafc.ac.uk/SSMEI.aspx>

Shetland Islands Council Corporate Plan 2010 - 2012

<http://www.shetland.gov.uk/corporateplan/>

Shetland Islands Council Priorities and Targets

<http://www.shetland.gov.uk/communityplanning/documents/ShetlandTargetsadPriorities.pdf>

Landscape Sensitivity and Capacity Study for Wind Farm Development (2009)

<http://www.shetland.gov.uk/developmentplans/documents/ShetlandIslandsCouncilLandscapesSensitivityStudyFinalReport.pdf>

Advice Note 7: Renewable Energy Technologies (2008)

<http://www.shetland.gov.uk/developmentplans/documents/GuidanceRenewableEnergyTechnologiesDecember2008.pdf>

The Development Management Criteria**Development Management Criteria 1.
Biodiversity**

On-shore wind energy development and any associated infrastructure will not be permitted in locations where it would have a significant adverse impact on biodiversity, nature conservation sites, and species and habitats protected by statute. Applications must be accompanied by an assessment of the natural heritage resource of the site and surrounding area, and the likely impact of the proposed development on this resource, so that it can be determined whether or under what conditions development could be allowed to proceed. Mitigation and/or compensatory measures will be required that comply with current best practice.

- 1.1 In order to conserve Shetland's biodiversity it is imperative that this resource is given serious consideration when assessing wind energy developments and its associated infrastructure. Internationally and nationally recognised environmental resources require to be fully protected, and it will be particularly important to assess the impact on Natura 2000 sites, Ramsar sites, SPAs, SACs (including potential and candidate Ramsar Sites, SPAs and SACs) and SSSIs. These are identified on Map 2: *Areas to be Afforded Significant Protection*.. The Conservation (Natural Habitats etc) Regulations 1994 as amended states that any development proposal that is likely to have a significant effect on a Natura site and is not directly connected with or necessary to the conservation management of that site must be subject to an appropriate assessment by the planning authority of the implications for the site's conservation objectives. Development that could have a significant effect on a Natura site can only be permitted where:
- an appropriate assessment has demonstrated that it will not adversely affect the integrity of the site, or
 - there are no alternative solutions, and
 - there are imperative reasons of overriding public interest, including those of a social or economic nature.
- 1.2 The statutory duty placed on Shetland Islands Council to protect biodiversity is not restricted to the protection of habitats and species within designated natural heritage sites. All applications will be assessed for their impact on protected species and habitats. Developers should be aware that in certain areas effective mitigation of predicted impacts might not be possible. This is more likely to be the case in those areas regarded as being of high biodiversity significance, such as:
- Those containing scheduled species (including bird species that are protected under Annex 1 of the European Birds Directive, the UK Biodiversity Action Plan species that are considered sensitive to wind energy developments and those species on Schedule 1 of the Wildlife and Countryside Act 1981). Further guidance on those areas that are considered to be heavily constrained in this respect can be sought from SNH and the

RSPB who have produced indicative guidance on bird species distribution. Information provided by these bodies is not considered a substitute for a site-specific Environmental Impact Assessment in relation to birds, and surveys will still be required to provide information on bird migration and other important movements;

- Areas containing priority habitats as identified under the European Habitats Directive. Specifically in Shetland the Habitats Regulations requires that Shetland Islands Council conserves Active Blanket Bog as a habitat type. SNH has produced an indicative map of the habitats of Shetland, but unfortunately this does not go down to the level required as all blanket bog is mapped, whether or not it is active. Accordingly further advice should be sought from SNH, and detailed habitat assessments will be required to accompany applications.
- Otters and their holts are internationally and nationally protected. If otters or their holts would be disturbed in any way by offshore or onshore wind energy development or its supporting infrastructure a licence must be obtained from the Scottish Government for which justification will need to be supplied as to why an alternative site/design/layout cannot be used. In these circumstances consent for development will not be given unless a licence has been obtained.
- A specific area of Shetland where any disturbance to the drainage of a particular burn catchment would have a likely significant impact on a priority species protected under Schedule 5 of the WCA 1981. This is shown on Appendix 2 Map 3: *Areas of Likely Significant Constraint*.

- 1.3 It had been hoped to give a spatial indication of those areas of Shetland that will prove difficult to mitigate for adverse impacts to priority species and habitats, but unfortunately at the present time this has not been possible due to there being further work required in interpreting the information into a spatial format that offers robust evidence. Site specific assessments will be required in all cases to identify the risks to the biodiversity resource of Shetland, and on-site mitigations or off-site compensatory measures will be required to be agreed to the satisfaction of the Planning Authority in consultation with relevant bodies.
- 1.4 Development Management Criteria 1 conforms with SPP and PAN 45 (Annex 2) and supports the following **Structure Plan Policies**: SP ENG2, SP NE4, SP NE5, SP NE6, SP NE7, SP NE8 and **Local Plan Policies**: LP NE 10, LP NE 13, LP ENERGY 8

Development Management Criteria 2. Geodiversity

A number of sites are afforded SSSI status for their geological and geomorphological interest. On-shore wind energy development and its associated infrastructure will not be permitted where it will adversely impact on either a geological feature for which the site has been designated or on the integrity of a SSSI designated for its geomorphological interest. In addition to this there are several sites of national and international significance that have currently no designated protection, but that are important factors in the decision by the European Geoparks Network to recognise Shetland as a European Geopark and for it to become part of the Global Geoparks Network. Development will not be permitted that would damage or otherwise adversely impact on these sites.

Applications must be accompanied by an assessment of the geological and geomorphological sites within and adjacent to the proposed development area, and the likely impact on this resource, so that it can be determined whether or under what conditions a proposed development could be permitted to proceed.

- 1.5 Shetland is extremely wealthy in geodiversity and geomorphology interest, there being a wide range of sites of national and international significance. This policy seeks to protect that resource because unique or irreplaceable features or sites cannot be replaced and on-site mitigation or off-site compensatory measures are unlikely to be considered acceptable. The situation is a little complicated here: Geological Conservation Review (GCR) sites, which are notifiable in terms of the Wildlife and Countryside (1981) Act have not (to date) been afforded SSSI status. In addition the challenges presented by a SSSI notified for its geological interest are different from sites notified for their biodiversity interest. In this case it is the feature of geological interest itself that must be protected. For sites of interest for geomorphology then the integrity of the whole site must be preserved. This policy is intended to give these sites, and all others required for the success of the Geopark protection from damage by wind energy development and any associated infrastructure.
- 1.6 Development Management Criteria 2 conforms with SPP and PAN 45 (Annex 2) and supports the following **Structure Plan Policies**: SP NE4, SP NE6 and **Local Plan Policy** LP NE10

Development Management Criteria 3.

Landscape and Visual Impact

Development that has an unacceptable impact on the landscape of Shetland will not be permitted.

Landscape and Visual Impact Assessment

Applications must be accompanied by an assessment of the likely impact of the proposed development on landscape and visual amenity. This assessment will meet the requirements of published guidance in SPP and from national statutory consultees and contained in the document 'Basic Principles of Landscape and Visual Impact Assessment for Sponsors of Development' (SIC, 2006). Zone of Theoretical Visibility (ZTV) maps will be included and will extend to a radius as recommended by current guidance. The area of the ZTV will be taken as the study area for the assessment.

The developer must set out the impacts on the landscape and visual amenity of each directly and indirectly affected visual compartment. Developers are required to demonstrate that either:

- Their proposal conforms to the guidance provided in the Landscape Sensitivity and Capacity Study for Wind Farm Development on The Shetland Islands (Land Use Consultants for SIC 2009) for each affected visual compartment, and how it takes account of the described landscape sensitivities of each landscape character area.

Or that:

- The proposals depart from the guidance provided. (Applicants must specify the reasons and justification for this.)

Wind turbine development will be assessed against the guidance provided in the Landscape Sensitivity and Capacity Study for Wind Farm Development on The Shetland Islands (Land Use Consultants for SIC 2009) and against other guidance produced by statutory bodies.

Cumulative Landscape and Visual Impact Assessment

In addition, the developer will be required to undertake and present to the Council a cumulative landscape and visual impact assessment that sets out the likely cumulative impacts in accordance with SNH guidance.

- 1.7 Any on-shore and offshore wind energy development and its associated infrastructure will have an impact on the landscape and visual amenity of Shetland (see PAN 45). The aim of this policy is to direct development to where it will be least damaging to the landscape and visual resource. This could mean focusing development towards landscapes that are already degraded and where new development may offer scope for enhancement.

- 1.8 The developer will submit a Landscape and Visual Impact Assessment that includes an assessment of cumulative landscape and visual effects, enabling SIC to fully understand the nature and significance of potential effects upon the landscape and views. This should be undertaken and presented in line with guidance issued by Scottish Natural Heritage, the Landscape Institute and The Institute of Environmental Management & Assessment and include all elements of the development, including all ancillary infrastructure (such as access tracks, borrow pits, any necessary road widening/straightening, turbine foundations, crane hard standings, substations, control rooms or offices, car parks and the grid connection).
- 1.9 Developers are encouraged when choosing their sites and developing their proposals to seek early advice concerning the scope of the landscape and visual impact assessment and to pay particular attention to the guidance provided in the Landscape Sensitivity and Capacity Study March 2009. This sets out detailed information about sensitivity, gives an indication of capacity, based upon the identified sensitivities, and provides guidance as to location and design within various 'visual compartments' in Shetland. The visual compartments also include seascapes where these form part of the coastal edge.
- 1.10 Indicative landscape capacities have been set out. These are based upon identifying the existing sensitivities and, from an understanding of these, estimating the extent of development which could be accommodated within each visual compartment without giving rise to wholesale change to landscape and visual character (i.e. the capacity of the area for development).
- 1.11 The 2009 study provides guidance about the distribution, typology and turbine sizes that could be accommodated. Guidance is provided for each of 17 visual compartments in Shetland. It evaluates turbine capacities above and below 20 megawatts and therefore is useful as guidance to aid decision making on medium size developments, policy for which is covered by Shetland Islands Council Interim Planning Policy Towards Sustainable Construction and Better Design (2009). It will also be of use when planning for wind farms with capacities over 20 megawatts, policy for which is set out in this document.
- 1.12 As a general rule, proposals should not materially affect the overall quality of the existing landscape and visual amenity. This includes across the extent of the Zone of Theoretical Visibility identified, and all visual compartments affected both directly and indirectly.
- 1.13 In nationally designated areas (i.e. National Scenic Areas) as shown on Map 2: Areas To Be Afforded Significant Protection, it is unlikely that commercial wind farm development will be able to be accommodated without fundamentally affecting the reasons for which the area was designated. In addition, it is unlikely that commercial wind farm development will be able to be accommodated in the most highly sensitive areas (included on Map 3 – Areas of Likely Significant Constraint) without materially changing the nature of those landscapes, and the visual amenity experienced by people present in those landscapes. Commercial scale wind farm development may be most easily accommodated within the areas of lowest sensitivity to wind farm development in Shetland. These form the basis for the Broad Area of Search as identified on Map 4.

- 1.14 Development Management Criteria 3 conforms with SPP and PAN 45 (Annex B) and supports the following **Structure Plan Policies**: SP NE1, SP NE2, and **Local Plan Policy** LP NE10

Development Management Criteria 4. Historic Environment

On-shore or off-shore wind energy development and any associated infrastructure will not be permitted in locations where they would have significant adverse impacts on the site and/ or setting of a:

- Scheduled Monument or site identified to be of regional importance by the regional archaeologist
- Building of Special Architectural or Historic Interest (listed building);
- Conservation Area; or
- Site included in the Inventory of Historic Gardens and Designed Landscapes.

If a site is recorded in the Shetland Sites and Monuments Record or if the local authority reasonably suspects that archaeological remains may be found on the site an archaeological evaluation will be required to be submitted in support of the application. This is so that it may be determined whether, or under what conditions the development could be permitted to proceed, whether a more detailed investigation should be carried out prior to development, and what measures would be required in order to protect the archaeological resource. In addition, applications will be required to include robust contingency plans that allow for the identification, recording, immediate reporting and appropriate mitigation for all archaeological features encountered unexpectedly during the proposed project.

- 1.15 An application for wind energy development must be accompanied by a full assessment of the impact on the historic environment; advice on this can be sought from the local authority. There are areas of Shetland where the historic resource is such that significant wind farm development is unlikely to be able to be accommodated in such a way that the integrity of the resource can be preserved. These have been indicated on Map 3: Areas of Likely Significant Constraint. This map includes those areas that are regarded as containing outstanding and internationally important archaeology and historical resource as follows:

- ‘The Golden Triangle’. (Jarlishof, Old Scatness, Ness of Burgi, Sumburgh Head and including Eastshore and Clevigarth Brochs). The South Mainland has a significant density of brochs and fortified sites, and the intervisibility between them seems to have been a key feature in the selection of their locations and should be safeguarded. These are of exceptionally high quality and of international importance. There is also a high density of sites having other aspects of archaeological interest in the area.

- Viking Unst (several discrete areas throughout Unst). Unst contains the highest density of rural Viking settlement remains found anywhere in the world, including Scandinavia, and significant groupings should be preserved intact. In addition there are areas of Unst outwith these that are managed for their historic resource by Historic Scotland.
 - West Side. The area indicated on the map contains tracts of Neolithic/Bronze Age field systems, which are connected by traces of dykes (now mostly buried in peat). The very extensiveness and cohesion of these remains is one of the unique aspects of archaeology in Shetland, and deserves preservation.
 - Mousa. This is the best-preserved broch anywhere. Its environs are key to understanding the impact the broch would have had to Iron Age mariners.
 - Beorgs of Uyea. These are extensive neolithic porphyric workings, including axe factories, in an undisturbed landscape.
 - Fethaland. This is an excellent example of a multi period landscape including fishing station, Neolithic house, soapstone workings, and an eremitic site.
 - Catpund. The most extensive Viking soapstone quarries in Britain.
- 1.16 In addition, there are large areas of Shetland where no detailed surveys have yet been undertaken and developers need to be aware that during the course of their development archaeological sites and artefacts may be unearthed and action will be required to deal with this appropriately.
- 1.17 Due to their high sensitivity to wind energy development, Historic Gardens and Designed Landscapes are shown on **Map 3: Areas of Likely Significant Constraint**. Wind energy development and its associated infrastructure should not impact on the settings of these and also views in to and out of the site should be safeguarded.
- 1.18 Development Management Criteria 4 conforms with SPP and PAN 45 (Annex B) and supports the following **Structure Plan Policies**: SP BE1, SP BE2 and **Local Plan Policy** LP NE 10

Development Management Criteria 5. Impact on Water Resources

Onshore wind energy development and/or associated infrastructure will not be permitted where it will have a significant adverse impact on groundwater and surface water regimes, including impact on water supplies, and where such effects cannot be mitigated to an acceptable level.

The developer will be required to enter into a s.75 agreement covering the implementation, maintenance and completion of any mitigation works.

- 1.19 Development should be clearly designed to minimise the impact on the water environment. The likely effects of construction activities and operational practices on groundwater and surface water should be assessed using current best practice as provided by SEPA. It may be necessary to undertake both a hydrological study and a hydrogeological study that should include an assessment of the potential for, and measures to mitigate or prevent:
- harm to and cumulative impact on the water environment;
 - harm to human health;
 - harm to the quality of aquatic ecosystems (inc marine and coastal) and water dependent terrestrial ecosystems;
 - harm to areas with potential land slip/slide
 - entry of List 1 substances to groundwater and pollution of groundwater from List II substances as defined by the Groundwater Directive (80/68/EEC);
- 1.20 Such potential impacts will be minimised by appropriate siting of all the turbines and associated infrastructure including tracks. Applicants are encouraged to enter into pre-application discussions with the planning authority and SEPA at a very early stage in the design of their proposed development. Details of drainage and engineering works will require to be submitted as part of the planning application and they must comply with SEPA's current best practice.
- 1.21 Development Management Criteria 5 conforms with SPP and PAN 45 (Annex B) and supports the following **Structure Plan Policies**: SP WD1, GDS 4, and Local Plan Policies LP NE 10, LP WD 5, LP WD 10, LP WD 11, LP WD 12

Development Management Criteria 6. Impact on Quality of Life and Amenity

Onshore and offshore wind energy development and/or any associated infrastructure will not be permitted in locations where there will be a significant adverse impact on the quality of life of the residents of Shetland or amenity at sensitive locations, such as:

- residential properties,
- schools,
- hospitals,
- workplaces,
- roads, Core Paths, Public Rights of Way and other popular recreational routes, and
- recognised visitor sites, including long distance cycle routes, hotels, ferry terminals, beaches, and small boat marinas.

Planning applications must be accompanied by an assessment of the effects on these locations covering a range of factors including noise, shadow flicker, electromagnetic interference, and construction/ decommissioning logistics, phasing and any other identifiable significant effect.

Developers will need to provide evidence that the siting of individual turbines and the overall design and layout of the proposed development has been chosen to minimise impact on the amenity of residents and visitors. In addition there will be much off-site disruption for residents and visitors, especially in the case of major development arising from, for example, road and port use, dust from quarrying, etc. It will be necessary for developers to provide method statements that demonstrate how they will manage this disruption during the construction, operation, maintenance and decommissioning phases, and how these will be agreed and updated where necessary with the Planning Service as part of a submitted and agreed schedule of works.

- 1.22 In Shetland, settlement limits are not defined. Instead the Local Plan defines four housing zones (LP HOU4). Additionally, Local Protection Areas are identified in the local plan for a variety of reasons. In some cases these lie within the 'settled areas'. In all cases they are places that the local community values for their amenity value. These are afforded substantial protection from development in the Local Plan (LP NE 11).
- 1.23 In order to indicate to developers where the inhabited areas of Shetland generally are, Housing Zones 1 to 3 along with the Local Protection Areas have been included on Map 3: Areas of Likely Significant Constraint. In these areas it is likely that the development of large-scale wind farms will impact adversely on the amenity of residents, including other 'sensitive receptors', see Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands. These are indicative only (no further buffering has been incorporated into the Broad Area of Search methodology), and all proposals will need to include an assessment of likely impact on the sensitive

receptors in the vicinity of the proposed wind energy development. Impacts on the amenity of residents and visitors to Shetland must be kept to a minimum during construction, operation and decommissioning phases, recognising the different impacts from each of these phases and the extent of their effect.

1.24 As a minimum the following will be assessed:

- **Noise:** noise from turbines comes from two sources: the aerodynamic noise of the blades and the noise of the engine that generates the electricity. PAN 56 *Planning and Noise* identifies noise sensitive properties as being housing, hospitals, educational establishments, and offices. Noise must be assessed to ensure compliance with the BIS publication 'The Assessment and Rating of Noise from Windfarms' (September 1996) or subsequent amendment or publication of updated guidance.
- **Shadow flicker:** The effects of shadow flicker are not fully understood. However, PAN 45 recommends that a minimum separation distance of 10 rotor diameters to sensitive uses/ receptors should be maintained to reduce the incidence of shadow flicker. Shetland Islands Council as Planning Authority accepts this general rule, but recognises that each case will be different depending on many factors including topography and relative orientation and efforts should be made to minimise the impact.
- **Television/ radio interference:** all efforts should be made to minimise electromagnetic interference with radio and television signals by having regard to the siting of the proposed wind turbines in relation to telecoms systems. Full consultation should take place with the appropriate authorities including Ofcom. In appropriate cases, consideration will be given as to whether planning conditions may be imposed to require the developer to correct any electromagnetic interference resulting from their development at their own expense.
- **Tourism and Recreation:** these are important aspects of the Shetland Islands' economy and contribute to the quality of life of residents. It is essential that impacts on this major economic sector arising from wind energy development are minimised. The construction and decommissioning phases, particularly, of wind farm development can be highly disruptive and applicants will need to demonstrate how these will be managed throughout the project lifecycle so as to keep adverse impacts to tourism and recreation to a minimum. This includes minimising disruption to statutory access rights. (Construction and maintenance method statements should include how the access rights will be managed during construction and operational phases, and full re-instatement of these rights will be required after decommissioning).

1.25 Development Management Criteria 6 conforms with SPP and PAN 45 (Annex 2) and supports the following **Structure Plan Policies:** GDS1, GDS 4, GDS 5, SP NE1, SP ENG3, and **Local Plan Policies** LP ENG 6, LP ENG 7

**Development Management Criteria 7.
Availability of grid connection**

Wind energy development and any associated infrastructure will only be permitted if there is, or is going to be at the time the development is constructed, sufficient grid capacity to accommodate the anticipated output from the development. In the case of doubt, a condition will be attached to prevent commencement of construction of the development until there is certainty about the required connection and capacity.

1.26 Available capacity on the grid to accommodate a wind energy project is a material planning consideration, however it is not the only determining factor. Localised wind energy development has great potential to bring energy security to isolated parts of (or the whole of) the Shetland Islands. However, major schemes will require an interconnector grid connection to enable export of the energy generated. These issues will be considered when determining individual planning applications. Developers should enter into early discussions about grid connection and capacity with the appropriate operator (SHETL or SPTL) and provide a statement regarding the likely grid connection with their application.

1.27 Development Management Criteria 7 conforms with SPP and PAN 45 (Annex B) and supports the following **Local Plan Policy**: LP ENG 11

**Development Management Criteria 8.
Peat and Soil Disturbance.**

On-shore wind energy development and any associated infrastructure will only be permitted if measures are included:

- to ensure soil (especially peat) disturbance is minimised in order to maximise the carbon-saving potential of wind energy developments; and
- to minimise risk of peat slip.

Proposals submitted for wind energy developments and any associated infrastructure that include construction works that are likely to impact on areas identified as being of high risk of peat slip will not be permitted unless these risks can be shown to be adequately managed and mitigated.

Applicants will be required to provide justification for any works involving the disturbance of soils, and submit a detailed description of what treatment will be provided for their protection in terms of their handling and storage, and how they are to be disposed of or otherwise utilised in the phased re-instatement of areas, including following decommissioning. Applications must be accompanied by geotechnical and hydrological information that identifies the presence/depth of peat on the site and include an assessment of the risk of landslide (on site and off) connected to any development work.

- 1.28 A key objective of renewable energy policy is the reduction of CO₂ emissions. In some cases the disturbance of the soil can contribute to releasing significant quantities of CO₂ into the atmosphere, thus contributing to the emissions of greenhouse gases. Peat is especially vulnerable to this affect. Only minimum soil disturbance will be tolerated, and any necessary removal/ replacement will be require to be undertaken in a manner that does not result in unacceptable visual and environmental impact.
- 1.29 In addition, all development proposals will be required to be accompanied by an assessment of the risk of peat slip both on site and in places that may be affected by development. Further information regarding this can be obtained from British Geological Survey. Development will only be approved if it can be demonstrated that the risk of peat slip can be adequately managed.
- 1.30 Proposals should be accompanied by a detailed schedule of what works will be required, how these will be carried out, and what remedial actions will be taken, alongside an assessment of the impacts these will have on peat disturbance and risk of peat slip.
- 1.31 Further guidance is available from the publication Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments - www.scotland.gov.uk/Publications/2006/12/21162303/0
- 1.32 Development Management Criteria 8 conforms with SPP and PAN 45 (Annex 2) and supports the following **Structure Plan Policies**: SP NE9 and **Local Plan Policy** LP NE 10

Development Management Criteria 9 Minimisation of Waste Materials

On-shore wind energy development and any associated infrastructure will only be permitted if measures are included:

To ensure that building materials are managed efficiently, waste is disposed of legally, and that material recycling, reuse and recovery is maximised.

Therefore, a Site Waste Management Plan (SWMP) that addresses these issues must be included with the application or submission. The SWMP should be at a level that is site specific, this may mean that more than one SWMP is required for larger scale projects.

- 1.33 Whilst it is considered that significant problems with waste management associated with this type of development will mainly relate to the management of soil and peat it is acknowledged that other wastes such as rock, metals and construction compound wastes should all be dealt with appropriately.

- 1.34 As suggested in Scottish Planning Policy, we require all wind farm development for which policy is advanced in this document to provide a Site Waste Management Plan (SWMP). By implementing a SWMP sites are likely to benefit from a reduction in waste arisings and associated costs
- 1.35 If it is proposed that peat should be used at depth to restore excavations such as borrow pits, the applicant needs to demonstrate that this could be achieved without the release of carbon through oxidisation and without risk to people and the environment. These arrangements should be indicated in the supporting evidence to the application such as the SWMP and not dealt with in an ad-hoc manner as they arise.
- 1.36 Development Management Criteria 9 conforms with SPP and PAN 45 (Annex 2) and supports the following **Structure Plan Policies**: SP WM2, SP WM3, SP WM 4

Development Management Criteria 10. Aviation

On-shore wind energy development and any associated infrastructure will not be permitted in locations where they will jeopardise the safe use of airports and airfields, or interfere with the effectiveness of electronic systems including radar, communications and other health and safety equipment, as provided for in the Shetland Islands Council:

SPG Public Safety and Safeguarding (policy LDP SFG3).

- 1.37 The purpose of these criteria is to protect the interests of aviation and MOD operations around Shetland.
- 1.38 There are two ways in which wind energy development can affect the safe operation of aviation and defence: Turbine height, which can affect flight paths; and the rotation of the blades, which can interfere with the operation of radar.
- 1.39 Sumburgh Airport is covered by a Civil Aviation Authority safeguarding plan. Scatsta airport has lodged a safeguarding plan with Shetland Islands Council. The remaining airstrips in Shetland have no formal safeguarding arrangements. However the impact of any proposed development on these will be assessed and development that will jeopardise the safe operation of these facilities will not be permitted.
- 1.40 The safeguarding zones around Scatsta and Sumburgh aerodromes relate to tall structures generally, and would represent a significant constraint to wind energy development, especially large scale wind energy developments. These are shown on Map 3: *Areas of Likely Significant Constraint*.

- 1.41 In addition, there are various Technical Sites in Shetland associated with aviation interests (mostly to do with radar), and these require separate consultations to be undertaken with the relevant body.
- 1.42 The Ministry of Defence may require consultation if wind farm development is to take place (in most cases) within 30 km of the below three notified Technical Sites. The applicant should seek clarification of these requirements with the planning authority in the first instance in this case:
- Saxa Vord Vallafield
 - Collafirth Hill
 - Lerwick Metereological site.
- 1.43 At an early part of the design process, developers are advised to consult the DTI sponsored document 'Wind Energy and Aviation Interest –Interim Policy Guidance' (2002) and liaise with the appropriate authorities (i.e. Civil Aviation Authority, National Air Traffic Services, and Highlands and Islands Airports Limited), Her Majesty's Coast Guard and military authorities (Ministry of Defence) to establish the scope of concerns and possible mitigations. Any lighting of turbines will be required to be installed such that it achieves effective warning to air traffic, while minimising light pollution.
- 1.45 This is a developing field of research, and developers should consult with the most up-to-date publications for advice. PAN 45 Annex2 allows for suspensive conditions to be attached to any permission granted with respect to outstanding radar and aviation concerns. However any such conditions will identify the types of solution or solutions that need to be developed and set a reasonable timeframe within which agreement between the developer and operator will be reached.
- 1.46 Reference should be made to the Shetland Islands Council SPG 'Public Safety and Safeguarding Consultation Zones within Shetland' (October 2008) paras 4.13 to 4.23 for further information
- 1.47 Development Management Criteria 10 conforms with SPP and PAN 45 (Annex B) and supports the following **Local Plan Policy**: LP ENG7 and Supplementary Planning Guidance 'Public Safety and Safeguarding Consultation Zones within Shetland' (May 2008).

Appendix 2. Broad Area of Search Methodology

SPP requires that a broad area of Search is identified. This is not to be used as a driver for a sequential approach to the siting of large scale wind farms. In addition it needs to be recognised that no area of Shetland is unconstrained. The approach adopted here is that the Broad Area of Search is an indication of the areas of Shetland where it is considered that large scale wind farms could most easily be accommodated. It is considered that within these areas the Development Management Criteria are most likely to be able to be satisfied, or mitigation or compensatory measures provided to offset negative impacts. A 'sieving method' was used to determine this area in Shetland. It is important to emphasise that constraints identified through the Development Management Criteria may well significantly limit or curtail development of a large wind farm project despite it being located in a broad area of search.

The Broad Area of Search has been determined using the following steps:

- 1 Map those areas of Shetland that are of the lowest landscape sensitivity to windfarm development. In terms of landscape these are the only areas that could be in the Broad Area of Search.
- 2 Map those areas to be afforded significant protection. These areas will not appear in the Broad Area of Search, and are shown on map 2.
- 3 Map those areas of locally derived constraints that are considered to be of such a nature that mitigation would be difficult: this includes landscapes of the highest sensitivity to wind farm development. These areas will not appear in the Broad Area of Search and are shown on Map 3.
- 4 The Broad Area of Search will be that part of Shetland which is not in either of the above categories AND is of the lowest landscape sensitivity. The extent of the Broad Area of Search is shown on Map 4.

The remainder of this appendix gives details of the constraints that have been included in the mapping exercise as described above.

Map 2: Areas to be Afforded Significant Protection.

These are areas with statutory protection under different legislation, and include:

- Ramsar sites,
- SACs,
- SPAs,
- SSSIs,
- NNRs and
- NSAs.

It also includes areas where it is judged (by using the landscape sensitivity and capacity study) that the landscape has reached its capacity for turbine development. This will be updated as applications for further development are validated and determined.

Map 3: Areas of Likely Significant Constraint.

This map indicates those areas of Shetland where it is considered unlikely that one or more of the Development Management Criteria can be satisfied. In these areas, the nature of the constraints is such that wind turbine development and associated infrastructure is unlikely to be able to be accommodated. These have been identified through extensive consultation with stakeholders, whom we thank for their input.

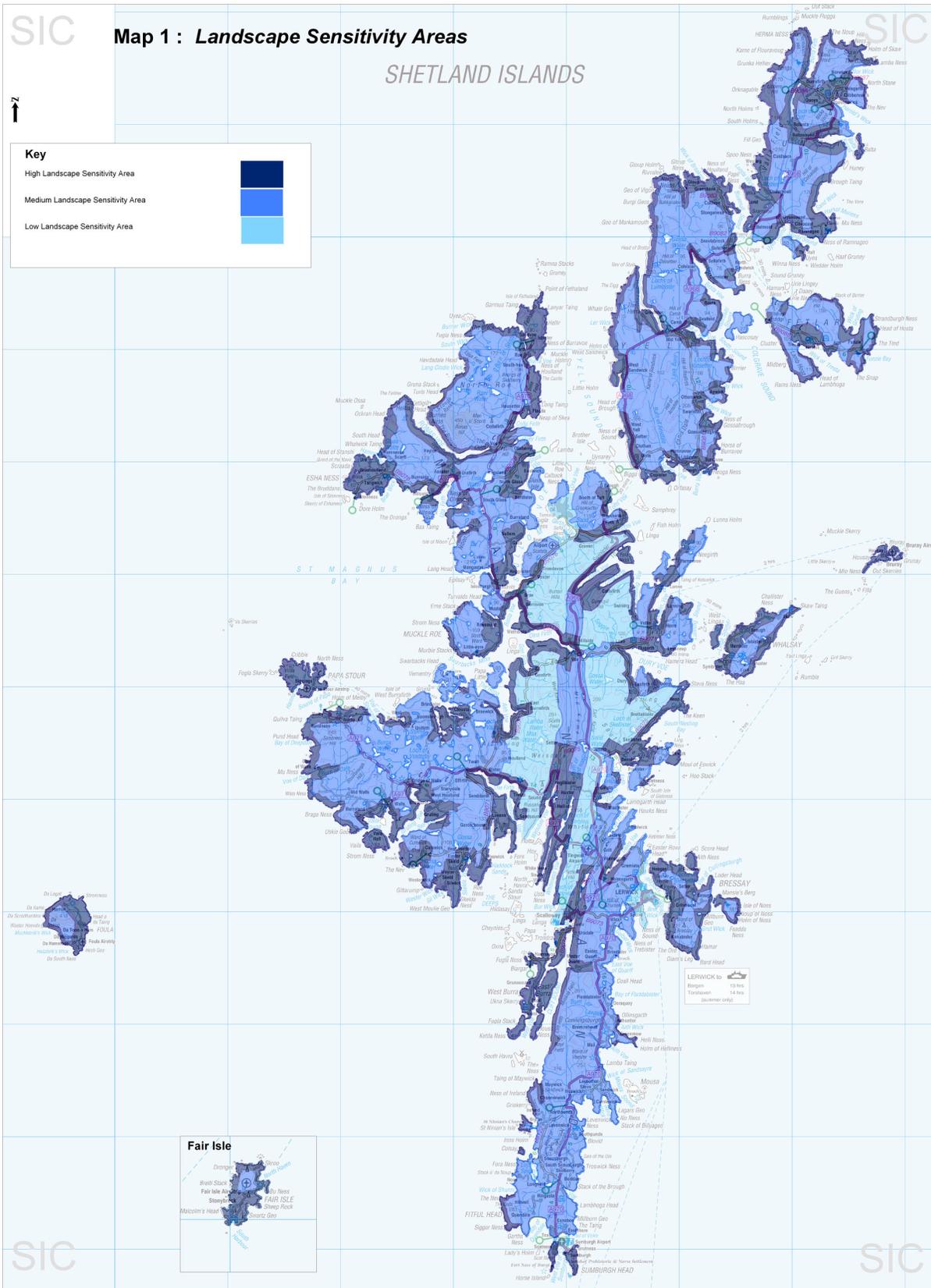
The following areas are included:

1. Settled areas of Shetland. Currently the Local Plan does not define settlements etc in the local plan; for the purposes of this exercise the housing zones 1-3 have been used as an indication of these settled areas. No further buffering has been included in the sieving exercise for the Broad Area of Search, but all proposals will be assessed for their impact on the amenity of residents and visitors.
2. Local Protection Areas that are identified in the Local Plan for a variety of reasons. In some cases these form part of the 'settled areas'. In all cases they are places that the local community values for their amenity value. These are afforded substantial protection from development in the Local Plan.
3. Archaeological importance where siting of turbines would interfere with areas that are particularly rich in archaeological history, and where the preservation of these sites intact and in relation to each other is important and would be subject to fragmentation.
4. An area of habitat that is generally sensitive to any drainage disturbance at all and is 'home' to an Annex 1 species as defined within the Birds Directive Directive 2009/147/EC

5. Areas where the landscape is of the highest sensitivity as identified through the Landscape Sensitivity and Capacity Study.
6. A 150m buffer zone around main roads. This is in recognition that a toppled turbine could have a major negative impact if it was to sever one of these routes.
7. Areas of height restrictions for development around Scatsta and Sumburgh airports.
8. Historic Gardens and Designed Landscapes.

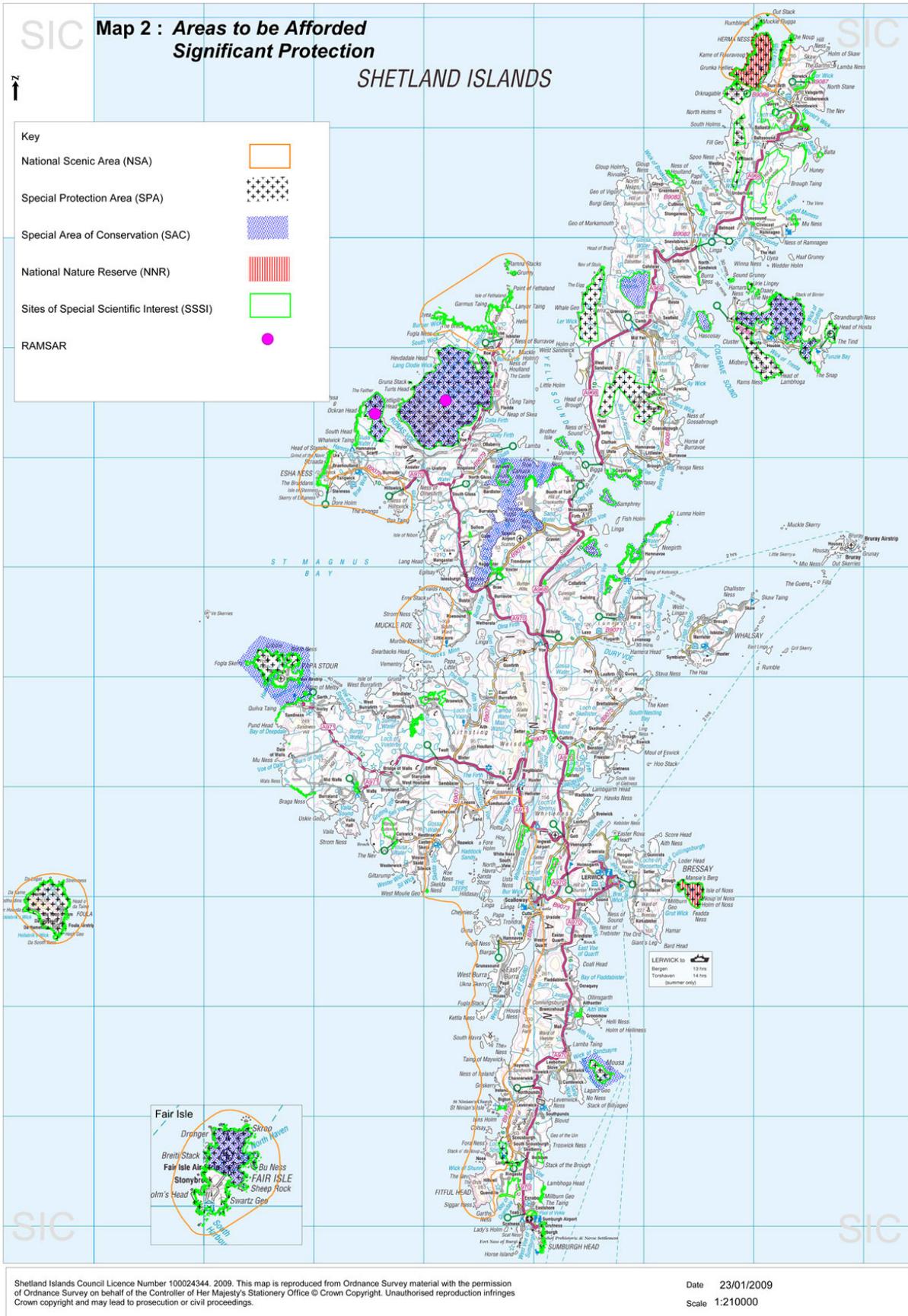
Map 4: *Broad Area of Search.*

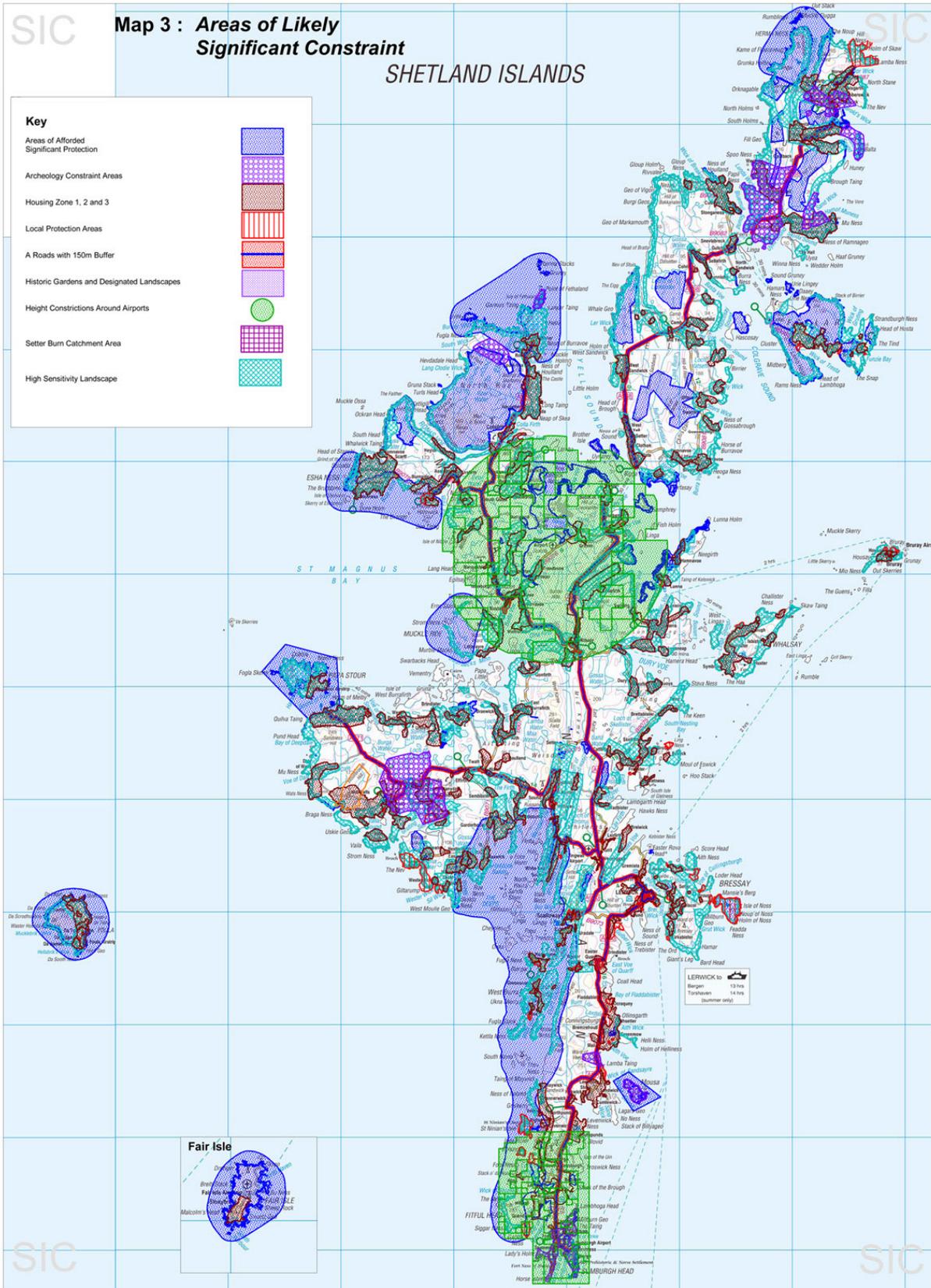
This map shows those areas of Shetland that are judged by professional landscape architects to be of the lowest sensitivity to large scale wind farm development. It then overlays this with the above two sets of constrained areas. The Broad Area of Search is identified as those parts of Shetland that are of the lowest landscape sensitivity AND are not coloured on Map 2 and 3.



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Scale 1:210000





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