

Cunninghame House,
Irvine.

8 June 2017

Local Review Body

You are requested to attend a Meeting of the above mentioned Committee of North Ayrshire Council to be held in the Council Chambers, Cunninghame House, Irvine on **WEDNESDAY 14 JUNE 2017 at 2.15p.m., or at the conclusion of the meeting of the Planning Committee, whichever is the later** to consider the undernoted business.

Yours faithfully

Elma Murray

Chief Executive

1. Declarations of Interest

Members are requested to give notice of any declarations of interest in respect of items of business on the Agenda.

2. Notice of Review: N/16/00712/PP - Site to the north of Woodlea Cottage, Whiting Bay, Arran (Page 5)

Submit report by the Chief Executive on a Notice of Review by the applicant in respect of a planning application refused by officers under delegated powers (copy enclosed).

Notice of Review documentation and supporting documents (Pages 7-22)

Report of Handling (Pages 23-30)

Decision Notice (Pages 31-38)

Further Representations (Pages 39-46)

Response to Further Representations (Pages 47-48)

3. Notice of Review: N/16/01126/PP - Jameston Moss, Dalry (Page 49)

Submit report by the Chief Executive on a Notice of Review by the applicant in respect of a planning application refused by officers under delegated powers (copy enclosed).

Notice of Review documentation and supporting documents (Pages 51-166)

Decision Notice (Pages 167-170)

Report of Handling (Pages 171-182)

Further Representations (Pages 183-185)

Local Review Body

Sederunt: Tom Marshall (Chair)
Timothy Billings (Vice-Chair)
Robert Barr
Ian Clarkson
Robert Foster
Christina Larsen
Shaun Macaulay
Ellen McMaster
Ronnie McNicol
Donald Reid

Chair:

Attending:

Apologies:

Meeting Ended:

NORTH AYRSHIRE COUNCIL

Agenda Item 2

14 June 2017

Local Review Body

Title: **Notice of Review: N/16/00712/PP - Site to the north of Woodlea Cottage, Whiting Bay, Arran**

Purpose: To submit, for the consideration of the Local Review Body, a Notice of Review by the applicant in respect of a condition imposed on a planning application approved by officers under delegated powers.

Recommendation: That the Local Review Body considers the Notice of Review.

1. Executive Summary

- 1.1 The Town and Country Planning (Scotland) Act 1997, as amended by the Planning (Scotland) Act 2006, provides for certain categories of planning application for "local" developments to be determined by appointed officers under delegated powers. Where such an application is refused, granted subject to conditions or not determined within the prescribed period of 2 months, the applicant may submit a Notice of Review to require the Planning Authority to review the case. Notices of Review in relation to refusals must be submitted within 3 months of the date of the Decision Notice.

2. Background

- 2.1 A Notice of Review has been submitted in respect of Planning Application N/16/00712/PP - Erection of 12 detached and semi-detached dwellinghouses.
- 2.2 The application was approved by officers subject to the conditions detailed in the Decision Notice (Appendix 3).
- 2.3 The following related documents are set out in the appendices to this report:-

Appendix 1 - Notice of Review documentation and supporting documents;
Appendix 2 - Report of Handling;
Appendix 3 - Decision Notice;
Appendix 4 - Further Representations; and
Appendix 5 - Response to Further Representations.

3. Proposals

3.1 The Local Review Body is invited to consider the Notice of Review.

4. Implications

Financial:	None arising from this report.
Human Resources:	None arising from this report.
Legal:	The Notice of Review requires to be considered in terms of the Town and Country Planning (Scotland) Act 1997, as amended by the Planning (Scotland) Act 2006, and the Town and Country Planning (Schemes of Delegation and Local Review Procedure) (Scotland) Regulations 2013.
Equality:	None arising from this report.
Environmental & Sustainability:	None arising from this report.
Key Priorities:	None arising from this report.
Community Benefits:	None arising from this report.

5. Consultation

- 5.1 Interested parties (both objectors to the planning application and statutory consultees) were invited to submit representations in terms of the Notice of Review and these are attached at Appendix 4 to the report.
- 5.2 The applicant has had an opportunity to respond to the further representations and their response is detailed at Appendix 5 to the report.



ELMA MURRAY
Chief Executive

Reference :

For further information please contact Angela Little, Committee Services Officer on 01294 324132

Background Papers

Planning Application N/16/00712/PP and related documentation is available to view on-line at www.north-ayrshire.gov.uk or by contacting the above officer.

Appendix 1

Your Ref:

31st March 2017

Committee Services
Chief Executives Department
North Ayrshire Council
Cunninghame House
IRVINE
KA12 8EE

Attention Angela Little

Dear Sirs

iCAD
ARCHITECTURAL DESIGN



PROPOSED ERECTION OF 12 No. DETACHED & SEMI DETACHED DWELLINGHOUSES AT
SITE TO NORTH OF WOODLEA COTTAGE WHITING BAY BRODICK ISLE OF ARRAN

I refer to the earlier conditional planning permission Ref No N/16/00712/PP dated 12.01.17 for the above

I have been instructed by my clients to lodge an appeal to be submitted to the LRB for the above planning application Ref No. N/16/00712/PP .

Accordingly, I now enclose for your use a copy of the following documents:

- Notice of Review Form.
- Notice of Review Statement Document.
- Report of Handling – Highlighting key points.

Please process this application for Appeal for the first available LRB sitting, which I understand will be in June following the council elections.

I trust that the enclosed is in order and I look forward to hearing back from you in due course. In the meantime please call with any questions.

Yours faithfully



IAN COOK
Agent
Encs:

By post & email: alittle@north-ayrshire.gov.uk

NOTICE OF REVIEW

UNDER SECTION 43A(8) OF THE TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED) IN
RESPECT OF DECISIONS ON LOCAL DEVELOPMENTS

THE TOWN AND COUNTRY PLANNING (SCHEMES OF DELEGATION AND LOCAL REVIEW PROCEDURE)
(SCOTLAND) REGULATIONS 2008

THE TOWN AND COUNTRY PLANNING (APPEALS) (SCOTLAND) REGULATIONS 2008

**IMPORTANT: Please read and follow the guidance notes provided when completing this form.
Failure to supply all the relevant information could invalidate your notice of review.**

Use BLOCK CAPITALS if completing in manuscript

Applicant(s)

Name

Address

Postcode

Contact Telephone 1

Contact Telephone 2

Fax No

E-mail*

Agent (if any)

Name

Address

Postcode

Contact Telephone 1

Contact Telephone 2

Fax No

E-mail*

Mark this box to confirm all contact should be
through this representative: X

Yes No
X ☐

* Do you agree to correspondence regarding your review being sent by e-mail?

Planning authority

Planning authority's application reference number

Site address

Description of proposed
development

Date of application

Date of decision (if any)

Note. This notice must be served on the planning authority within three months of the date of the decision notice or from the date of expiry of the period allowed for determining the application.

Nature of application

- | | |
|--|-------------------------------------|
| 1. Application for planning permission (including householder application) | <input checked="" type="checkbox"/> |
| 2. Application for planning permission in principle | <input type="checkbox"/> |
| 3. Further application (including development that has not yet commenced and where a time limit has been imposed; renewal of planning permission; and/or modification, variation or removal of a planning condition) | <input type="checkbox"/> |
| 4. Application for approval of matters specified in conditions | <input type="checkbox"/> |

Reasons for seeking review

- | | |
|---|-------------------------------------|
| 1. Refusal of application by appointed officer | |
| 2. Failure by appointed officer to determine the application within the period allowed for determination of the application | <input type="checkbox"/> |
| 3. Conditions imposed on consent by appointed officer | <input checked="" type="checkbox"/> |

Review procedure

The Local Review Body will decide on the procedure to be used to determine your review and may at any time during the review process require that further information or representations be made to enable them to determine the review. Further information may be required by one or a combination of procedures, such as: written submissions; the holding of one or more hearing sessions and/or inspecting the land which is the subject of the review case.

Please indicate what procedure (or combination of procedures) you think is most appropriate for the handling of your review. You may tick more than one box if you wish the review to be conducted by a combination of procedures.

- | | |
|---|-------------------------------------|
| 1. Further written submissions | |
| 2. One or more hearing sessions | |
| 3. Site inspection | |
| 4. Assessment of review documents only, with no further procedure | <input checked="" type="checkbox"/> |

If you have marked box 1 or 2, please explain here which of the matters (as set out in your statement below) you believe ought to be subject of that procedure, and why you consider further submissions or a hearing are necessary:

Site inspection

In the event that the Local Review Body decides to inspect the review site, in your opinion:

- | | Yes | No |
|--|-------------------------------------|--------------------------|
| 1. Can the site be viewed entirely from public land? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Is it possible for the site to be accessed safely, and without barriers to entry? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If there are reasons why you think the Local Review Body would be unable to undertake an unaccompanied site inspection, please explain here:

N/A

Statement

You must state, in full, why you are seeking a review on your application. Your statement must set out all matters you consider require to be taken into account in determining your review. Note: You may not have a further opportunity to add to your statement of review at a later date. It is therefore essential that you submit with your notice of review, all necessary information and evidence that you rely on and wish the Local Review Body to consider as part of your review.

If the Local Review Body issues a notice requesting further information from any other person or body, you will have a period of 14 days in which to comment on any additional matter which has been raised by that person or body.

State here the reasons for your notice of review and all matters you wish to raise. If necessary, this can be continued or provided in full in a separate document. You may also submit additional documentation with this form.

SEE ATTACHED STATEMENT DOCUMENT

Have you raised any matters which were not before the appointed officer at the time the determination on your application was made?

Yes No
☐ ☒

If yes, you should explain in the box below, why you are raising new material, why it was not raised with the appointed officer before your application was determined and why you consider it should now be considered in your review.

List of documents and evidence

Please provide a list of all supporting documents, materials and evidence which you wish to submit with your notice of review and intend to rely on in support of your review.

COVERING LETTER
 NOTICE OF REVIEW FORM
 NOTICE OF REVIEW - STATEMENT DOCUMENT
 REPORT OF HANDLING – HIGHLIGHTING KEY POINTS

Note: The planning authority will make a copy of the notice of review, the review documents and any notice of the procedure of the review available for inspection at an office of the planning authority until such time as the review is determined. It may also be available on the planning authority website.

Checklist

Please mark the appropriate boxes to confirm you have provided all supporting documents and evidence relevant to your review:


- ☒ Full completion of all parts of this form
- ☒ Statement of your reasons for requiring a review
- ☒ All documents, materials and evidence which you intend to rely on (e.g. plans and drawings or other documents) which are now the subject of this review.

Note: Where the review relates to a further application e.g. renewal of planning permission or modification, variation or removal of a planning condition or where it relates to an application for approval of matters specified in conditions, it is advisable to provide the application reference number, approved plans and decision notice from that earlier consent.

Declaration

I the agent [delete as appropriate] hereby serve notice on the planning authority to review the application as set out on this form and in the supporting documents.

Signed



Date

31.03.17

NOTICE OF REVIEW Ref No. N/16/00712/PP

NOTICE OF REVIEW STATEMENT

North Ayrshire Council granted Conditional Planning Permission Ref No. N/16/00712/PP on 12th January 2017 for the erection of 12 No. detached & semi detached dwellinghouses at Site to the North of Woodlea Cottage, Whiting Bay, Brodick, Isle of Arran for Mr & Mrs A MacLeod.

Condition No.1 of the above consent states:

- 1. That prior to the commencement of the development hereby approved, the developer shall submit for the approval of North Ayrshire Council as Planning Authority full details of the proposed affordable housing Trust model including current and projected land values from the District or Local Valuation Board, evidence of affordability based on local market values for **all the units** proposed and proposed control over future affordability of **all the units**. Thereafter, unless otherwise agreed in writing, the developer shall complete the development in accordance with the agreed details to the satisfaction of North Ayrshire Council complete the development in accordance with the agreed details to the satisfaction of North Ayrshire Council as Planning Authority. For the avoidance of doubt, where the proposed affordable housing model cannot be agreed, North Ayrshire Council will seek a developer contribution based on 25% of the difference between the market and affordable valuations of the site.*

We are aggrieved by the wording highlighted within this condition No. 1 for the proposed development, and in requiring North Ayrshire Council as the planning authority to review this case, we would propose that Condition No. 1 be amended to replace the words 'all the units' with the wording **all 11 No. affordable units**.

1.0 PLANNING HISTORY & PROCESS

- 1.0.1 The applicant site was designated Res4 within the existing Local Development Plan(LDP).
- 1.0.2 Initial pre application discussions with the council took place in spring 2016 with a full planning application prepared and submitted in July 2016.
- 1.0.3 A good working relationship was developed with the planning officer during the pre app and full planning submission stages, allowing the design and layout to be amended to satisfy planning and overall planning criteria. The layout and proposals always included for 1 No. bespoke private dwellinghouse.
- 1.0.4 Conditional Planning Permission Ref No 16/00712/PP was issued on 12th January 2017.
- 1.0.5 There are 9 No. conditions attached to the above permission, The applicant is only seeking to amend the wording in Condition No. 1.

2.0 APPLICANT & ARRAN HOUSING BACKGROUND

- 2.0.1 The applicant is acutely aware of the shortage of **'affordable'** housing on the island, particularly **'affordable'** housing that suits the need of island families with 2 or 3 children requiring a 3 or 4 bedroom home. This situation is further highlighted by the applicant's own family members who, along with their peer group, struggle to afford suitable family accommodation on Arran.
- 2.0.2 Arran needs to retain young working families within its villages to ensure school numbers remain constant and to protect other vital services and infrastructure. If local families cannot secure suitable **'affordable'** accommodation, they will be forced to leave the island.
- 2.0.3 A recent study undertaken by Northstar Ltd and commissioned by the Arran Economic Group (AEG) highlighted many shortfalls in the present housing situation on Arran. The report established that there are approx 90 professional and trade jobs on the island at present unfilled due to the lack of **'affordable'** housing on the island. The report further confirmed that the ratio of earnings to house prices on Arran is a staggering 8.4, second only to London at a ratio of 10.2. The average for North Ayrshire is approx 3.9.
- 2.0.4 It is therefore little wonder that working families on Arran struggle to secure suitable accommodation on average island earnings. This is something that the applicant is passionate about, and about which he is able to make a small positive contribution with the proposed development.

3.0 THE PROPOSAL

3.0.1 The applicant is proposing an innovative shared ownership scheme which will enable working families on Arran to afford suitable family homes, and still be compliant with affordable housing criteria.

3.0.2 Shared ownership homes operated by a Trust to be set up by the applicant will enable prospective families working on Arran to secure a mortgage on say 60% of their home with the balance being met by the trust.

3.0.3..To develop the Trust Model, the applicant has met with Stephen MacGregor of TC Young Solicitors, Stephen was advisor to the Scottish Government in the early 2000's for this type of scheme throughout Scotland. He has a wealth of experience in this field.

3.0.4 Shared Ownership accords with the Arran Housing Policy document

3.0.5 Successful family applicants will be required in the event of their job taking them off the island, to sell their property back to the trust to ensure future ownership fits the criteria and to prevent the properties becoming holiday homes.

4.0 DEVELOPMENT FACILITATION AND REALISATION

4.0.1 To facilitate and realise this innovative scheme to deliver affordable housing, the applicant will be utilising personal savings together with the monies raised from the sale of his own private home to realise the necessary capital to initiate the development and install infrastructure and services.

4.0.2 The proposed phasing of the 12 No. house development has to be agreed with the council in accordance with Condition No. 2 of the above permission. Although the applicant may move in temporarily to one of the first houses erected, it has always been the proposal that he will construct a bespoke dwelling for himself, in a second phase, which will not be operated by the Trust or deemed to be an affordable home.

4.0.3 The applicant is marketing his existing home to realise capital to finance the original phase of construction. The provision of 1 No. bespoke private dwelling has always been tabled as part of the overall development and it has always been included and highlighted in all the planning applications and drawings.

4.0.4 The Report of Handling by the planning officer dealing with the planning application states many times that there will be 11 No. affordable houses and 1 no. bespoke dwelling.

4.0.5 The sale of his existing property as an enabling property to fund the start of the development is a crucial part of the business plan. The applicant and his wife are at an age and stage nearing retirement when it is unlikely that they would qualify or fit the criteria of the Trust requirements. It is therefore an essential part of the overall development that they retain a permanent private home by constructing this bespoke dwelling.

5.0 SUMMARY

4.0.1 The applicant will sell his existing privately owned property to finance the start of the development and installation of infrastructure services.

4.0.2 The applicant will continue to require a permanent principal residence within the village, having sold his home to enable the development.

4.0.3 The applicant may not qualify or meet the criteria for shared ownership established by the approved Trust Model.

4.0.4 The setting up of an approved Trust Model to deliver shared ownership homes, is dependent on the applicant securing this 1 No. bespoke private dwellinghouse.

4.0.5 The remaining 11 No. dwellinghouses will be operated by the Trust and offered for shared ownership to working families on Arran who are struggling to find suitable accommodation and who fit the Trust's criteria.

4.0.6 The planning application and supporting documents have always included for 1 No. bespoke private dwellinghouse.

We ask the Local Review Body in reviewing the condition No. 1 attached to the earlier planning permission, and in the light of the foregoing which clearly demonstrates the importance of the proposed bespoke private dwelling, to agree to the proposed amendment.

REPORT OF HANDLING



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

Reference No:	16/00712/PP
Proposal:	Erection of 12 No detached & semi detached dwellinghouses
Location:	Site To North Of Woodlea Cottage, Whiting Bay, Brodick, Isle Of Arran
LDP Allocation:	Residential/Housing
LDP Policies:	/
Consultations:	Yes
Neighbour Notification:	Neighbour Notification carried out on 14.10.2016 Neighbour Notification expired on 04.11.2016
Advert:	Regulation 20 (1) Advert Published on:- 28.10.2016 Expired on:- 18.11.2016
Previous Applications:	None
Appeal History Of Site:	None

Description

The application seeks planning permission for the **development of 12 two storey residential dwellings**. The application site is an area of greenfield land located on the upper half of Golf Course Road, on the south side of Whiting Bay, Isle of Arran. The site extends to approximately 0.8 hectares in area and slopes down towards the east and south of the site. The site is bound by existing residential properties to the east, sitting lower down the slope, and to the south by a grouping of houses. The site is drained by open ditches running along the south and east boundary and is contained within a stob and wire fence planted with hedging.

It is proposed to erect 11 affordable housing residential units comprising of 5 detached properties and 6 semi-detached properties. Each property would provide 4 bedrooms. **A further detached dwellinghouse is also proposed in the north western section of the site. This property would not be affordable and would provide a 3 bedroom property.** All buildings would be 2 storeys in height.

A simple palette of materials is proposed for the dwellings with off white cement render walls, slate roofs and white upvc windows and doors. All boundary treatments would be a mixture of existing hedging, new hedging and stob and wire fences. All buildings would be placed around a central communal landscaped square with hard landscaping in the form of grey paviors. Soft landscaping would be in the form of trees and hedging within public areas and grass in private garden ground. Parking would be provided within the curtilage of properties, to the side with the potential for 2 spaces per property. Access would be from Golf Course Road.

Pre- application discussion with Officers focussed on the general layout of the site, housing design and retention of natural features. In support of the application, the applicants have submitted a short justification regarding the proposed concept for the affordable housing units which would be marketed as shared ownership operated by a Trust set up by the applicant. The Trust would own the properties and sell a percentage of the units to those who meet the criteria of the Trust. The Trust would in effect be a Registered Social Landlord. The exact percentage split is yet to be confirmed but could be in the region of 60% buyer, 40% Trust. The applicant states that the market values of the proposed dwellings would be £200k to £250k, requiring a mortgage of £120k and £150k which the applicant states would allow working families to afford a mortgage. Buyers would be required to sell properties back to the Trust to avoid them being offered on the open market for holiday homes.

One bespoke property would be erected in the north-west of the site for the applicant and his family following the sale of their property to fund the implementation of the development.

In the Adopted Local Development Plan (LDP) the application site is allocated for residential purposes where Policy RES4 (12) applies. Policy RES4 (Affordable Housing) identifies sites for affordable housing whereby the indicative capacity for the site is 10 units.

In addition to the above policies, the following general policies are also relevant to the determination of the application.

- PI 8 (Drainage, SUDS and Flooding), requiring appropriate assessment to be submitted together with any required mitigation measures; and
- RES 8 (Open Space and Play Provision in New Housing Developments), which sets out requirements for open space and play provision for residential development.

The proposed development also requires to be assessed against the General Policy of the LDP, the relevant criteria in this case being (a) siting, design and external appearance; (b) amenity; and (d) access, road layout and parking provision.

Consultations and Representations

The application was subject to the standard neighbour notification procedure and was advertised in the press on 28th October 2016. There were 10 letters of representation received, 4 objecting, 4 making general comments and 2 supporting the proposal.

With regard to those objecting the following issues were raised:

1. Amenity. The proposed dwellings on plots 6 & 7 would impact on the amenity of neighbours by way of privacy and overshadowing. Similarly the proposed plots at

4, 5, 8, 9, & 10 would impact on the privacy of neighbours with windows within 18 metres of dwellings.

Response - See analysis below.

2. Road Safety. The proposal would impact on road safety on Golf Course Road resulting in an increase in traffic. Golf Course Road is substandard and cannot cope with more traffic. There is no capacity for further housing/traffic on the road. There is insufficient parking being provided on site. The proposed access is not clear and is too narrow for refuse/emergency vehicles etc. The proposed path in the south west corner would give access to Lum Street, which would encourage access down a private lane.

Response - NAC Transportation has raised no objection to the proposal with regard to the access or proposed levels of traffic on Golf Course Road. The applicant has provided junction radii to evidence that larger vehicles can access the site. Parking would be provided to the side of properties with at least two spaces. There is no proposal to provide direct access onto Lum Street at this point but there is no restriction on the public access to this street outwith the scope of this development.

3. Siting and design. The number of units being proposed is excessive for the site. The proposal does not comply with the Council's Non Statutory Neighbourhood Design Guidance. There are power lines running through the site, which would need to be diverted or the layout amended.

Response - Within the LDP the indicative capacity of the site was 10 units. The scale and layout of housing proposed illustrates that more than 10 can be achieved satisfactorily on site. The scale of gardens and properties proposed are appropriate for the site. It is not agreed that the development does not comply with the Council's neighbourhood design guidance. The scale and design of properties proposed reflect that of the surrounding area with an emphasis on a more traditional building design. The applicant is aware of the power lines and would consult with Scottish Power regarding their routing.

4. Affordable Housing. The proposal is contrary to the LDP as the bespoke house is private & the applicant is not a RSL providing rented houses. There should be a Section 75 limiting the future affordability of the housing. The applicant should be paying an affordable housing contribution. The proposed scale and type of housing does not meet the demand for housing on the island. The type of housing proposed is contrary to the Strategic Housing Infrastructure Plan.

Response - There is no requirement to provide rented housing or for the applicant to be a RSL. The applicant is proposing a more bespoke approach to delivering the development and NAC Housing has not raised any objections to the proposal. A planning condition restricting any development commencing until the applicant outlines the full detail of the approach in agreement with Housing could be applied in this case. There is no need for a Section 75. Given the manner in which these units are being delivered, there is no requirement to provide a financial contribution. NAC Housing has raised no objection to the type and scale of housing being proposed.

5. Drainage. The proposed sewage treatment plant would create odours and impact on the amenity of neighbours. The proposed private drainage is inappropriate and no justification for its use has been provided. The development should be connected to the main sewage system.

Response - The details of the sewage plant and full details of drainage through the site have to be provided. A condition could be applied requiring further details. Similarly an informative could be applied requiring the applicant to discuss the proposed outflow with SEPA. Scottish Water and NAC Flooding have raised no objections to the proposal.

6. There are inaccuracies with the blue line of the application. There are concerns that the applicant cannot afford to complete the development.

Response - The applicant has confirmed the plans are correct. The ability to complete the development are not material planning considerations.

2 letters of support were received confirming that the development would provide much needed affordable housing on the island and that the proposals would help working families afford a house.

Consultations:

NAC Transportation - **There are no Transportation related objections to this proposal** subject to the conditions stated below. This land has been allocated for housing in the adopted LDP. "An Independent Road Safety / Development Capacity Study of 3 public Roads within Whiting Bay, Alan McGhee 2007" and "Quality Homes Scotland, Golf Course Road Assessment, Colin Buchanan, 2009", were used to determine if the road was suitable for additional traffic. Subsequently, the additional passing places have been constructed allowing for further developments to take place. The layout of this development indicates a large area of road for a small housing development, which can be re-assessed at the construction consent stage and the road widths can be adjusted to suit a small development. The parking provision proposed (2 spaces per house) is acceptable on the basis of the development being an affordable housing development. Should this position alter the development would require to accord with the parking standards set out in Table 7.3 in the Roads Development Guide. It is recommended that conditions relating to the reduction of road widths and a requirement to accord with parking standards set out in the Roads Development Guide be applied.

Response - Noted. A condition requiring compliance with parking standards should the affordable housing trust not be agreed could be applied. Those matters regarding road widths could be attached as an informative for resolution at Road construction consent stage.

NAC Housing - No objection. Housing would be satisfied with the model for affordable housing, in principle, but would require some form of agreement for the units to be made affordable in perpetuity. Where the model could not be agreed a financial contribution would be required.

Response - Noted. A planning condition would restrict development until such time as the model or contribution is agreed.

West of Scotland Archaeology - The proposal is situated in an area of high archaeological potential in a landscape which has clearly been in use by humans for thousands of years. This is illustrated by the archaeological records located in the surrounding landscape many of which are the result of random reporting of finds and sites made accidentally during ground disturbance over the last 150 years or so.

These include prehistoric and medieval sites including burials, a former township and a little known chapel and burial ground. Also, the proposal is large in scale so the potential for significant unrecorded sub-surface archaeological deposits remains an issue. Despite disturbance from ploughing in recent times it is possible that significant archaeological remains may survive within the application boundary and that these may be damaged or destroyed by the ground-breaking elements of the proposals.

In these circumstances, the West of Scotland Archaeology Service would instead advise the Council to consider attaching an archaeological condition to any consent they may be minded to grant restricting any development until a suitable Witten Scheme of Investigation is drafted and carried out.

Response - Noted. A condition could be applied in this regard.

Arran Community Council - The Isle of Arran Community Council has no objections in principle to the construction of eleven affordable homes, with one additional new dwelling house to be constructed for the applicant.

However, a number of responses have been made by members of the public and ACC respectfully trust that the comments received by North Ayrshire Council Planning Department will be carefully considered against Policy RES 4 of the Local Development Plan, in conjunction with the supplementary guidance laid out in the 'Affordable Housing - Guidance for Developers and Policy: Isle of Arran and Affordable Housing - Guidance for Developers and Policy Mainland.

Additionally ACC note the report from North Ayrshire Council Roads Department dated 31/10/16 in the initial response and ACC support its content.

Response - Noted. Planning Services has been in direct consultation with NAC Housing prior to the submission of this application to resolve any concerns regarding the proposed affordable housing model. No objection has been raised from NAC Housing subject to a condition requiring full details of the model prior to commencement. Those matters raised by NAC Transportation have been addressed.

NAC Flooding - No objections.

Scottish Water - No objections.

Analysis

The application seeks planning permission for the development of **12 two storey residential dwellings comprising of 11 affordable housing residential units** consisting of 5 detached properties and 6 semi-detached properties and **one detached bespoke house on an area of greenfield land** located on the upper half of Golf Course Road, Whiting Bay, Isle of Arran.

In the Adopted Local Development Plan (LDP) the application site is allocated for residential purposes where Policy RES4 (12) applies. In addition the application requires to be determined against Policies PI 8 (Drainage, SUDS and Flooding), PI 1 (Walking, Cycling and Public Transport) and RES 8 (Open Space and Play Provision in New Housing Developments). The proposed development also requires to be assessed against the General Policy of the LDP, the relevant criteria in this case

16/00712/PP

being (a) siting, design and external appearance; (b) amenity; and (d) access, road layout and parking provision.

With regard to policies Policy RES 4, the principle of the development has been established through the LDP. Policy RES4 (Affordable Housing) identifies the site for affordable housing with an indicative capacity of 10 units. It is considered that the detailed plans illustrate that the site could accommodate the proposed 12 units satisfactorily.

In support of the application, the applicant states that the proposed bespoke house is required as the current dwellings would be sold in order to fund the development of the site. The house is located within the boundary of the RES 4 site as such it would be considered appropriate to restrict the erection of this dwelling, through a phasing plan, until such time as the remaining development is completed and also be subject to the consideration of the model for delivery of the affordable housing.

NAC Housing has requested that a planning condition be imposed, which would restrict the commencement of the development, until full details of the model for the delivery of the affordable housing is provided, including evidence that the units would be affordable in perpetuity. An appropriate planning condition would address this matter. Therefore subject to this condition and compliance with the General Policy regarding siting and design, the development would comply with Policy Res 4.

In respect of Policy PI 8 (Drainage, SUDS and Flooding), the applicant has provided a drainage plan which illustrates that surface water would be discharged into an existing ditch within the site. Similarly all foul drainage would be fed into a sewerage treatment plant which would also discharge into a ditch. NAC Flooding and Scottish Water have raised no objections to the proposal. A condition would require detailed drawings of the drainage system and sewerage treatment plant. SEPA would be consulted on the submission of the details. The proposal would comply with the requirements of Policy PI8.

Policy PI 1 (Walking, Cycling and Public Transport) requires that development proposals should demonstrate that the needs of walkers, cyclist and public transport users have been addressed. The site is located on the edge of an established settlement with direct connection to the established infrastructure. The proposals would comply with Policy PI 1.

With regard to Policy RES 8 (Open Space and Play Provision in New Housing Developments) requires that new development should incorporate sufficient open space and play provision. The development includes two large communal recreation areas, creating the opportunity for informal play, and the private rear gardens would provide a more significant level of amenity for future residents.

The proposals also require to be assessed against the General Policy criteria:

a) Siting, design and external appearance.

The proposed courtyard layout would be similar to existing residential areas within the immediate area. The design takes reference from traditional buildings in the area and proposes the use of complementary materials such as render and slate. The buildings would be set against the heel of the road, incorporating elements of Designing Streets whilst improving the scale of rear gardens. The proposed 'bespoke' house, although larger than the remainder, would have 2 storeys to the

16/00712/PP

front and 1 storey to the rear, reflecting the change in level in this part of the site. This property would match the remainder in terms of materials and would provide a more contemporary building within the site. The building would act as a gateway feature house into the site.

The visual effects of varying building scale, design and appearance would be compatible with the development typologies in the surrounding areas, being of similar size, scale, form, massing, height and density. The design and appearance of the development is considered to be acceptable at this location, offering an acceptable standard of residential and visual amenity.

b) Amenity

Due to the siting and layout of the dwellings, boundary treatments, and the distance to neighbouring residential properties, there would not be any significant adverse impacts on either residential amenity by reason of loss of sunlight or daylight, or visual and residential amenity.

With respect to privacy each property in the east of the site would be approximately 12 metres from the boundary and 18 metres to the rear boundary of the closest property. Due to the difference in levels, the boundary treatment and the distance away from properties it is not considered that the privacy of neighbours to the east would be significantly affected.

To the south the dwellings would be approximately 13 metres from the boundary at its closet point and 15 metres at its furthest high is acceptable. There proposed rear garden areas of the dwellings at Plots 8, 9 and 10 would be overlooked from existing properties to the south, given the proximity of these properties to the site boundary, however it is considered the impact would not have a significant impact on the residential amenity of the proposed dwellings.

There would be no adverse impact by way of amenity.

d) Road layout and Parking Provision

The design of the proposed access would be acceptable, with the level of parking deemed appropriate for the scale and type of development proposed. The proposals are supported by NAC Transportation.

It is considered that the proposal accords with the relevant LDP policies, and General Policy. It is recommended that planning permission be granted, subject to conditions.

Decision

Approved subject to Conditions

Case Officer - Mr Ross Middleton

REPORT OF HANDLING



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

Reference No:	16/00712/PP
Proposal:	Erection of 12 No detached & semi detached dwellinghouses
Location:	Site To North Of Woodlea Cottage, Whiting Bay, Brodick, Isle Of Arran
LDP Allocation:	Residential/Housing
LDP Policies:	/
Consultations:	Yes
Neighbour Notification:	Neighbour Notification carried out on 14.10.2016 Neighbour Notification expired on 04.11.2016
Advert:	Regulation 20 (1) Advert Published on:- 28.10.2016 Expired on:- 18.11.2016
Previous Applications:	None
Appeal History Of Site:	None

Description

The application seeks planning permission for the development of 12 two storey residential dwellings. The application site is an area of greenfield land located on the upper half of Golf Course Road, on the south side of Whiting Bay, Isle of Arran. The site extends to approximately 0.8 hectares in area and slopes down towards the east and south of the site. The site is bound by existing residential properties to the east, sitting lower down the slope, and to the south by a grouping of houses. The site is drained by open ditches running along the south and east boundary and is contained within a stob and wire fence planted with hedging.

It is proposed to erect 11 affordable housing residential units comprising of 5 detached properties and 6 semi-detached properties. Each property would provide 4 bedrooms. A further detached dwellinghouse is also proposed in the north western section of the site. This property would not be affordable and would provide a 3 bedroom property. All buildings would be 2 storeys in height.

A simple palette of materials is proposed for the dwellings with off white cement render walls, slate roofs and white upvc windows and doors. All boundary

treatments would be a mixture of existing hedging, new hedging and stob and wire fences. All buildings would be placed around a central communal landscaped square with hard landscaping in the form of grey paviers. Soft landscaping would be in the form of trees and hedging within public areas and grass in private garden ground. Parking would be provided within the curtilage of properties, to the side with the potential for 2 spaces per property. Access would be from Golf Course Road.

Pre- application discussion with Officers focussed on the general layout of the site, housing design and retention of natural features. In support of the application, the applicants have submitted a short justification regarding the proposed concept for the affordable housing units which would be marketed as shared ownership operated by a Trust set up by the applicant. The Trust would own the properties and sell a percentage of the units to those who meet the criteria of the Trust. The Trust would in effect be a Registered Social Landlord. The exact percentage split is yet to be confirmed but could be in the region of 60% buyer, 40% Trust. The applicant states that the market values of the proposed dwellings would be £200k to £250k, requiring a mortgage of £120k and £150k which the applicant states would allow working families to afford a mortgage. Buyers would be required to sell properties back to the Trust to avoid them being offered on the open market for holiday homes.

One bespoke property would be erected in the north-west of the site for the applicant and his family following the sale of their property to fund the implementation of the development.

In the Adopted Local Development Plan (LDP) the application site is allocated for residential purposes where Policy RES4 (12) applies. Policy RES4 (Affordable Housing) identifies sites for affordable housing whereby the indicative capacity for the site is 10 units.

In addition to the above policies, the following general policies are also relevant to the determination of the application.

- PI 8 (Drainage, SUDS and Flooding), requiring appropriate assessment to be submitted together with any required mitigation measures; and
- RES 8 (Open Space and Play Provision in New Housing Developments), which sets out requirements for open space and play provision for residential development.

The proposed development also requires to be assessed against the General Policy of the LDP, the relevant criteria in this case being (a) siting, design and external appearance; (b) amenity; and (d) access, road layout and parking provision.

Consultations and Representations

The application was subject to the standard neighbour notification procedure and was advertised in the press on 28th October 2016. There were 10 letters of representation received, 4 objecting, 4 making general comments and 2 supporting the proposal.

With regard to those objecting the following issues were raised:

1. Amenity. The proposed dwellings on plots 6 & 7 would impact on the amenity of neighbours by way of privacy and overshadowing. Similarly the proposed plots at 4, 5, 8, 9, & 10 would impact on the privacy of neighbours with windows within 18 metres of dwellings.

Response - See analysis below.

2. Road Safety. The proposal would impact on road safety on Golf Course Road resulting in an increase in traffic. Golf Course Road is substandard and cannot cope with more traffic. There is no capacity for further housing/traffic on the road. There is insufficient parking being provided on site. The proposed access is not clear and is too narrow for refuse/emergency vehicles etc. The proposed path in the south west corner would give access to Lum Street, which would encourage access down a private lane.

Response - NAC Transportation has raised no objection to the proposal with regard to the access or proposed levels of traffic on Golf Course Road. The applicant has provided junction radii to evidence that larger vehicles can access the site. Parking would be provided to the side of properties with at least two spaces. There is no proposal to provide direct access onto Lum Street at this point but there is no restriction on the public access to this street outwith the scope of this development.

3. Siting and design. The number of units being proposed is excessive for the site. The proposal does not comply with the Council's Non Statutory Neighbourhood Design Guidance. There are power lines running through the site, which would need to be diverted or the layout amended.

Response - Within the LDP the indicative capacity of the site was 10 units. The scale and layout of housing proposed illustrates that more than 10 can be achieved satisfactorily on site. The scale of gardens and properties proposed are appropriate for the site. It is not agreed that the development does not comply with the Council's neighbourhood design guidance. The scale and design of properties proposed reflect that of the surrounding area with an emphasis on a more traditional building design. The applicant is aware of the power lines and would consult with Scottish Power regarding their routing.

4. Affordable Housing. The proposal is contrary to the LDP as the bespoke house is private & the applicant is not a RSL providing rented houses. There should be a Section 75 limiting the future affordability of the housing. The applicant should be paying an affordable housing contribution. The proposed scale and type of housing does not meet the demand for housing on the island. The type of housing proposed is contrary to the Strategic Housing Infrastructure Plan.

Response - There is no requirement to provide rented housing or for the applicant to be a RSL. The applicant is proposing a more bespoke approach to delivering the development and NAC Housing has not raised any objections to the proposal. A planning condition restricting any development commencing until the applicant outlines the full detail of the approach in agreement with Housing could be applied in this case. There is no need for a Section 75. Given the manner in which these units are being delivered, there is no requirement to provide a financial contribution. NAC Housing has raised no objection to the type and scale of housing being proposed.

5. Drainage. The proposed sewage treatment plant would create odours and impact on the amenity of neighbours. The proposed private drainage is inappropriate and no justification for its use has been provided. The development should be connected to the main sewage system.

Response - The details of the sewage plant and full details of drainage through the site have to be provided. A condition could be applied requiring further details.

Similarly an informative could be applied requiring the applicant to discuss the proposed outflow with SEPA. Scottish Water and NAC Flooding have raised no objections to the proposal.

6. There are inaccuracies with the blue line of the application. There are concerns that the applicant cannot afford to complete the development.

Response - The applicant has confirmed the plans are correct. The ability to complete the development are not material planning considerations.

2 letters of support were received confirming that the development would provide much needed affordable housing on the island and that the proposals would help working families afford a house.

Consultations:

NAC Transportation - There are no Transportation related objections to this proposal subject to the conditions stated below. This land has been allocated for housing in the adopted LDP. "An Independent Road Safety / Development Capacity Study of 3 public Roads within Whiting Bay, Alan McGhee 2007" and "Quality Homes Scotland, Golf Course Road Assessment, Colin Buchanan, 2009" ,were used to determine if the road was suitable for additional traffic. Subsequently, the additional passing places have been constructed allowing for further developments to take place. The layout of this development indicates a large area of road for a small housing development, which can be re-assessed at the construction consent stage and the road widths can be adjusted to suit a small development. The parking provision proposed (2 spaces per house) is acceptable on the basis of the development being an affordable housing development. Should this position alter the development would require to accord with the parking standards set out in Table 7.3 in the Roads Development Guide. It is recommended that conditions relating to the reduction of road widths and a requirement to accord with parking standards set out in the Roads Development Guide be applied.

Response - Noted. A condition requiring compliance with parking standards should the affordable housing trust not be agreed could be applied. Those matters regarding road widths could be attached as an informative for resolution at Road construction consent stage.

NAC Housing - No objection. Housing would be satisfied with the model for affordable housing, in principle, but would require some form of agreement for the units to be made affordable in perpetuity. Where the model could not be agreed a financial contribution would be required.

Response - Noted. A planning condition would restrict development until such time as the model or contribution is agreed.

West of Scotland Archaeology - The proposal is situated in an area of high archaeological potential in a landscape which has clearly been in use by humans for thousands of years. This is illustrated by the archaeological records located in the surrounding landscape many of which are the result of random reporting of finds and sites made accidentally during ground disturbance over the last 150 years or so. These include prehistoric and medieval sites including burials, a former township and a little known chapel and burial ground. Also, the proposal is large in scale so the potential for significant unrecorded sub-surface archaeological deposits remains

an issue. Despite disturbance from ploughing in recent times it is possible that significant archaeological remains may survive within the application boundary and that these may be damaged or destroyed by the ground-breaking elements of the proposals.

In these circumstances, the West of Scotland Archaeology Service would instead advise the Council to consider attaching an archaeological condition to any consent they may be minded to grant restricting any development until a suitable Witten Scheme of Investigation is drafted and carried out.

Response - Noted. A condition could be applied in this regard.

Arran Community Council - The Isle of Arran Community Council has no objections in principle to the construction of eleven affordable homes, with one additional new dwelling house to be constructed for the applicant.

However, a number of responses have been made by members of the public and ACC respectfully trust that the comments received by North Ayrshire Council Planning Department will be carefully considered against Policy RES 4 of the Local Development Plan, in conjunction with the supplementary guidance laid out in the 'Affordable Housing - Guidance for Developers and Policy: Isle of Arran and Affordable Housing - Guidance for Developers and Policy Mainland.

Additionally ACC note the report from North Ayrshire Council Roads Department dated 31/10/16 in the initial response and ACC support its content.

Response - Noted. Planning Services has been in direct consultation with NAC Housing prior to the submission of this application to resolve any concerns regarding the proposed affordable housing model. No objection has been raised from NAC Housing subject to a condition requiring full details of the model prior to commencement. Those matters raised by NAC Transportation have been addressed.

NAC Flooding - No objections.

Scottish Water - No objections.

Analysis

The application seeks planning permission for the development of 12 two storey residential dwellings comprising of 11 affordable housing residential units consisting of 5 detached properties and 6 semi-detached properties and one detached bespoke house on an area of greenfield land located on the upper half of Golf Course Road, Whiting Bay, Isle of Arran.

In the Adopted Local Development Plan (LDP) the application site is allocated for residential purposes where Policy RES4 (12) applies. In addition the application requires to be determined against Policies PI 8 (Drainage, SUDS and Flooding), PI 1 (Walking, Cycling and Public Transport) and RES 8 (Open Space and Play Provision in New Housing Developments). The proposed development also requires to be assessed against the General Policy of the LDP, the relevant criteria in this case being (a) siting, design and external appearance; (b) amenity; and (d) access, road layout and parking provision.

With regard to policies Policy RES 4, the principle of the development has been established through the LDP. Policy RES4 (Affordable Housing) identifies the site for affordable housing with an indicative capacity of 10 units. It is considered that the detailed plans illustrate that the site could accommodate the proposed 12 units satisfactorily.

In support of the application, the applicant states that the proposed bespoke house is required as the current dwellings would be sold in order to fund the development of the site. The house is located within the boundary of the RES 4 site as such it would be considered appropriate to restrict the erection of this dwelling, through a phasing plan, until such time as the remaining development is completed and also be subject to the consideration of the model for delivery of the affordable housing.

NAC Housing has requested that a planning condition be imposed, which would restrict the commencement of the development, until full details of the model for the delivery of the affordable housing is provided, including evidence that the units would be affordable in perpetuity. An appropriate planning condition would address this matter. Therefore subject to this condition and compliance with the General Policy regarding siting and design, the development would comply with Policy Res 4.

In respect of Policy PI 8 (Drainage, SUDS and Flooding), the applicant has provided a drainage plan which illustrates that surface water would be discharged into an existing ditch within the site. Similarly all foul drainage would be fed into a sewerage treatment plant which would also discharge into a ditch. NAC Flooding and Scottish Water have raised no objections to the proposal. A condition would require detailed drawings of the drainage system and sewerage treatment plant. SEPA would be consulted on the submission of the details. The proposal would comply with the requirements of Policy PI8.

Policy PI 1 (Walking, Cycling and Public Transport) requires that development proposals should demonstrate that the needs of walkers, cyclist and public transport users have been addressed. The site is located on the edge of an established settlement with direct connection to the established infrastructure. The proposals would comply with Policy PI 1.

With regard to Policy RES 8 (Open Space and Play Provision in New Housing Developments) requires that new development should incorporate sufficient open space and play provision. The development includes two large communal recreation areas, creating the opportunity for informal play, and the private rear gardens would provide a more significant level of amenity for future residents.

The proposals also require to be assessed against the General Policy criteria:

a) Siting, design and external appearance.

The proposed courtyard layout would be similar to existing residential areas within the immediate area. The design takes reference from traditional buildings in the area and proposes the use of complementary materials such as render and slate. The buildings would be set against the heel of the road, incorporating elements of Designing Streets whilst improving the scale of rear gardens. The proposed 'bespoke' house, although larger than the remainder, would have 2 storeys to the front and 1 storey to the rear, reflecting the change in level in this part of the site. This property would match the remainder in terms of materials and would provide a

more contemporary building within the site. The building would act as a gateway feature house into the site.

The visual effects of varying building scale, design and appearance would be compatible with the development typologies in the surrounding areas, being of similar size, scale, form, massing, height and density. The design and appearance of the development is considered to be acceptable at this location, offering an acceptable standard of residential and visual amenity.

b) Amenity

Due to the siting and layout of the dwellings, boundary treatments, and the distance to neighbouring residential properties, there would not be any significant adverse impacts on either residential amenity by reason of loss of sunlight or daylight, or visual and residential amenity.

With respect to privacy each property in the east of the site would be approximately 12 metres from the boundary and 18 metres to the rear boundary of the closest property. Due to the difference in levels, the boundary treatment and the distance away from properties it is not considered that the privacy of neighbours to the east would be significantly affected.

To the south the dwellings would be approximately 13 metres from the boundary at its closet point and 15 metres at its furthest high is acceptable. There proposed rear garden areas of the dwellings at Plots 8, 9 and 10 would be overlooked from existing properties to the south, given the proximity of these properties to the site boundary, however it is considered the impact would not have a significant impact on the residential amenity of the proposed dwellings.

There would be no adverse impact by way of amenity.

d) Road layout and Parking Provision

The design of the proposed access would be acceptable, with the level of parking deemed appropriate for the scale and type of development proposed. The proposals are supported by NAC Transportation.

It is considered that the proposal accords with the relevant LDP policies, and General Policy. It is recommended that planning permission be granted, subject to conditions.

Decision

Approved subject to Conditions

Case Officer - Mr Ross Middleton

Appendix 1 - Drawings relating to decision

Drawing Title	Drawing Reference (if applicable)	Drawing Version (if applicable)
Location Plan	1608/01	
Site Plan	1608/02 REV B	
Services Plan	1608/03	
Sections	1608/04	
Sections	1608/05	
Proposed Floor Plans	1608/06	
Proposed Floor Plans	1608/07	
Sections	1608/08	
Proposed Elevations	1608/09	
Proposed Elevations	1608/10	
Proposed Elevations	1608/11	
Proposed Elevations	1608/12	
Proposed Floor Plans	1608/13	
Proposed Floor Plans	1608/14	
Proposed Elevations	1608/15	
Proposed Elevations	1608/16	
Proposed Elevations	1608/17	
Sections	1608/18	
Parking Layout	1608/19	



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

KAREN YEOMANS : Executive Director – (Economy & Communities)

No N/16/00712/PP

CONDITIONAL PLANNING PERMISSION

Type of Application: Local Application

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT, 1997,
AS AMENDED BY THE PLANNING ETC (SCOTLAND) ACT 2006.
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND)
REGULATIONS 2013

To : Mr & Mrs A MacLeod
c/o Ian Cook (iCAD)
Linn Cottage
Whiting Bay
Brodict
Isle Of Arran
KA27 8PR

With reference to your application received on 14 October 2016 for planning permission under the above mentioned Acts and Orders for :-

Erection of 12 No detached & semi detached dwellinghouses

at Site To North Of Woodlea Cottage
Whiting Bay
Brodict
Isle Of Arran

North Ayrshire Council in exercise of their powers under the above-mentioned Acts and Orders hereby grant planning permission, in accordance with the plan(s) docquetted as relative hereto and the particulars given in the application, subject to the following conditions and associated reasons :-

- | | | |
|-----------|----|---|
| Condition | 1. | That prior to the commencement of the development hereby approved, the developer shall submit for the approval of North Ayrshire Council as Planning Authority full details of the proposed affordable housing Trust model including current and projected land values from the District or Local Valuation Board, evidence of affordability based on local market values for all the units proposed and proposed control over future affordability of all the units. Thereafter, unless otherwise agreed in writing, the developer shall complete the development in accordance with the agreed details to the satisfaction of North Ayrshire Council as Planning Authority. For the avoidance of doubt, where the proposed affordable housing model cannot be agreed North Ayrshire Council will seek a developer contribution based on 25% of the difference between the market and affordable valuations of the site. |
| Reason | 1. | To ensure that the development meets the requirements for affordable housing. |
| Condition | 2. | That prior to the commencement of the development hereby approved, the developer shall submit a Phasing Plan for the written approval of North Ayrshire Council as Planning Authority to include all land within the application site. The development shall progress in accordance with the approved Phasing Plan, which may be agreed, unless North Ayrshire Council as Planning Authority gives written consent to any variation. |
| Reason | 2. | To ensure the phasing of the development meets the requirements for affordable housing and proper planning of the site. |

Condition	3.	That no development shall take place until there has been submitted to and approved by North Ayrshire Council as Planning Authority a scheme of landscaping, which shall include details of species, planting densities, soil treatment and aftercare and shall include indications of all existing trees and hedgerows on the land and details of any to be retained together with measures for their protection in the course of the development.
Reason	3.	To secure a landscaping scheme in the interest of amenity.
Condition	4.	That details of the boundary enclosures shall be agreed in writing with North Ayrshire Council as Planning Authority prior to the commencement of any works. Thereafter any such details, which may be agreed, shall be implemented prior to the occupation of each house and thereafter maintained all to the satisfaction of North Ayrshire Council as Planning Authority.
Reason	4.	In the interest of the amenity of the area.
Condition	5.	That, prior to the commencement of the development, hereby approved, confirmation shall be submitted in writing to North Ayrshire Council as Planning Authority and certified by a suitably qualified person that a scheme to treat the surface water arising from the site has been prepared in accordance with the principles and practices contained in 'The SuDS Manual' (CIRIA report C753, published November 2015). Thereafter, the certified scheme shall be implemented prior to the completion of the development and maintained thereafter to the satisfaction of North Ayrshire Council as Planning Authority.
Reason	5.	To meet the requirements of NAC Flooding..
Condition	6.	No development shall take place within the development site as outlined in red on the approved plan until the developer has secured the implementation of a programme of archaeological works in accordance with a written scheme of investigation which has been submitted to North Ayrshire Council as Planning Authority. Thereafter the developer shall ensure that the agreed programme of archaeological works is fully implemented and that all recording and recovery of archaeological resources within the development site is undertaken to the satisfaction of North Ayrshire Council as Planning Authority.
Reason	6.	In recognition of the archaeological significance of the site.
Condition	7.	That the siting and design of the proposed sewage treatment plant shall be agreed in writing with North Ayrshire Council as Planning Authority prior to the commencement of any works. The proposed design and siting of the plant and proposed treatment and outflow of sewage shall take account of advice received from SEPA and completed to the satisfaction of North Ayrshire Council as Planning Authority prior to the occupation of the first residential unit hereby approved.
Reason	7.	To meet the requirements of SEPA and protect the amenity of neighbours.
Condition	8.	That notwithstanding the details for parking provision provided in approved drawing 1608/19, should the affordable housing Trust model proposed in Condition 1 not be agreed the developer shall provide, for the approval of North Ayrshire Council as Planning Authority, a revised drawing setting out parking arrangements which accord with Table 7.3 in the North Ayrshire Council, Roads Development Guide, providing a minimum of 3 parking spaces for each dwelling.
Reason	8.	To meet the requirements of North Ayrshire Council as Roads Authority.
Condition	9.	That prior to the occupation of any of the dwellinghouses and where Council adoption of open space areas is not to be pursued, there shall be submitted for approval of North Ayrshire Council as Planning Authority, details of the proposed factor or management agency and a landscape management plan, including long term design objectives, management responsibilities and maintenance schedules for all open space areas. The landscape management plan shall be carried out in accordance with the approved details unless the prior written approval of North Ayrshire Council as Planning Authority is obtained for any variation, and the agreed agency shall only be changed with the agreement of North Ayrshire Council as Planning Authority.
Reason	9.	To secure a landscaping scheme in the interest of amenity.

Reason(s) for approval 1. The proposal complies with the relevant provisions of the Local Development Plan and there are no other material considerations that indicate otherwise.

Dated this : 12 January 2017

.....
for the North Ayrshire Council

Drawings relating to decision

Drawing Title	Drawing Reference	Drawing Version
Location Plan	1608/01	
Site Plan	1608/02 REV B	
Services Plan	1608/03	
Sections	1608/04	
Sections	1608/05	
Proposed Floor Plans	1608/06	
Proposed Floor Plans	1608/07	
Sections	1608/08	
Proposed Elevations	1608/09	
Proposed Elevations	1608/10	
Proposed Elevations	1608/11	
Proposed Elevations	1608/12	
Proposed Floor Plans	1608/13	
Proposed Floor Plans	1608/14	
Proposed Elevations	1608/15	
Proposed Elevations	1608/16	
Proposed Elevations	1608/17	
Sections	1608/18	
Parking Layout	1608/19	

(See accompanying notes.) (The applicant's attention is particularly drawn to note 5 (limit of duration of planning permission))

The applicant is advised to consult the following authorities prior to the commencement of the development hereby approved :-

1. Scottish Environment Protection Agency, 31 Miller Road, Ayr, KA7 2AX with regard to the preparation of a pollution prevention plan and surface water discharge.
2. Development Planning Services (Roads), North Ayrshire Council, Cunninghame House, Irvine, KA12 8EE with regards to adjustments to the internal road widths of the development, a Roads Construction Consent and a Road Bond.



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

NOTIFICATION OF INITIATION OF DEVELOPMENT

Please return notice when you intend to commence development

12 January 2017

TO:

Enforcement Officer
 Planning Services
 Cunninghame House
 Irvine
 North Ayrshire
 KA12 8EE

Our Ref: N/16/00712/PP

Decision: Approved subject to Conditions

Decision Date: 12 January 2017

DETAILS OF APPLICANT AND/OR DEVELOPER	DETAILS OF OWNER	DETAILS OF AGENT IF APPLICABLE
		Ian Cook (iCAD) Linn Cottage Whiting Bay Brodick Isle Of Arran KA27 8PR 01770 700411

Description of Development: Erection of 12 No detached & semi detached dwellinghouses

Location of Development: Site To North Of Woodlea Cottage Whiting Bay Brodick Isle Of Arran

Date when work commences: _____

Signed: _____

Applicant/Agent* _____

* Delete where applicable

Please read the following and retain for your information.

1. Work must be carried out in accordance with the relevant docquetted plans and any conditions on the decision notice.
2. A grant of Planning Permission does not authorise work under the Building (Scotland) Act 2003.
3. A separate Building Warrant may be required. Please contact (01294) 324348 to ascertain the need for a warrant.
4. Should the docquetted plans not correspond with what you intend to construct/build, you must seek the Authority of the Council before proceeding.
5. If the development you intend to undertake is either a national or major development and of a type specified in Schedule 3 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 you will be required to display a site notice.



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

NOTIFICATION OF COMPLETION OF DEVELOPMENT

Please return notice when you have completed the development

12 January 2017

TO:

Enforcement Officer
 Planning Services
 Cunninghame House
 Irvine
 North Ayrshire
 KA12 8EE

Our Ref: N/16/00712/PP

Decision: Approved subject to Conditions

Decision Date: 12 January 2017

DETAILS OF APPLICANT AND/OR DEVELOPER	DETAILS OF OWNER	DETAILS OF AGENT IF APPLICABLE
		Ian Cook (iCAD) Linn Cottage Whiting Bay Brodick Isle Of Arran KA27 8PR 01770 700411

Description of Development: Erection of 12 No detached & semi detached dwellinghouses

Location of Development: Site To North Of Woodlea Cottage Whiting Bay Brodick Isle Of Arran

Date when works complete: _____

Signed: _____

Applicant/Agent* _____

*Delete where applicable

Please read the following and retain for your information.

1. Work must have been carried out in accordance with the relevant docquetted plans and any conditions on the decision notice.
2. A grant of Planning Permission does not authorise work under the Building (Scotland) Act 2003.
3. A separate Building Warrant may be required. Please contact (01294) 324348 to ascertain the need for a warrant.
4. Should the docquetted plans not correspond with what you intend to construct/build, you must seek the Authority of the Council before proceeding.
5. If the development you intend to undertake is either a national or major development and of a type specified in Schedule 3 of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 you will be required to display a site notice.



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
AS AMENDED BY THE PLANNING ETC (SCOTLAND) ACT 2006.
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND)
REGULATIONS 2013 – REGULATION 28

KAREN YEOMANS : Executive Director – (Economy & Communities)

FORM 2

1. If the applicant is aggrieved by the decision to refuse permission for or approval required by a condition in respect of the proposed development, or to grant permission or approval subject to conditions, the applicant may require the planning authority to review the case under section 43A of the Town and Country Planning (Scotland) Act 1997 within three months from the date of this notice. The notice of review should be addressed to Committee Services, Committee Services, Chief Executive's Department, Cunninghame House, Irvine, North Ayrshire, KA12 8EE.
2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

Appendix 4

First Class

Angela Little
Committee Services Officer
North Ayrshire Council
Cunninghame House
Irvine
KA12 8EE

18 April 2017

Dear Ms Little

Planning Application 16/00712 PP

Chalet 13, Silverhill, Whiting Bay

Erection of Dwellinghouses to North of Woodlea Cottage, Whiting Bay, Isle of Arran

Thank you for your letter of 12 April 2017. I noted that this planning application did not actually go in front of the Committee which surprises me. Is Mr McLeod now attempting to water down the first condition of the planning permission which presumably was designed to ensure that social housing was the main point of the development. I certainly would not be in favour of any watering down of this condition.

Kind regards.

Yours sincerely

Professor Robert Rennie

Mr N Marriott

Ms Angela Little
Committee Secretariat
North Ayrshire Council
Cunninghame House
Irvine
KA12 8EE

FAO: Angela Little

Dear Sir,

**Planning Application 16/00712 PP
Erection of 12 No detached & semi detached dwellinghouses
Site To North Of Woodlea Cottage, Whiting Bay, Brodick, Isle Of Arran
Request by Applicant for Review of Condition attached by Appointed Officer**

Dear Ms Little,

Thank you for your letter dated 12th April 2017 advising that the applicant for the above planning application had requested a Review of Condition I attached to the recent issue of planning permission. I wish to record my objection to the review request and have outlined my concerns below.

I submitted a very detailed objection letter to the original application. I believe my views are still relevant although were not given enough weight in the final decision to grant permission. The design, layout and infrastructure provision are I consider ill thought out and certainly in layout terms do not meet the aspirations of the rural housing design guidance supported by the Council's Local Development Plan. However given the review is specific I will contain my submission to the condition in question.

The proposed site has already been zoned for affordable housing under *Policy RES4 Table 2* of the *North Ayrshire Local Development Plan 2014*. Therefore it is not about a percentage of affordable housing across the site but it's entirety.

1. RES4: Affordable Housing

The site is identified in LDP 2014 as 'specifically allocated for affordable housing to help address the identified housing requirement to 2025' with indicative capacity of 10 houses. 12 houses are proposed one of which (Dwelling No1) is a 'bespoke dwelling retained by the applicant as his principal dwelling'.

The land is not zoned for private housing supply and other sites have been identified in Whiting Bay for the development of private houses for sale. On this basis the Authority would be deviating from policy to grant permission for a private house on this site.

I would query the wording of condition I and would ask that the Review Board considers the following. The site is very specifically identified as a completely affordable housing site. Why is a 25% levy included within the condition if the developer fails to bring forward a suitable Housing Trust model. It surely means that if agreement is not reached he pays a 25% levy and then develops out for private mainstream housing assuming the figures work in his favour. Clarification would be welcomed on this point. If for any particular reason a developer can no longer achieve implementation of the specific affordability local development plan requirement on the site then this must surely be part of any future development plan call for appropriate housing sites. If a site has been identified but found to be unworkable it should not continue to be given credence in any development plan. I appreciate the permission is only recent however I did query it's whole concept and now so soon after a permission is given, a review is requested.

It is worth quoting the full policy with regards affordability.

POLICY RES 4: AFFORDABLE HOUSING

“Proposals for the development of RES 2 sites allocated in the local development plan and residential proposals on Arran and the mainland will be subject to requirements for affordable housing, as detailed in supplementary guidance. The contributions to affordable housing provision will be at the following levels in the following areas:

Irvine & Kilwinning: 15%

Three Towns: 10%; and

North Coast and Arran: 25%.

Additional criteria to guide the provision are set out in the supplementary guidance (Affordable Housing - Guidance for Developers & Policy: Isle of Arran and Affordable Housing - Guidance for Developers & Policy: Mainland), which is consistent with the Scottish Government's policy set out in Scottish Planning Policy and in the Chief Planner's letter of 5 March 2011 and with its advice on affordable housing contained in Planning Advice Note 2/2010.

The sites identified in Table 2 and on the LDP Maps are allocated specifically for affordable housing to help address the identified housing requirement to 2025.

For the avoidance of doubt, Policy RES4 does not apply to sites in the Garnock Valley sub Housing Market Area.”

It is clear that the 25% allocation for the North Coast and Arran relates to those sites which have been allocated by Policy RES2. In effect those which “are allocated for market housing to meet the identified housing requirement to 2025.”

Condition 1 in my opinion should not include a reference to a 25% levy. This particular site under review is clearly allocated in totality for affordable homes as outlined in red above.

The Council provides guidance for developers in respect of affordable housing provision on Arran in the document "Affordable Housing Policy: Isle of Arran Supplementary Guidance for Developers". The Authority identifies an order of preference for the provision of affordable housing from the most preferred being 'social rented', through various options for publicly 'subsidised low cost housing for sale' to, at one of the least preferred, 'unsubsidised low cost housing for sale'.

Is the developer an RSL?

The proposal is described in the applicants 'Justification' document as being shared equity homes for sale. Their stated intention being to establish a Trust which will operate as a Registered Social Landlord (RSL). A RSL is a not-for-profit social landlord with a constitution, appropriate governance and auditing procedures - it is normally governed by a board of trustees made up of independent advisors and members (tenants) - and regulated by the Scottish Housing Regulator.

However, this application is not made by a Trust or by an RSL but by private individuals and at this time the alleged Trust is not an RSL. The applicant is therefore asking the Authority to 'take it on trust' that the applicant will indeed be successful in registering as an RSL. Until this has occurred the Authority must surely be obliged to view the application as being for 'unsubsidised low cost housing for sale' by a private sector applicant.

In this context the question arises as to why the applicant has not sought to partner with the established RSL already operating on Arran, Trust Housing Association, to develop the site. Instead, the community is being asked to believe that the developer will follow-through on his promises to make these homes available at an affordable price - and indeed to build out the full development after his own private house has been completed.

It would only be reasonable for the community to expect the Council to insist upon a binding legal agreement between the Authority and the Developer in the form of a Section 75 Agreement that protects the supply of affordable housing and limits the applicants' ability to abort the later phases once the bespoke private house has been completed.

Affordable Housing Contribution

The Authority's Housing Section has identified the development as attracting an affordable housing contribution which should be calculated according to the guidelines set out in Policy.

Policy states that "if a site is developed in phases, the affordable housing contribution will still apply". Therefore, the applicant will be expected to pay the contribution at the start of the development or at least before any house is sold. Policy states that the Contribution will be secured by a Section 75 Agreement that requires that the affordable units will be specified, that the mechanism and timescale for delivery will be agreed, that there will be a

restriction on increasing the number of private/market units constructed, and that the costs of the legal agreement will be borne by the developer. Yet the requirement for a Section 75 legal agreement has not been made a condition of this consent.

The affordable housing contribution is calculated as 25% of the difference between the market value and the affordable value of the site. This value is relevant in relation to the applicant's ability to bring forward the development as declared in his 'justification' document. At a rough estimate the value of the affordable housing contribution for a 12 house plot could be in the region of £90,000. This potential sum exceeds the applicants stated available funds. However, I would query the above based on my comments listed in para 2 above under RES4 Affordable Housing.

The proposal does not reflect any variety in need or household size. This needs closer scrutiny by Planners if the community is to be reassured that the proposed house types and mix will meet the need of the people in Arran for affordable housing.

Housing Affordability

The same report identifies that median household income on Arran (2008) of £24,265 compared to an average house price (2008) of £221,403 (9.1 times income). The average cost of developing new social housing on Arran is stated in the report at £150,000 per unit (2008). The applicant advises in his application that the projected value of the completed houses will be 'between £200k and £250k' and that on the basis of a 60% equity stake the purchaser would require a mortgage of 'between £120k and £150k'. The Scottish Housing Information Centre 2015 report 'Earnings in Scotland 2015' identifies that 'Since 2008 median full-time gross weekly pay in Scotland has fallen 0.5% in real terms'. Therefore the median Arran household income of 2008 is unlikely to have increased over the last eight years - over this period house values in Arran have risen by an average of 16.4%. Therefore, for buyers, the issue of house affordability on Arran has become more acute.

The Halifax online Mortgage Calculator illustrates that a household on the median household income on Arran of £24,265 p.a with monthly outgoings of only £300 could borrow £18,212. This compares to the applicants projection of a 60% stake at £120-150,000.

The desperate need for affordable housing on Arran is not in doubt but the applicants' projections of affordability need closer scrutiny. With an established national housing association already operating on Arran would it not be better for this site to be developed in partnership with a professional RSL providing social housing for rent or a more affordable realistic model of shared ownership? Indeed the social rented tenure model is the Authority's 'First Preference' for the provision of affordable housing under the Policy. If the Review Board is minded to support this request I would suggest that before doing so that they gain an independent valuer's opinion on the financial models being suggested by the developer.

The Planning Application Ref 16/00712/PP

The original planning application form states housing development under description of proposal. The drawings all state housing development. No mention is made of affordable housing specific to the development plan. A fee, drawings and an application form constitute a planning application. So, whilst the developer may have provided further information, it is surely correct and proper that the Council applies conditions which ensure that it's policies are met. Condition 2 is quite specific on phasing:

Condition 2

That prior to the commencement of the development hereby approved, the developer shall submit a Phasing Plan for the written approval of North Ayrshire Council as Planning Authority to include all land within the application site. The development shall progress in accordance with the approved Phasing Plan, which may be agreed, unless North Ayrshire Council as Planning Authority gives written consent to any variation.

This condition was applied to link in with the analysis section of the Report of Handling which states:

“In support of the application, the applicant states that the proposed bespoke house is required as the current dwellings would be sold in order to fund the development of the site. The house is located within the boundary of the RES 4 site as such it would be considered appropriate to restrict the erection of this dwelling, through a phasing plan, until such time as the remaining development is completed and also be subject to the consideration of the model for delivery of the affordable housing.”

Therefore this condition would appear to cancel out any request to allow the applicant to occupy one of the first houses temporarily until future phases are built. The complexity of the model being proposed and the request for this change to the condition should be in my opinion be resisted.

In Summary

- the applicant is private developer and not an RSL
- a Section 75 Agreement is required under policy to secure the supply of affordable housing
- the applicants claims of the proposed houses being affordable requires closer scrutiny in the context of published NAC and Scottish Government statistics
- the proposed tenure model is not the preferred tenure model of NAC and consequentially is potentially not affordable for typical median households on Arran
- the proposed layout takes no account of the existing Scottish Power wayleave across the site and impact of the existing power line on the feasibility of the development
- the combined issues of drainage, privacy, parking and wayleaves are likely to require significant changes to the proposed layout that may impact on the number of dwellings that can be developed on this site. The viability of the proposal and adequacy of available funding therefore may be in doubt
- the applicant has not identified the adjacent land in his control.

Conclusion

Certain of the points raised above perhaps stray beyond what is being asked of the Board . However I believe that in order to reach a determination a variety of factors need to be taken into account.

I still have significant concerns at the ability of the developer to deliver the development as described in his submission. The initial costs of development prior to construction of any houses could include:

- affordable housing contribution (say £90,000) - assuming that Condition 1 is correct in it's interpretation of this policy requirement
- mains sewer connection (say £30,000)
- roads improvements (say £20-40,000)
- overhead power cable diversion (say £20,000)
- Section 75 legal charges (£considerable)

It may be that the pre-start costs are significant and exceed the stated funds available.

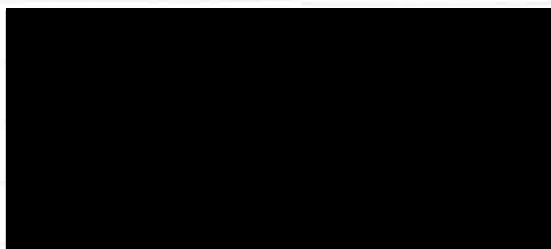
I urge the Board to examine the evidence of the technical viability of the proposal before diluting condition 1 any further than it is at present and reject this current request to have the condition amended.

Yours faithfully

Nick Marriott



MR. T. BUCHANAN



Dear Ms. LITTLE,

(Committee Services Officer)

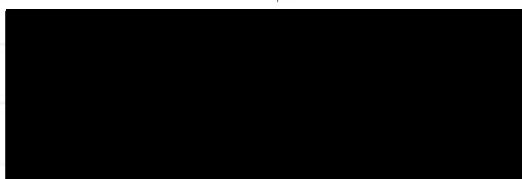
Thank you for letter re planning application
(N/16/00712/PP) regarding the erection of 12 houses
in Whiting Bay.

I wish to re-iterate my previous comments regarding
this development.

I wish to add that I have observed that some
clearance has been made alongside the fence
on the eastern side of the site. I understand the
actual boundary is the ditch to the rear of my
property, not the fence referred to. Perhaps you
can clarify what exactly will be the boundary.

Also, I do not understand how "affordable"
housing can be 4 bedrooms (2-en-suite) - these
types of property do not seem "affordable" to me.
I hope these points are noted.

Yours sincerely



Appendix 5

Your Ref:

11th May 2017

Committee Services
Chief Executives Department
North Ayrshire Council
Cunninghame House
IRVINE
KA12 8EE

Attention Angela Little

Dear Sirs

PROPOSED ERECTION OF 12 No. DETACHED & SEMI DETACHED DWELLINGHOUSES AT
SITE TO NORTH OF WOODLEA COTTAGE WHITING BAY BRODICK ISLE OF ARRAN
NOTICE OF REVIEW

I refer to the earlier conditional Planning Permission Ref No N/16/00712/PP dated 12.01.17 for the above and to the subsequent Notice of Review submission.

I am in receipt of your letter dated 28.04.17 with attached representations received from interested parties.

As you are aware the application for review before the Local Review Body for the above planning permission relates to the specific wording '*all the units*' in Condition No.1 only,.

You will recall from our Notice of Review Statement that:

We are aggrieved by the wording highlighted within this condition No. 1 for the proposed development, and in requiring North Ayrshire Council as the planning authority to review this case, we would propose that Condition No. 1 be amended to replace the words '*all the units*' with the wording *all 11 No. affordable units*.

That is the scope of the current appeal and therefore the scope of the forthcoming LRB review. Representations from interested parties regarding the above appeal, should therefore also only relate to the specific highlighted wording in Condition No.1.

Comments or representations addressing other issues are outwith the remit of the LRB review and are irrelevant to this appeal.

As is our entitlement, We would now comment on the above representations as follows.

With regard to the representation received from Professor Robert Rennie, we can confirm that social (or affordable) housing is the main point of the development as stated in his representation, there is no attempt to 'water down' the condition, but only to correct the wording in line with what was clearly stated throughout the planning process and indeed with what was repeatedly stated in the planning officer's Report of Handling, that 11 no. dwellings will be affordable.

The representation from Mr Thomas Buchanan refers to boundary issues and to the size of the proposed properties , neither of these points are relevant to the current appeal.

The representation received from Mr Nick Marriott states in the first paragraph that he wishes to object to this review request, Clearly it is the applicant's rite to submit an appeal which is not open to objection from others.

Although Mr Marriott states at the end of paragraph 2 in his representation that 'the review is specific' the bulk of his letter contains comments and policy statements which are not specific to the scope of the appeal and are therefore not relevant.

His representation is in essence a reworking of his earlier objection submitted at planning stage, The planners obviously did not agree with Mr Marriott statements as they granted conditional permission for this development.

It has always been clearly stated in the original Planning Application documents and justification report and also clearly stated at the various meetings between the applicant and the planning authority that 1 no. of the proposed 12 No. house development will be constructed as a private dwelling for the applicant.


Furthermore it has also always been clearly stated that the applicant will sell his existing dwelling to enable the phased development to proceed.

The cash flow released from the sale of the applicant's existing private dwelling is an integral part of the proposed business plan. The applicant needs to have his own dwelling to continue living on the island.

Yours faithfully



IAN COOK
Agent
Encs:

By post & email: [alittle](#) 

NORTH AYRSHIRE COUNCIL

Agenda Item 3

14 June 2017

Local Review Body

Title: **Notice of Review: N/16/01126/PP - Jameston Moss, Dalry**

Purpose: To submit, for the consideration of the Local Review Body, a Notice of Review by the applicant in respect of a planning application refused by officers under delegated powers.

Recommendation: That the Local Review Body considers the Notice of Review.

1. Executive Summary

- 1.1 The Town and Country Planning (Scotland) Act 1997, as amended by the Planning (Scotland) Act 2006, provides for certain categories of planning application for "local" developments to be determined by appointed officers under delegated powers. Where such an application is refused, granted subject to conditions or not determined within the prescribed period of 2 months, the applicant may submit a Notice of Review to require the Planning Authority to review the case. Notices of Review in relation to refusals must be submitted within 3 months of the date of the Decision Notice.

2. Background

- 2.1 A Notice of Review has been submitted in respect of Planning Application N/16/01126/PP - Erection of a wind turbine (36m to hub and 47m to blade tip) and formation of an access track and associated infrastructure.
- 2.2 The application was refused by officers for the reasons detailed in the Decision Notice.
- 2.3 The following related documents are set out in the appendices to this report:-
- Appendix 1 - Notice of Review documentation and supporting documents, including the Report of Handling and Decision Notice; and
- Appendix 2 - Further Representations.

3. Proposals

3.1 The Local Review Body is invited to consider the Notice of Review.

4. Implications

Financial:	None arising from this report.
Human Resources:	None arising from this report.
Legal:	The Notice of Review requires to be considered in terms of the Town and Country Planning (Scotland) Act 1997, as amended by the Planning (Scotland) Act 2006, and the Town and Country Planning (Schemes of Delegation and Local Review Procedure) (Scotland) Regulations 2013.
Equality:	None arising from this report.
Environmental & Sustainability:	None arising from this report.
Key Priorities:	None arising from this report.
Community Benefits:	None arising from this report.

5. Consultation

5.1 Interested parties (both objectors to the planning application and statutory consultees) were invited to submit representations in terms of the Notice of Review and these are attached at Appendix 2 to the report.

5.2 The applicant has had an opportunity to respond to the further representations however no further comments were submitted.



ELMA MURRAY
Chief Executive

Reference :

For further information please contact Angela Little, Committee Services Officer on 01294 324132

Background Papers

Planning Application N/16/01128/PP and related documentation is available to view on-line at www.north-ayrshire.gov.uk or by contacting the above officer.

Proposal Details

Proposal Name	100049099
Proposal Description	Appeal against refusal of planning permission at Jameston Moss, Dalry
Address	
Local Authority	North Ayrshire Council
Application Online Reference	100049099-001

Application Status

Form	complete
Main Details	complete
Checklist	complete
Declaration	complete
Supporting Documentation	complete
Email Notification	complete

Attachment Details

Notice of Review	System	A4
Planning Permission Appeal	Attached	A4
Statement Jameston Moss		
Environmental Report for Proposed	Attached	A4
Wind Development at Jameston Moss		
Jameston Moss Environmental Report	Posted	A3
Appendix Documents		
North Ayrshire Council Refusal of	Attached	A4
Planning Permission at Jameston		
Moss		
North Ayrshire Council Report of	Attached	A4
Handling for Jameston Moss		
Development		
Notice_of_Review-2.pdf	Attached	A0
Application_Summary.pdf	Attached	A0
Notice of Review-001.xml	Attached	A0



Cunninghame House Friars Croft Irvine KA12 8EE Tel: 01294 324 319 Fax: 01294 324 372 Email: eplanning@north-ayrshire.gov.uk

Applications cannot be validated until all the necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 100049099-001

The online reference is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the planning Authority about this application.

Applicant or Agent Details

Are you an applicant or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application)

☐ Applicant ☒ Agent

Agent Details

Please enter Agent details

Company/Organisation:	VG Consulting Ltd.		
Ref. Number:		You must enter a Building Name or Number, or both: *	
First Name: *	Bethan	Building Name:	Waterside Farm
Last Name: *	Lewis	Building Number:	
Telephone Number: *		Address 1 (Street): *	Glasgow Road
Extension Number:		Address 2:	
Mobile Number:		Town/City: *	Galston
Fax Number:		Country: *	Scotland
		Postcode: *	KA4 8PB
Email Address: *	bethan.lewis@vg-consulting.co.uk		

Is the applicant an individual or an organisation/corporate entity? *

☒ Individual ☐ Organisation/Corporate entity

Applicant Details

Please enter Applicant details

Title:	<input type="text" value="Mr"/>	You must enter a Building Name or Number, or both: *
Other Title:	<input type="text"/>	Building Name: <input type="text" value="Jameston Moss"/>
First Name: *	<input type="text" value="Robert"/>	Building Number: <input type="text"/>
Last Name: *	<input type="text" value="Miller"/>	Address 1 (Street): * <input type="text" value="Dalry"/>
Company/Organisation	<input type="text"/>	Address 2: <input type="text"/>
Telephone Number: *	<input type="text"/>	Town/City: * <input type="text" value="North Ayrshire"/>
Extension Number:	<input type="text"/>	Country: * <input type="text" value="Scotland"/>
Mobile Number:	<input type="text"/>	Postcode: * <input type="text" value="KA24 4HB"/>
Fax Number:	<input type="text"/>	
Email Address: *	<input type="text"/>	

Site Address Details

Planning Authority:	<input type="text" value="North Ayrshire Council"/>
Full postal address of the site (including postcode where available):	
Address 1:	<input type="text"/>
Address 2:	<input type="text"/>
Address 3:	<input type="text"/>
Address 4:	<input type="text"/>
Address 5:	<input type="text"/>
Town/City/Settlement:	<input type="text"/>
Post Code:	<input type="text"/>

Please identify/describe the location of the site or sites

Land at Jameston Moss, Dalry, Ayrshire, KA24 4HA

Northing	<input type="text" value="647332"/>	Easting	<input type="text" value="233210"/>
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Description of Proposal

Please provide a description of your proposal to which your review relates. The description should be the same as given in the application form, or as amended with the agreement of the planning authority: *
(Max 500 characters)

Erection of a 36m to hub height wind turbine (47m tip) and associated access track and infrastructure.

Type of Application

What type of application did you submit to the planning authority? *

- ☒ Application for planning permission (including householder application but excluding application to work minerals).
- ☐ Application for planning permission in principle.
- ☐ Further application.
- ☐ Application for approval of matters specified in conditions.

What does your review relate to? *

- ☒ Refusal Notice.
- ☐ Grant of permission with Conditions imposed.
- ☐ No decision reached within the prescribed period (two months after validation date or any agreed extension) – deemed refusal.

Statement of reasons for seeking review

You must state in full, why you are seeking a review of the planning authority's decision (or failure to make a decision). Your statement must set out all matters you consider require to be taken into account in determining your review. If necessary this can be provided as a separate document in the 'Supporting Documents' section: * (Max 500 characters)

Note: you are unlikely to have a further opportunity to add to your statement of appeal at a later date, so it is essential that you produce all of the information you want the decision-maker to take into account.

You should not however raise any new matter which was not before the planning authority at the time it decided your application (or at the time expiry of the period of determination), unless you can demonstrate that the new matter could not have been raised before that time or that it not being raised before that time is a consequence of exceptional circumstances.

Appeal statement submitted seeking review of the refusal of planning permission by the Case Officer - please see attached Planning Permission Appeal Statement.

Have you raised any matters which were not before the appointed officer at the time the Determination on your application was made? *

☐ Yes ☒ No

If yes, you should explain in the box below, why you are raising the new matter, why it was not raised with the appointed officer before your application was determined and why you consider it should be considered in your review: * (Max 500 characters)

Please provide a list of all supporting documents, materials and evidence which you wish to submit with your notice of review and intend to rely on in support of your review. You can attach these documents electronically later in the process: * (Max 500 characters)

- Planning Permission Appeal Statement for Jameston Moss Development. - Submitted Environmental Report for the Jameston Moss Development, including associated appendix. - Decision Notice and Handling Report from North Ayrshire Council detailing refusal of planning permission.

Application Details

Please provide details of the application and decision.

What is the application reference number? *

16/01126/PP

What date was the application submitted to the planning authority? *

16/11/2016

What date was the decision issued by the planning authority? *

20/01/2017

Review Procedure

The Local Review Body will decide on the procedure to be used to determine your review and may at any time during the review process require that further information or representations be made to enable them to determine the review. Further information may be required by one or a combination of procedures, such as: written submissions; the holding of one or more hearing sessions and/or inspecting the land which is the subject of the review case.

Can this review continue to a conclusion, in your opinion, based on a review of the relevant information provided by yourself and other parties only, without any further procedures? For example, written submission, hearing session, site inspection. *

☐ Yes ☒ No

Please indicate what procedure (or combination of procedures) you think is most appropriate for the handling of your review. You may select more than one option if you wish the review to be a combination of procedures.

Please select a further procedure *

By means of inspection of the land to which the review relates

Please explain in detail in your own words why this further procedure is required and the matters set out in your statement of appeal it will deal with? (Max 500 characters)

We would request a visit to the development site for members to gain an appreciation of the surrounding landscape and how the development sits within it.

In the event that the Local Review Body appointed to consider your application decides to inspect the site, in your opinion:

Can the site be clearly seen from a road or public land? *

☒ Yes ☐ No

Is it possible for the site to be accessed safely and without barriers to entry? *

☒ Yes ☐ No

Checklist – Application for Notice of Review

Please complete the following checklist to make sure you have provided all the necessary information in support of your appeal. Failure to submit all this information may result in your appeal being deemed invalid.

Have you provided the name and address of the applicant?. *

☒ Yes ☐ No

Have you provided the date and reference number of the application which is the subject of this review? *

☒ Yes ☐ No

If you are the agent, acting on behalf of the applicant, have you provided details of your name and address and indicated whether any notice or correspondence required in connection with the review should be sent to you or the applicant? *

☒ Yes ☐ No ☐ N/A

Have you provided a statement setting out your reasons for requiring a review and by what procedure (or combination of procedures) you wish the review to be conducted? *

☒ Yes ☐ No

Note: You must state, in full, why you are seeking a review on your application. Your statement must set out all matters you consider require to be taken into account in determining your review. You may not have a further opportunity to add to your statement of review at a later date. It is therefore essential that you submit with your notice of review, all necessary information and evidence that you rely on and wish the Local Review Body to consider as part of your review.

Please attach a copy of all documents, material and evidence which you intend to rely on (e.g. plans and Drawings) which are now the subject of this review *

☒ Yes ☐ No

Note: Where the review relates to a further application e.g. renewal of planning permission or modification, variation or removal of a planning condition or where it relates to an application for approval of matters specified in conditions, it is advisable to provide the application reference number, approved plans and decision notice (if any) from the earlier consent.

Declare – Notice of Review

I/We the applicant/agent certify that this is an application for review on the grounds stated.

Declaration Name: Miss Bethan Lewis

Declaration Date: 19/04/2017

PLANNING PERMISSION APPEAL STATEMENT

JAMESTON MOSS – 16/01126/PP

Applicant: Mr. R. Miller

Version 1.1

Document Version Control

Revision Control Table

Issue	Date	Change	Prepared	Edited
1.0	17/04/17	Appeal Statement – First Draft	BL	TW
1.1	19/04/17	Appeal Statement – Submission Draft	BL	TW

Proprietary Statement

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1. DOCUMENT ATTACHMENTS

Table 1.1 Document Attachments

Document Title	Description
Environmental Report for Proposed Wind Development at Jameston Moss	Environmental Report and associated Appendix documents submitted to North Ayrshire Council for consideration - 16/01126/PP
Decision Notice - N/16/01126/PP	Decision Notice issued by North Ayrshire Council for the Refusal of Planning Permission at Jameston Moss
Report of Handling - 16/01126/PP	Handling Report compiled by the Case Officer for the decision issued against granting permission at Jameston Moss

2. EXECUTIVE SUMMARY

A planning application was submitted by VG Consulting to install a single wind turbine development, inclusive of associated infrastructure at Jameston Moss, Dalry in November 2016.

On the 20th January 2017, North Ayrshire Council refused the application at delegated level. This appeal statement seeks a review of the decision made by the Planning Officer, asking that the Local Review Body review the application based on its merits as a unique development opportunity for the landowner.

VG Consulting wish to bring the following points to the attention of the Local Review Body for consideration;

- ◆ The proposed turbine at Jameston Moss measures 47m to blade tip and is considered a Small-Medium turbine as specified within North Ayrshire Council Supplementary Landscape Wind Capacity Guidance (30-50m).
- ◆ The LCT in which the site is located is classified as *7a - North Ayrshire Lowlands* which is considered to have a Medium Sensitivity rating for turbines of the proposed scale (Small-Medium typology).
- ◆ The proposed development does not contravene North Ayrshire Council Policy and Guidance and will not result in an unacceptable impact to the surrounding landscape.
- ◆ With a limited number of consented operational developments in the area, there is no cumulative impact resulting from the installation of the proposed Jameston Moss turbine.
- ◆ The proposed Jameston Moss development presents a viable onsite renewable energy generation opportunity for the landowner with sensitive siting of the installation ensuring minimal impact to the surrounding area.

3. INTRODUCTION

This statement seeks a review by the Local Review Body on the refusal of planning permission from North Ayrshire Council with regards to the proposed installation of a wind turbine development and its associated infrastructure at Jameston Moss, Dalry. The proposed development consists of a single wind turbine with a hub height of 36m, height to blade tip of 47m and a rotor diameter of 22m.

Under reference 16/01126/PP, the application seeking permission for the development was registered by the Council on 22nd November 2016. The application was determined at Delegated Level with refusal of permission dated 20th January 2017.

Following a review of the Handling Report and Decision Notice, VG Consulting (VGC) submit this Appeal Statement on behalf of the applicant Mr Miller seeking a review of the decision to refuse permission at Jameston Moss for the proposed development. It is believed that the reasons for refusing permission for the proposed wind turbine development at the site do not reflect the published guidance for the region and as such, we seek a review of the determination under Section 43A of the Town and Country Planning (Scotland) Act 1997.

4. COUNCIL DECISION

4.1. Reasons for Refusal

As detailed within the Decision Notice, the grounds of refusal for this application are as follows;

1. *The proposed development would be contrary to criteria (a), (b), (c), (h) and (i) of Policy PI 9 of the Adopted North Ayrshire Local Development Plan by reason of:*
 - (a) *The inappropriate design and scale of the development in relation to its surroundings;*
 - (b) *The significant adverse effect of the development on the intrinsic landscape quality of the area, the visual impact of which could not be mitigated due to the siting/scale of the turbine on a visually prominent, flat, open field;*
 - (c) *The 'high sensitivity' of the area for small-medium typology turbines within the Landscape Capacity Study for Windfarm Development in North Ayrshire;*
 - (h) *The unacceptable cumulative impact on the local countryside, in combination with nearby turbines at Dove Hill, Benthead, Lissens Moss and operational windfarms at Baidland Hill (Dalry Community Windfarm/Millour Hill) and Kelburn.*
 - (i) *The proposal would not satisfy the contents of the Ayrshire Supplementary Guidance: Wind Farm Development (October 2009) and the Landscape Wind Capacity Study (June 2013).*

All to the detriment of the rural character of the area.

2. *The proposal would be contrary to the General Policy in respect of (a) unacceptable siting, design and external appearance; (b) adverse impact on residential amenity and (c) adverse impact on landscape character.*

We respect the Council's determination on this proposal, however we would disagree with the reasons for refusal as outlined within the Decision Notice. We do not agree with the Council that the proposed development contravenes local policies as noted, neither will it adversely impact the landscape within which it is located.

It is our opinion that the impact of the proposed development has been fully analysed within the Environmental Report submitted (attached), and the effect of this development on the surrounding environment is shown to be low and of an acceptable level.

To avoid repetition within this statement, we wish to address the reasons for refusal set out by the Council under the following categories:

- ◆ Scale and design of the development;
- ◆ Landscape and Visual Impact;
- ◆ Cumulative Impact; and
- ◆ Residential Amenity.

5. SCALE AND DESIGN OF DEVELOPMENT

5.1. NAC Reason for Refusal

Within the Handling Report and Decision Notice it is detailed that the Case Officer deems the proposed turbine at Jameston Moss inappropriate for the site. The reasons for refusal of permission note that the design and scale of the development is inappropriate for its surroundings and contravenes Policy PI9 and General Policy for this reason.

VGC wish to rebut this reason for refusal and draw attention to the ER submitted, SNH guidance¹ and the Local Wind Energy Guidance documentation for the region².

5.2. Scale and Design Selected

Through analysis of the published guidance and careful site selection and design, the Jameston Moss development proposed presents the most suitable and viable renewable energy generation opportunity at the site.

A three-bladed wind turbine typology was chosen for Jameston Moss to avoid clashing of designs within the landscape, taking into account those operational and consented developments in line with guidance. As discussed later within this appeal statement, NAC guidance for wind energy within this region supports the deployment of turbines of the scale proposed at Jameston Moss. The layout of the development ensures a viable operating turbine whilst minimising the impacts of the installation to the greatest extent possible, within the confines of the site.

By their very nature, turbines are visible structures as they are designed to rotate and generate energy from where there is the best wind resource. As such, given their design they are on times viewed on the horizon and are seen to 'break the skyline' as termed by the Case Officer. We would stress that because a turbine is viewed against the skyline or viewed within the landscape, it does not mean that it creates an unacceptable impact to views or the character of the area. The foundation of the landscape does not fundamentally change as a result of an operational turbine as proposed at Jameston Moss and the detailed ER submitted demonstrates this. The turbine scales well at its proposed location, is read as a minor addition to the landscape and as such complies with guidance. VGC disagree with the decision issued and stress that the proposal does comply with the criteria detailed within Policy PI9 (a), (b) (i) and General Policy (a).

¹ SNH Guidance (2012) Siting and Design of Small Scale Wind Turbines of between 15 and 50 metres in height – *Updated within Annex A of the Feb 2017 guidance detailed below.*

SNH Guidance (Feb 2017) Siting and Designing Wind Farms in the Landscape: Version 3

² Carol Anderson & Alison Grant Landscape Architects (2009) Landscape Capacity Study for Wind Farm Development in North Ayrshire

Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study

6. LANDSCAPE AND VISUAL IMPACT

6.1. NAC Reason for Refusal

With numerous years' experience of working within the renewable energy sector, we are more than aware of the concerns held by individuals in relation to the perceived impact a wind turbine installation will have on the area. We understand that the installation of a wind turbine will introduce a new, moving element in to the landscape, however we would disagree with the Councils interpretation of the development and landscape along with the subsequent refusal of planning permission on the grounds of landscape and visual impact.

6.2. Published Guidance

Within North Ayrshire Councils published guidance on the deployment of wind energy development within their boundary, developers are guided to suitable scales of developments for certain Landscape Character Types (LCT). The North Ayrshire Landscape Capacity Study (2009)³ and Supplementary Landscape Wind Capacity Study (2013)⁴ confirms that the development site at Jameston Moss falls within the North Ayrshire Lowlands LCT (7a) as discussed within Chapter 6 of the submitted ER. As detailed within this capacity study, the North Ayrshire Lowlands (7a) has an overall *Medium Sensitivity* to small-medium typology turbines which are categorised as turbines of 30-50m tip height⁵. This contradicts the Case Officers reason for refusal within the Handling Report received and is discussed in more detail in this chapter.

Careful consideration was given to the design of development at Jameston Moss, in line with the guidance for the area as discussed. The capacity study clearly details that there is no scope for wind turbines over 50m in overall tip height within this LCT, however there is increased scope for the small-medium typology with "very limited opportunities"⁶. By ensuring the tip height of the proposed turbine was below the threshold of 50m, the structure at Jameston Moss would more readily be accommodated within the landscape with minimal impact to the character of the region. This was discussed in detail within the assessments undertaken for the proposal and presented within visualisations generated for the application.

Guidance suggests that there is greater opportunity to develop turbines of this scale, *i.e* small-medium, 30-50m, in the "*less densely settled, flatter and more open areas of pasture*" which Jameston Moss is considered to represent. Furthermore, it is advised that turbines of this scale are sited away from small hills and ridges and avoiding areas of complex rolling landforms; this guidance has been followed for

³ Carol Anderson & Alison Grant Landscape Architects (2009) Landscape Capacity Study for Wind Farm Development in North Ayrshire

⁴ Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study, p.47-50

⁵ Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study, p.47

⁶ Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study, p.49

the proposed development, with the turbine being located away from properties and scaling elements within the landscape. As such, VGC suggest that the development does comply with the siting and design guidance for the North Ayrshire Lowlands LCT and adheres to the suggested suitable development locations within documentation where opportunity exists.

6.3. Landscape Sensitivity and Capacity

As noted, the North Ayrshire Supplementary Landscape Wind Capacity Study (2013)⁷ provided guidance on the development proposed at Jameston Moss for VGC and Mr Miller. The Case Officer has refused permission on grounds that the development does not comply with the noted Capacity Study. We wish to draw attention to the Case Officers Handling Report which discusses the reasoning for refusal on these grounds, specifically the perceived contravention of the guidance for suitable scale and sensitivity. Page 5 of the Report of Handling (attached) states that the Countryside within which the site is located has a medium to high sensitivity, leaning towards the high side "*due to its relative proximity (over open farmland) to the Lowland River Valleys*" LCT. Again, on this same page (p.5) the following conclusion is drawn:

"In terms of this criterion, there is a high-medium sensitivity to the small-medium typology (turbines 30-50m) within the Landscape Capacity Study which states that there is no scope for the medium or small-medium typologies (turbines >30m) to be accommodated in this landscape".

VGC disagree strongly with these statements and reasons for refusal and highlight that the sensitivity of the landscape has been misinterpreted and misquoted by the Case Officer within the reports compiled. North Ayrshire guidance clearly states the following for the North Ayrshire Lowlands LCT (7a);

*"Sensitivity to the **small-medium** typology (turbines 30m-50m) would be **Medium**"⁸.*

The Case Officer writes that at 47m tip height, the structure is "*considerably higher than the preferred turbine height of below 30m as recommended in the 2013 capacity study*" (see Report of Handling, p.5). VGC note that although there is increased opportunities to locate turbines sub-30m in this LCT, there still remains capacity to develop turbines of the scale proposed at Jameston Moss as discussed within the guidance.

As noted earlier in this chapter, the applicant and VGC strongly disagree with the conclusions drawn by the Case Officer on the refusal of permission based on the high sensitivity of the landscape for the scale of development proposed. We would ask Members to review the guidance provided within NAC documentation as the refusal of permission based on the grounds of contravention of the Capacity Study and Landscape guidance is incorrect and has been misinterpreted and misquoted by the Case

⁷ Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study

⁸ Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study, p.47

Officer involved. The application at Jameston Moss has followed the siting guidance provided within documentation for the region and does not adversely alter the landscape or rural character of the area.

6.4. Landscape Impact

It is deemed by the Council that the proposed Jameston Moss turbine would impact the rural character of the landscape within which it is located. VGC disagree with this conclusion and would reiterate the findings of the study completed and submitted to NAC for consideration within the ER.

A single wind turbine at the proposed location at Jameston Moss follows the siting guidance provided by SNH and NAC within documentation and does not adversely impact the area. This small-medium scale structure, set back from properties and hill forms, is viewed within the wider context of the area which consists of a rural, changing landscape. As such, the characteristics of the LCT are not altered or adversely impacted by the development as a standalone proposal or when taking into account operational developments within the area. The turbine is a minor addition to the views of the area and does not change the key features of the LCT.

6.5. Visual Impact

The Case Officer moved to refuse the application on grounds of visual and landscape impact, both of which are assessed together throughout the reporting received. VGC wish to address the points raised by the Council to allay concerns and reiterate that the ER submitted demonstrates little impact to the surrounding area.

VGC would like to restate a point made earlier in this statement and within the ER; **the fact that a turbine is visible does not mean that it is a negative addition to the landscape or that the development is in itself unacceptable.** A turbine is designed to generate electricity from wind, a clean resource that increases with height where fewer features cause turbulence affecting the efficiency of the installation. As such, a turbine is a visible feature and its siting is important when locating within the landscape. This is a factor that VGC understand and believe is an important consideration when developing a wind energy project.

The landscape within which the development is located is characterised by its relatively flat agricultural fields, afforded a degree of screening from hedgerows, woodlands and roadside trees⁹. Aware of the openness of the countryside at Jameston Moss, the wind turbine was chosen to ensure compliance with the landscape capacity guidance for the North Ayrshire Lowlands LCT, below the 50m threshold tip height. Furthermore, located away from properties and scaling features, the turbine meets the siting guidance for turbines of this scale. VGC do not understand the Case Officers reason for refusal which states that the development is located on a “*visually prominent, flat, open field*” (Decision Notice). This statement does not reflect the site as the fields are not ‘visually prominent’; instead the rolling lowlands

⁹ Carol Anderson Landscape Associates (2013) North Ayrshire Supplementary Landscape Wind Capacity Study, p.49

of the area draw the eye across the vast landscape. A single small-medium turbine at Jameston Moss would not deter from these views.

The Case Officer notes:

“The proposal would break the skyline when viewed from many locations north and south of the site...This lack of mitigation...is considered to be a key issue in the consideration of the proposal, adding greatly to the significant adverse landscape and visual impacts” (Report of Handling, p.5).

Due to their very nature, turbines are viewed on the skyline from certain vantage points, however we would strongly argue that this does not necessarily make the development unacceptable. A degree of skylining is inevitable and as is apparent from study detailed within the application, this does not result in an unacceptable impact or one that would require mitigation. Turbines have been designed in such a way, with white-light grey structures so as to be less visible on the skyline, knowing that by their design they are seen in such views. We do not believe that because a turbine development is visible in the landscape or above the horizon it creates an unacceptable impact warranting refusal.

As noted within the ER, the development area at Jameston Moss is not a designated landscape and no impact would be posed to sites of importance (no cultural or ecological sites). The Case Officer acknowledges this but suggests a higher value given its proximity to the road network including the B707 and B778, along with the settlements of Dalry and Kilwinning. VGC conclude from analysis of the development site and surrounding area that the proposed wind turbine at Jameston Moss would not adversely impact features including roadway corridors, settlements, important viewpoints, attractions or properties neighbouring the site. This is detailed within the ER and clear within the visualisations produced of the development (see Appendices 6.4-6.11).

The ZTV (Appendix 6.1) indicates potential visibility over the surrounding landscape with minimal screening afforded to the turbine in terms of topography. As explained within the ER, this ZTV does not account for features within the area such as roadside vegetation, established woodlands or shelterbelts, properties or agricultural/industrial sheds which screen and/or filter views. The working agricultural landscape encompassing the development site at Jameston Moss includes large clusters of agricultural units, farm complexes, established blocks of trees and hedgerows which will limit clear views of the proposed turbine from viewpoints throughout the surrounding area. As is illustrated within the photomontages submitted, although the turbine may theoretically be visible (wireframes), man-made and natural features filter views of the turbine or screen them completely. Upon visiting Dalry and completing the landscape photography it was apparent no views of the turbine were possible given screening from properties and vegetation, hence its omission from study. Appendix 6.11 shows that although visible, the turbine does not present an unacceptable addition to the views from Kilwinning with the lower portion of the tower screened by the treeline. This is the case when assessing the other images produced; the small-medium scale turbine proposed at Jameston Moss is accommodated into the surrounding landscape and does not present an obtrusive or unacceptable addition to views.

6.6. Conclusion

The installation of a single wind turbine at Jameston Moss would not adversely impact the character of the landscape in which it is located, or alter the way in which it is read or experienced. We would argue that the proposed development does not adversely affect the landscape character of the area, nor does it impact on views to a degree warranting refusal of planning permission. Following siting and landscape guidance, it is felt that the impacts of the turbine have been minimised to the greatest extent possible and that it does not present an unacceptable addition to views that would require mitigation. The development benefits from a degree of screening and filtering of views from intervening natural and man-made elements within the landscape, reducing the visual envelop in which the turbine is evident from various vantage points throughout the area. At 47m to blade tip, the proposed Jameston Moss development would not adversely affect the landscape or views experienced, as demonstrated within the Environmental Report and visualisations submitted. In conclusion, VGC would argue that the proposal does comply with PI9 (a), (b), (c), (i) and General Policy.

7. CUMULATIVE IMPACT

7.1. NAC Reason for Refusal

The proposed Jameston Moss development is viewed as increasing the presence of wind energy development within the region and as such has been refused planning permission on the grounds of cumulative impact.

The Handling Report details the Case Officers stance in relation to the impacts that the Jameston Moss development would cause:

"It is considered the proposed would result in an unacceptable cumulative visual impact due to the close proximity of existing turbines at North Lissens, Dove Hill, Benthead and existing operational windfarms as discussed...the erection of an additional turbine would create a cluster of turbines and would have a significant cumulative impact on the rural landscape" (Report of Handling, p.6).

VGC do not agree with this assessment and disagree with the conclusion that this single small-medium typology turbine proposed at Jameston Moss will increase the presence of wind energy developments in this region to an unacceptable degree warranting refusal of planning permission.

7.2. Assessment Undertaken

Following agreement with NAC through the Screening process for this proposal, a cumulative study area of 5km was set and analysis undertaken for all developments within this catchment. As detailed within Chapter 6 of the ER and Appendix 6.12, there are few other wind energy developments within this study area; only four sites, all of which are consented/installed. The scale of the four developments cross NAC categories with a *small* turbine operational at Lissens Moss, a *small-medium* at Auchenskeith and West Muirhouse and a *medium* turbine at Benthead. These turbines were taken into account during all assessments undertaken for this proposal.

As can be drawn from the photomontages submitted, views from the surrounding landscape include the operational turbines and proposed turbine; however views are not clear or unobstructed. Analysis of the images generated for the application (ER, p.40-42) discuss the impact posed by the installation of the small-medium scale Jameston Moss development, concluding that although visible, either wholly or partially from viewpoints within the surrounding area, the turbine does not generate unacceptable impacts as a standalone turbine or when taking into account others within the area. Furthermore, the perceived cumulative effect of the Jameston Moss turbine and the windfarms noted within the representations is unfounded (i.e. Dalry/Baidland, Kelburn). It is clear from analysis and visits to the site that the proposed turbine is wholly separate from the larger, distant wind farm developments.

7.3. Cumulative Conclusion

We would note that the cumulative impact of the development at Jameston Moss has been fully assessed within the application to the agreed methodology and study area. Cumulative impact is an important factor to consider during the design development stage, and as such VGC assess the potential cumulative impact thoroughly throughout the process. Siting and design ensures that the proposed turbine does not generate unacceptable levels of impact as a standalone development, or along with other turbines in the surrounding landscape.

Although other wind energy projects are visible in the same view as the Jameston Moss turbine, it is evident that the developments are different projects. There is a clear separation between all developments within the landscape. Separation distances between the turbines allows each to be read as a single development, minimising the overall visual and landscape impact. Additionally, the variation in scale of development is a clear indicator that the Jameston Moss turbine is a standalone proposal, unconnected from the windfarms within the wider landscape; a concern raised within the decision received. The erection of this single small-medium turbine at Jameston Moss will not result in unacceptable cumulative impacts and therefore complies with the relevant policies, in particular those of PI9 (h), (i) and General Policy.

8. RESIDENTIAL AMENITY

8.1. NAC Reason for Refusal

North Ayrshire Council suggest that the proposal contravenes General Policy in respect of (b); adverse impact on residential amenity. VGC strongly disagree with this conclusion and draw attention to the assessment undertaken within the ER submitted as part of the application. Residential amenity is measured in a number of ways and takes into account views, noise and shadow flicker. An unsatisfactory degree of impact to such amenity is unacceptable and is an important consideration for VGC when designing developments such as that proposed at Jameston Moss. Although the Case Officer notes that there is sufficient evidence to confirm that the distance achieved between the development and properties allay concerns over noise and shadow flicker, unacceptable impact is perceived on the grounds of views.

VG Consulting provided detailed analysis of the potential impact to residential amenity within the local area within the ER submitted, ensuring no properties were subject to an unpleasant, overwhelming or oppressive outlook of the development which would make the homes unattractive places to live¹⁰.

8.2. Assessment Undertaken

Within Chapter 6: Landscape and Visual Impact Assessment (LVIA), subsection 6.4.1 assessed the potential impact to homes within 2km of the development site (see pages 30-38). These properties are also illustrated in Appendix 6.13 of the ER.

The property deemed to be at highest significance of effect from the proposed development is that of Jameston Moss, the applicant's home. This is due to the orientation of the property, with direct views overlooking the development site itself at a distance of approximately 521m south southwest. Given the relationship between the proprietor and the development, the impact on this home is deemed to be acceptable, with the energy generated supporting the farm and onsite operations.

All properties within this 2km radius were assessed to determine the degree of impact posed by the potential development, ensuring the sensitive siting of the structure did not adversely alter the amenity of residents within the local area.

Taking account of the higher significance of effect at Lissens Moss; North and South, we would reiterate that the operational turbine at the front of these properties presents a significant impact, greater than that exhibited by the proposed Jameston Moss development. Whilst the proposed turbine is visible, the operational Lissens Moss turbine is much closer to the houses, exerting a stronger influence upon views and the amenity. Though smaller in scale to that proposed, the operational turbine is a clear and

¹⁰ Inspector's Decision in respect of the Burnthouse Farm Development, Appeal Reference APP/D0515/A/10/2123739 and APP/D0515/A/10/2131194

recognised feature. It is suggested that views of the proposed turbine would be subordinate to the existing operational structure and would constitute neither an unpleasantly overwhelming feature nor an unavoidable presence within the landscape. By siting the Jameston Moss turbine at its proposed location, views of the structure would be at a distance of 640m at the closest point and will not adversely alter the views which include the operational Proven P35.

Neighbouring properties were deemed to have an acceptable degree of impact from the development given distance, intervening vegetation and land use, as well as screening afforded in the way of natural and man-made features (i.e. hedgerows, buildings). Though views of the proposed turbine are theoretically likely from certain properties, views may be at an oblique angle to the homes or outwith their primary view corridors. Furthermore the development does not dominate or negatively impact the amenity of the area, with shadow flicker and noise clearly shown to be within acceptable limits.

8.3. Residential Impact Conclusion

Unacceptable impact to residential amenity is an important consideration when developing a wind energy project given the subjectivity of the topic. The fact that a turbine is visible does not suggest that it is unacceptable. VGC understand the importance of maintaining residential amenity and ensure through sensitive design of a development, no neighbouring properties to a development site are impacted unacceptably by the installation.

Analysis set out within Chapter 6 of the ER demonstrated that no properties within the local landscape surrounding Jameston Moss will be impacted to a degree that would warrant refusal of planning permission at the site. Views of the proposed structure will be afforded a degree of absorption within the wider landscape, filtering of views will occur from intervening land use and vegetation, and views from properties will be at a distance and outwith direct primary views. As such, VGC and the applicant disagree with the Case Officers conclusion that the proposal contravenes the policies noted and we request that this is reviewed by Members in light of the information provided.

9. CONCLUDING REMARKS

9.1. Consultee Representations

We feel it is important to note that no objection was raised by any Statutory Consultee in response to the development at Jameston Moss. VGC work to address any concerns or issues raised by Consultees as early on in the process as possible, opening discussions with relevant parties and amending the proposal as required. No objections have been lodged, with only recommendations for conditions that should be attached to any consent granted; to which both VGC and our Client are happy to adhere.

9.2. Socio-Economic Argument

As discussed within the ER, this proposal presents a unique opportunity for Mr Miller of Jameston Moss to generate renewable green energy at the farm. A family business which has expanded in recent years to include transporting, repairing and hiring plant for tractors and machinery for a variety of industries including construction, agriculture, landscaping and house building, this project will increase the green credentials of the business. With this expansion of services, the number of employees has also increased from one to eighteen, all from the local area.

The income generated from the turbine will be used mainly to offset the significant electricity bill produced from the business and the turbine's maintenance will also be covered. Additionally, the money generated will be used to invest in the employees of the business and the upkeep of the farm itself, which in turn will benefit the local community through monetary spend in the local area.

Although the Case Officer notes this, no consideration has been given to the developments importance to the continued operation and future success of the business as a local company and employer. This turbine will ensure the continued running of the business within the local area, continued employment of local people and economical support spread locally. This turbine is a positive addition to this important local business with all measures taken to minimise the impact of the structure to the area to the greatest extent possible.

9.3. Request for Review

The Environmental Report submitted shows thorough in-depth assessment of planning procedures, proving the development at Jameston Moss is of a suitable size and scale for the surrounding landscape. Careful siting of the structure ensures that it does not negatively impact on views within the area, neither does it affect the amenity of neighbouring dwellings. It is felt that wind energy is an excellent opportunity for diversification within the agricultural sector, particularly to those whom other forms of diversification are impractical or unbecoming of their particular area.

It is hoped that this appeal statement and the information presented through the original documents meets your requirements, and you are able to see the positive merits presented by this development not only to the applicant but also the local economy. VGC and the applicant strongly believe that this

proposal complies with the guidance and policy for the area set at Local and Regional level, and it is hoped that this has been demonstrated through the assessments undertaken.

VGC respectfully request that Members overturn the decision issued by North Ayrshire Council and grant planning permission for this proposal.

JAMESTON MOSS

ENVIRONMENTAL REPORT FOR PROPOSED WIND DEVELOPMENT AT JAMESTON MOSS

Applicant: Mr Miller

Version 0.4

Document Version Control

Revision Control Table

Issue	Author	Date	Change
0.1	CE	26/10/16	Consultation draft
0.2	SW	03/11/16	Review of consultation draft
0.3	CB	07/11/16	Second review of consultation draft
0.4	SW	16/11/16	Review of second consultation draft

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Table 1.1: Document Attachments

2. Introduction

2.1. Planning Application

This Environmental Report is being submitted as part of a Planning Application to North Ayrshire Council for the installation of a single Norvento 100kW wind turbine, with a tip height of 47m at Jameston Moss, Dalry, KA24 4HB. The application for planning consent is made under the Town and Country Planning (Scotland) Act (as amended) 2006.

A Screening Opinion Request was submitted to North Ayrshire Council in February 2016 regarding the potential for a wind turbine development of 47m to blade tip at Jameston Moss (screening response 16/00140/EIA). The response was received in March 2016 and the council advised that an Environmental Impact Assessment (EIA) was not required, but did offer concerns about the potential adverse impacts on visual amenity, built environment and landscape pattern.

As per the guidelines issued through the Screening Opinion, this report will thoroughly examine the potential impacts of the proposal on various aspects of the environment including: landscape, ecology, hydrology, cultural heritage, shadow flicker and noise. VG Consulting Ltd has prepared this Environmental Report on behalf of Mr R Miller, who owns Jameston Moss.

2.2. Applicant Information

Jameston Moss is a family run business which covers 295 acres of land to farm. The farm stems from the rearing and finishing of cattle, with 200 calves and 250 cattle currently being finished. The business has now expanded to a transporting, repairing and hiring plant for tractors and machinery for a variety of industries including construction, agriculture, landscaping and house building. The business has grown, going from employing 1 person to now having a team of 18 people who are all from the local surrounding area.

The income generated from the turbine will be used mainly to offset the significant electricity bill produced from the business and the turbine's maintenance will also be covered by its income. Additionally, the money generated will be used to invest in the employees of the business and the upkeep of the farm itself, which in turn will benefit the local community through additional income circulating the local area.

3. Project Description

3.1. Site Description

Jameston Moss is located 4km north northeast of Kilwinning, 3.4km southeast of Dalry and 8.6km northeast of Ardrossan and Saltcoats in the central region of North Ayrshire. The farm, as previously mentioned, covers 295 acres and within the land ownership boundary the applicant's house is located 521m south southwest of the proposed development.

Jameston Moss is located on an unnamed road which connects to the B707, 1.6km north, and the B778, 1.4km southeast. The closest 'A' class roads are the A736, which is located 3.2km to the east, and the A737 located 3.8km west of the site; both of these roads connect to the M8 and M77 to the northeast.

The land ownership boundary is split into two sections; south of the unnamed road features the applicants home and numerous sheds which are used within the business, north of the road is mostly arable and grazing land and is where the proposed wind turbine will be located. There is a section of woodland located 95m north of the proposed turbine site which is approximately 33m in width and 260m in length, starting at the periphery of the site and located in a west northwest to east southeast line. There are two drains located within the land ownership boundary located 420m east northeast and 490m south of the proposed development site. Additionally, there is a small pond located 577m north northeast of the turbine site which is deemed by SEPA¹ not to be prone to flooding.

Surrounding the land boundary of Jameston Moss are several residences. Located 488m directly south of the proposed site are three adjoining properties, which are the closest residences. Lissens Moss is located 650m southeast of the development site which features its own turbine located in front of the property.

3.2. Site Selection

The site selected for the proposed turbine consists of land located at an elevation of approximately 98m Above Ordnance Datum (AOD), and is likely to have a good wind resource. Illustrations of the site layout and detailed site drawings have been attached to the Appendices 3.1 through to 3.5.

Due to the many on site constraints, the field in which the turbine has been situated has been identified as the most suitable for this type of development. Table 3.1 highlights the features which have been taken into consideration when siting this development.

Other options for the site designs were explored early in the development process. In the Screening Opinion Request, the turbine was proposed to be located at E233197 N647226, however due to noise constraints, the turbine has been relocated to E233210 N647332. The

¹ SEPA Flood Map: <http://map.sepa.org.uk/floodmap/map.htm>

Case Officer was contacted about this change of position, and it was agreed that the Screening Opinion is still valid due to the change being minor.

Feature	Guidelines	Reasons
Noise	Following guidance set out in ETSU-R-97, noise cannot exceed 35 dB(A) at the nearest sensitive properties.	In order to accommodate nearest residences, the turbine has been located enough distance to be compliant with ETSU guidance.
Landscape & Visual Impact	North Ayrshire Council states within the Wind Energy Capacity Study that the total turbine height cannot exceed 50m in this landscape character type.	Following this guidance, the turbine selected has a tip height of 47m. This is under the total height stated in the capacity study. Due to the lower tip height, the turbine's visual envelope will be reduced.
Historic Environment	No guidance documents on buffer zones relating to wind turbine development.	The closest site of historic importance is located 1.9km away which is sufficient enough distance not to have an impact on the site.
Ecology	TIN 051 guidance states turbines should be located 50m plus blade length from any linear feature such as hedgerows, woodlands and water bodies.	The turbine is situated 95m from any linear feature to avoid any potential damage to ecological features.
Power Lines	Wind turbines need to be located turbine height plus 10% from overhead power lines.	The proposed turbine is located 124m from any power lines. This distance will ensure safety in the unlikely event the turbine collapses.
Roads	Wind turbines need to be located 1.5 times the height of the turbine from roads ² .	The proposed turbine is located 490m from the nearest road. This distance will ensure the safety of road users in the unlikely event the turbine collapses.
Gas Mains	Wind turbines need to be located 1.5 times the height of the turbine from gas mains.	A site map was submitted to Scotia Gas (SGN) with an approximate buffer zone of 650m around the turbine. SGN responded to say there are no gas mains within this area.

² Transport Scotland guidance on wind turbine development;
https://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CCoQFjAA&url=https%3A%2F%2Feastlothianconsultations.co.uk%2Fhousing-environment%2F12mw_wind_spg%2Fresults%2Fresponse-transport-scotland_redacted.pdf&ei=jzDqUrqSCcmg0QWog4HoBQ&usg=AFQjCNHCBFropr-XYaCVUTVNY07gZtY0g&bvm=bv.60444564,d.d2k

Radar	Turbines cannot interfere with radar systems.	The turbine location does not lie under a radar ceiling.
Tele-communications links	No guidance documents on telecommunication links. The JRC has been contacted.	JRC have confirmed there will be no interference with telecommunication links.

Table 3.1: Table of Constraints

3.3. Development Specifications

The proposed project has been designed with the intention of generating zero-carbon electricity through the utilisation of wind as a renewable energy source. The development will require the infrastructure associated with the wind turbine itself, an on-site control unit system and a meter house. The project will also require new access tracks and a crane pad, which will be located at the foundation of the turbine for component lifting.

3.4. Associated Infrastructure

The turbine will be delivered via the A737, where the B707 will be accessed at Highfield, heading in an easterly direction. Further along the B707, an unnamed road heading south at North Auchenmade will be taken where the first right, heading west, will lead to the access track at Jameston Moss. The new track required will run from the existing track and will be approximately 166m in length and made from Type 1 aggregate.

Table 3.2 to Table 3.5 detail the specifications of the turbine and associated infrastructure, including the new access track. Appendices 3.2 to 3.5 provide illustrations of these features.

Specification	Detail
Turbine model	1 x nED100
Hub height	36m
Rotor diameter	22m
Height to blade tip	47m
Colour	Light Grey, Matte Finish

Table 3.2: Proposed Turbine Specifications

Dimension	Size
Height	2.5m
Width	2.5m
Length	5.0m

Table 3.3: Meter House Dimensions

Specification	Detail
Length	166m
Width	3.5m
Depth	0.3m
Construction Material	Type 1 aggregate

Table 3.4: New Access Track Specifications

Specification	Detail
Length	12m
Width	12m
Depth	0.3m
Construction Material	Type 1 aggregate

Table 3.5: Crane Pad Specifications

3.5. Micro-siting

It is normal practice to allow a small margin for adjustment of the wind turbine and equipment positions to accommodate any unusual ground conditions encountered during excavations. A 5m micro-siting allowance has therefore been added to the application site.

3.6. Grid Connection

The turbine will be connected to a single storey substation via underground cabling. The underground cabling will be laid adjacent to the access track and the meter house located next to the turbine foundations.

Connection to the National Grid will not be considered as part of this Environmental Report as consent falls under another process and the environmental legislation surrounding it is separate from that which is covered in this assessment. The application for connection to the National Grid will also be carried out independently.

3.7. Decommissioning

The operational period of the turbine will be 25 years and provision for it to be decommissioned will take place on the expiration of the planning permission. The site will be restored within 6 months of this time unless planning permission is sought for the extension of the operational period. Any application for extension must be done in accordance with the legislation and regulations at the time of applying. If an extension for operation is not sought, then it is common practice for all equipment which is above ground to be removed from the site completely after having been dismantled.

The disassembled turbine parts can mostly be recycled and taken to a suitable recycling plant. Another option is for the decommissioned turbine to be refurbished and sold on the second hand market. At this time the foundations of the turbine will be removed and the area will be

reinstated. The cables, which will be laid inside ducting, can be easily removed leaving only the ducting in-situ. Once again, the cabling can be recycled at a suitable recycling plant. Access tracks may be covered by topsoil or left as they are if they are beneficial to the landowner.

4. Relevant Planning Policy

4.1. Environmental Impact Assessment

Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 ('the EIA Regulations') implement Council Directive 85/337/EEC as amended by Council Directive 97/11/EC on the assessment of certain public and private projects impact upon the environment.

Under the EIA regulations, developments which will have a significant effect upon the surrounding environment will require an Environmental Impact Assessment (EIA). Schedule 1 of this regulation lists those developments where an EIA is compulsory, whilst Schedule 2 describes projects for which the need for an EIA is judged by the determining authority on a case-by-case basis.

The proposed development at Jameston Moss is considered to be a Schedule 2 development:

"Installations for the harnessing of wind power for energy production (wind farms).

- i. *The development involves the installation of two or more turbines;*
- ii. *The hub height of any turbine or height of any structure exceeds 15 metres³."*

This development is considered to be a Schedule 2 development as the hub height is 36m and tip height is 47m; a Screening Opinion was therefore been submitted to North Ayrshire. It is noted that not all Schedule 2 developments require an EIA. Only developments which are likely to have significant environmental impacts due to its size or location will require an EIA.

In response to the Screening Opinion, the Council confirmed an EIA would not be required. Within the Screening Response, the following aspects were highlighted as potential issues and are therefore covered in this report:

- ◆ *'It would appear that there could be adverse impacts on visual amenity, built environment and landscape pattern'*

The project's development has been refined in order to avoid or reduce any foreseeable potential environmental conflicts. Potential impacts associated with all stages of the development, from construction through to decommissioning, have been thoroughly analysed. Where necessary, mitigation measures have been designed to alleviate any impacts as much as is feasibly possible.

4.2. Policy and Guidance

A number of planning policies have been consulted during the initial siting and design stages of this project. On a national level, the main policy documents are the National Planning

³ Schedule 2 development; <http://www.legislation.gov.uk/ssi/2011/139/schedule/2/made>

Framework for Scotland 3 (2014) and Scottish Planning Policy (2014). The latter introduces “a presumption in favour of development that contributes to sustainable development.”⁴

On a regional level, Table 4.1 shows the relevant guidance documents which have been consulted through the siting and design stages of this project. These are referenced where applicable throughout this Environmental Report.

Policy Document	Relevant Policies
North Ayrshire Council Local Development Plan	STRAT5: Environment; HE1: Conservation Areas; HE2: Listed Buildings; HE4: Schedules Ancient Monuments and Archaeological Sites; HE5: Historic Landscapes; ENV1: New Development in the Countryside; ENV5: Farm Diversification; ENV6: Economic Development or Diversification in Rural Areas; PI4: Core Path Network; and PI9: Renewable Energy.
Ayrshire Joint Structure Plan: Growing a Sustainable Ayrshire 2007	STRAT1 – Sustainable Development, ECON 6 – Renewable Energy, ECON 7 – Wind Farms, ECON 13(C) – Tourism Opportunities, ECON 14 – Rural Diversification etc. etc.
Regional	Ayrshire Supplementary Planning Guidance (SPG) on Wind Farm Development ⁵ North Ayrshire Supplementary Landscape Wind Capacity Study (2013) ⁶

Table 4.1: Details of Local Policies Pertaining to the Proposed Development

4.3. Policy Analysis

As will be shown throughout the remainder of this report, this development complies with all relevant policies and conforms to guidance. Each remaining chapter addresses the key policy areas shown within Table 4.1 and details the predicted impact of the proposed turbine and any mitigation measures that will be taken if considered necessary.

⁴ The Scottish Government, Planning Policies: <http://www.gov.scot/Publications/2014/06/5823/4>

⁵ Ayrshire Supplementary Planning (SPG) on Wind Farm Development: <http://www.north-ayrshire.gov.uk/Documents/CorporateServices/LegalProtective/LocalDevelopmentPlan/AyrshireSGonWindFarmDev.pdf>

⁶ North Ayrshire Supplementary Landscape Wind Capacity Study (2013): <http://www.north-ayrshire.gov.uk/Documents/CorporateServices/LegalProtective/Planning/supplementary-landscape-wind-capacity-study-main-report.pdf>

5. Tourism, Recreation and Socio-economic Assessment

5.1. Tourism

To date there is no evidence to suggest that wind turbines have an adverse effect on tourism. Wind farms have become increasingly popular, with tourists and locals alike visiting a number of wind farms across the UK.

In April 2012 VisitScotland published research on consumer attitudes to wind farms and their effect on tourism.⁷ The report found that 27.5% of respondents strongly disagreed with the notion that wind farms spoil the Scottish countryside, with only 9% strongly agreeing that wind developments ruined it. 83% of respondents said their decision to visit an area would not be affected by the presence of wind farms.

Nevertheless, although there is evidence to suggest the majority of tourists will not be deterred from visiting a site due to nearby wind energy developments, it is important that sensitive destinations are not adversely impacted by a development so as to spoil their amenity. Tourism near the proposal at Jameston Moss will therefore be explored below.

5.1.1. Tourism in Ayrshire

Ayrshire features three local authorities and is a historic county in the southwest of Scotland located at the River Clyde estuary⁸. Across the district, there are many different attractions which entice people to the area every year such as Culzean Castle, Largs Marina, Goatfell and the Turnberry Resort. Tourism is very valuable to Ayrshire as it generates approximately £348 million per annum from the 3.5 million visitors, which supports roughly 9000 jobs⁹.

The Ayrshire and Arran Tourism Strategy 2012/2017 was developed in 2012 to ensure *'Ayrshire and Arran will be a premier destination of choice, where visitors will receive a fantastic welcome and enjoy outstanding experiences of our coastline, countryside, culture and hospitality'*. The key objectives of the strategy is to increase the number of visitors, increase annual spend of tourists, increase the amount of jobs and conserve and enhance the regions natural, heritage and cultural assets¹⁰.

North Ayrshire itself is home to approximately 136,000 residents covering an area of 340 squares miles¹¹. The region itself offers coastal scenery, rolling hills, various outdoor pursuits and parks and events which bring people to visit the area. In the last year, there has been over

⁷ http://www.visitscotland.org/pdf/Windfarm%20Consumer%20Research%20final_docUpdatedx.pdf.

⁸ Wikipedia, Ayrshire: <https://en.wikipedia.org/wiki/Ayrshire>

⁹ Ayrshire & Arran Tourism Strategy 2012/2017:

http://www.scottishlandandestates.co.uk/index.php?option=com_attachments&task=download&id=513

¹⁰ Ayrshire & Arran Tourism Strategy 2012/2017:

http://www.scottishlandandestates.co.uk/index.php?option=com_attachments&task=download&id=513

¹¹ North Ayrshire Council, Discover North Ayrshire: <http://www.north-ayrshire.gov.uk/visitor/discover-north-ayrshire.aspx>

1.1 million tourists visit North Ayrshire which injected approximately £133 million into the local economy through the range of destinations offered by the region¹².

5.1.2. Tourism in Surrounding Area

A study area of 5km has been implemented as it is believed any business or tourist attraction out with this distance will not be adversely affected by the development. Those within 5km are listed in the table below.

Receptor	Name/ Reference Number	Description / Location	Distance (Km)
Tourist Attraction	Blair Estate	Castle and Garden and Designed Landscape	2.0
	Montgreenan	Mansion House	3.0
	Dalgarven Mill	Mill and Museum of Country Life	3.8
	Eglinton Country Park	Country Park and Castle	4.0
	Kilwinning Abbey	Kilwinning Abbey Tower	4.9
Core Paths	GV1	Waterside – Kerse Nursery	2.1
	IK56	Viaduct Circle to Blair (South Lodge)	2.5
	GV13	Stoopshill - Dalry	2.7
	IK23	Kilwinning – Garnock Viaduct	4.0
	GV16	Dalry	4.1
	GV44	Dalry	4.7
	GV42	Dalry	4.7
	IK24E	Eglinton Gate House – Sourlie Roundabout	4.8

Table 5.1: Tourist Attractions and Core Paths within 5km

5.1.3. Impacts on Tourist Attractions

Blair Castle is a 250 acre estate and castle located 2km west of the proposed development at Jameston Moss. The estate offers tourists attractive gardens to walk in with numerous other activities available on site including luxury accommodation¹³. As demonstrated in Appendix 5.1 the castle itself is located in the middle of the estate and is not located within the Zone of Theoretical Visibility (ZTV) and therefore will not experience any views of the proposed turbine. Large sections of the estate to the southeast are shown to be within an area deemed to experience views of the proposed turbine. However, the grounds of the estate are screened by dense vegetation around the periphery of the garden and designed landscape. Appendices 6.6 and 6.7 demonstrate views from southern outer road of the estate and illustrate that only a

¹² North Ayrshire Key Sectors: <http://www.northayrshireforbusiness.com/key-sectors/tourism-leisure-hospitality.aspx>

¹³ Visit Scotland, Blair Estate: <https://www.visitscotland.com/info/accommodation/blair-estate-p432801>

small section of the turbine's blades can be seen from behind the dense woodland. Therefore, from within the Blair Estate, visitors will not experience views of the proposed development and the turbine will not have a negative impact on the designated area.

Montgreenan Mansion House is an 'A' listed building located 3km to the south southeast of the proposed development. The building is a Georgian mansion which is used as a hotel and is surrounded by landscaped gardens¹⁴. Although in Appendix 5.1 it is illustrated that the hotel is located within the ZTV, it and the surrounding gardens will not experience views of the proposed turbine as the area is surrounded by dense woodland. Therefore, Montgreenan Mansion House will not be negatively impacted by the implementation of the proposed wind turbine.

Dalgarven Mill is a Mill and Museum of Country Life located 3.8km southwest of Jameston Moss. The tourist attraction has been created in a group of historic industrial buildings which features a visitor centre and exhibitions on the rural community as well as riverside walks and an onsite café¹⁵. Visitors to the museum will be focused on the buildings and the information within them and not of the views from the site. Additionally, the site is screened by dense vegetation and visitors to the attraction will not experience views of the proposed turbine. Consequently, Dalgarven Mill will not be negatively impacted by the wind turbine development at Jameston Moss.

Eglinton Country Park is located 4km directly south of Jameston Moss and is a large country park and designated garden and designed landscape area. The park is set over 400 hectares and offers tourists lots of outdoor pursuits such as horse riding, fishing and camping as well as featuring a visitor centre, café and children's play area¹⁶. Half of the designated area is located out with the 5km study area and features dense vegetation and therefore will not experience a negative impact from the proposed development. The ZTV is staggered across the rest of Eglinton Park, however there are large dense areas of vegetation are located throughout the park which will effectively screen a majority of the park from views of the turbine. Consequently the only areas likely to experience views of Jameston Moss are some sections of the park south of Mid Moncur and the open farmland around South Fergushill; located in the eastern section of the garden and designed landscape. Appendices 6.8 and 6.9 demonstrate views from a bridle path located south of Mid Moncur. The photomontage shows that only a small section of the turbine's blade will be visible at any time. The distance to the turbine makes it barely visible, in addition to the screening from vegetation between Eglinton Park and the proposed turbine location. It is apparent that only small sections of the park will receive views of the proposed turbine due to screening from landform, vegetation and distance to the turbine and even where it is visible, it is only small sections of the blade, resulting in the proposed development having a minor impact on Eglinton Country Park.

¹⁴ Montgreenan Mansion House Hotel: <https://en.directrooms.com/hotels/info/2-24-2597-16804/>

¹⁵ Dalgarven Mill: <http://www.dalgarvenmill.org.uk/>

¹⁶ Visit Scotland, Eglinton Country Park: <https://www.visitscotland.com/info/see-do/eglinton-country-park-p254971>

Kilwinning Abbey Tower is a ruined 'A' Listed Building located 4.9km south southwest of the proposed turbine at Jameston Moss. The tower is open to visitors and features information boards on the history of the abbey¹⁷. The abbey is located within the urban area of Kilwinning and will be screened by views from topography and the existing buildings and infrastructure from the town. The top of the tower is accessible by tourists and offers views of Kilwinning and the surrounding landscape. From the tower, there will be views of the proposed turbine, however due to the considerable distance between the sites, the turbine will appear as a minor element in an otherwise expansive landscape. Additionally, views from the tower will be overlooking a built up area that features existing electrical infrastructure and therefore the turbine will not look out of place within the landscape. Therefore, the turbine will not affect the attraction to tourists visiting the tower and will not negatively impact Kilwinning Abbey Tower.

5.1.4. Impacts on Core Paths

Core path GV1 extends approximately 10km from Waterside to Kerse Nursey with the closest point being 2.1km to the proposed development at Jameston Moss. The path will experience intermittent views of the turbine with the ZTV indicating most of the views will be experienced between Waterside and Templandmuir Farm, however there is dense woodland located to the west of the core path at Cleeves Cove which will offer screening of the turbine at many points of the path. A section of the path was visited with the aim of producing a Photomontage, however it was apparent the proposed development will not be visible from the majority of the path due to screening from vegetation.

Core path IK56 extends from Viaduct Circle to Blair (South Lodge) covering approximately 3km in distance. The path is located 2.5km from the development to the southwest and experiences intermittent views as illustrated in Appendix 5.1. The path offers extensive views of the surrounding landscape and consequently, the turbine will appear as a minor feature within the expansive views. Appendix 6.7 demonstrates views from the core path and illustrates that the turbine is barely visible with only the blade tips visible above the tree line. Additionally, there are numerous pylons located within the views resulting in tall electrical infrastructure already being prominent in the landscape. Therefore, the turbine will not have a negative impact on the core path due to the extensive views from the route.

Core Path GV13 runs from Stoopshill to Dalry across 2km and is located approximately 2.7km northwest of the proposed development. Most of the area covered by the ZTV is within Blairland, which due to the buildings in the village, will be screened from views of the turbine. There is an additional area of visibility at Stoopshill, however this section will also be screened from the woodland located beside the path. The core path was visited in order to create visuals from the core path and Dalry, however it was apparent that the turbine will completely screened due to the vegetation surrounding the Blair Estate and Cleeves Cove. Therefore core path GV13 will not be negatively impacted by the proposed turbine at Jameston Moss.

Core path IK23 runs through the town of Kilwinning to the Garnock Viaduct and is located 4km south southwest of the proposed development. The core path will not be impacted by the

¹⁷ Kilwinning Abbey Tower: <http://www.kilwinning.org/abbeytower/>

turbine as it will be completely screened by the buildings and infrastructure of the town in addition to woodland located at Woodgreen.

Core path GV16 runs through the urbanised area of Dalry and is located 4.1km northwest of Jameston Moss. As illustrated in Appendix 5.1, the path is not located within the ZTV and therefore will not be impacted by the proposed development.

Core paths GV44 and GV42 both connect with each other and are located 4.7km west northwest of the proposed development within Dalry. The paths are located within a built up residential area and will not receive views of the turbine. Thus, the proposed development will not negatively impact the core paths.

Core path IK24E extends from Eglinton Gate House to Sourlie Roundabout and at its closest point is 4.8km directly south of the proposed development. It is unlikely the turbine will be visible from this distance and the path is also screened by vegetation which is located to the north of the path. Therefore, the path will not be negatively impacted by the proposed development.

5.1.5. Overall Impact on Tourism

The main sources of tourism in the local area are the core paths, country estates and historic sites. Overall, the proposed turbine at Jameston Moss will not have a negative impact on tourism within a 5km study area. Screening from infrastructure and various areas of vegetation and woodland results in the turbine is not being visible from most of the previously mentioned tourist attractions and therefore, tourism will not be negatively impacted by the development.

5.1.6. Socio-Economic Effects

The direct and indirect impacts of the proposed development on the local area can be separated into the following areas:

- ◆ Economic benefits for the landowner;
- ◆ Economic and social benefits for the community; and
- ◆ Economic benefits from construction and operation.

The potential impact of the development on each of the above areas is discussed below.

5.1.7. Economic Benefits for the Landowner

Changing weather patterns, fluctuating market prices, quality of crops and operational costs of running a rural business mean landowners are forced to explore alternative sources of income. Renewables technologies, including wind turbines which have a life span of 25 years, have become a popular choice with landowners in securing the financial future of their businesses.

5.1.8. Economic and Social Benefits for the Community

The turbine will be owned by a local employer, the income generated will be reinvested into both his business and the local economy, therefore creating more opportunities for workers in the area.

5.1.9. Economic Benefits during Construction and Operation

During the construction and decommissioning phase, contract opportunities for various specialists will occur such as; opportunities for haulage, access track and turbine base construction, supply of building materials, electrical services and fencing contractors. The turbines will require regular maintenance over their lifespan which will be provided by our partner company VG Energy's own installation and maintenance team.

6. Landscape and Visual Impact Assessment (LVIA)

6.1. Introduction

The purpose of this assessment is to ascertain the potential landscape and visual effects of this proposed 47m wind turbine at Jameston Moss.

Landscape and visual impacts are considered separately within this chapter in accordance with published guidance, although the procedures for each are closely related. The distinction between landscape and visual impacts is set out as follows:

- ◆ Landscape impacts relate to the effects of the proposals on the physical and other characteristics of the landscape, and changes to its fabric, character and quality;
- ◆ Visual impacts relate to the effects on the character of views and the effects of those changes to the visual amenity experienced by visual receptors, such as residents, footpath users, tourists and users of recreational facilities.

The proposal to install a single 47m high wind turbine is in line with North Ayrshire Council guidance. It is defined as '*Small/Medium - turbines between 30 metres and less than 50 metres high.*'

The potential impacts of this development will be assessed in relation to the various guidelines which have been published relative to renewable energy, but will refer mostly to the Scottish Natural Heritage (SNH) publication '*Assessing the impact of small-scale wind energy proposals on the natural heritage*' (2014). Other documentation referred to in this report will be:

- ◆ Landscape Institute & Institute of Environmental Management & Assessment (LI-IEMA; 2013) *Guidelines for Landscape and Visual Impact Assessment. 3rd Edition*;
- ◆ Scottish Government (June 2014) *Scottish Planning Policy*;
- ◆ IEMA: *The State of Environmental Impact assessment Practice in the UK* (2011);
- ◆ SNH *Micro Renewables and the Natural Heritage Guidance Note* (2009);
- ◆ SNH: *Guidelines on the Environmental Impacts of Windfarms and Small Scale Hydroelectric Schemes* (2002);
- ◆ University of Newcastle: *Visual Assessment of Windfarms: Best Practice: Scottish Natural Heritage Commissioned Report F01AA303A* (2002);
- ◆ SNH: *Visual Representation of Windfarms Good Practice Guidance* (2014);
- ◆ SNH: *Assessing the Cumulative Impact of Onshore Wind Energy Developments* (2012);
- ◆ Landscape Institute (LI; Advice Note 01/11) *Photography and Photomontage in Landscape and Visual Impact Assessment*;
- ◆ North Ayrshire Supplementary Landscape Wind Capacity Study; *Carol Anderson Landscape Associates June 2013*
- ◆ North Ayrshire Council Local Development Plan 2014

6.2. Methodology

The methodology for this assessment is, as best practice dictates, flexible. In assessing the landscape and visual effects, this assessment has been undertaken in a systematic and comprehensive manner in accordance with SNH (2014) 'Assessing the impact of small-scale wind energy proposals on the natural heritage.' This suggests the following level of assessment should be undertaken for turbines between 15m and 50m in height:

"A basic level of LVIA is likely to be required for the planning authority. The precise detail should be agreed by the planning authority but, as a minimum, we recommend:

- ◆ *A ZTV map covering an area up to 15km (radius) from the turbine/outermost turbines; and*
- ◆ *Wireline drawings and/or photomontages from a **limited** number of key viewpoints."*

These thresholds are indicative only and can vary depending on the sensitivity of the landscape. In addition, for small proposals such as this 47m turbine, SNH state that the planning authority should decide if a cumulative assessment is required.

6.2.1. Study Area

As advised by SNH guidance, a 15km search area and ZTV has been established from the proposed turbine, and is attached as Appendix 6.1. From this ZTV, an appropriate study area of 5km has been identified that is proportional to the size and scale of this application and all potential impacts. This size of study area was also recommended by North Ayrshire Council through a Screening Opinion.

6.2.2. Procedure

In order to assess the likely impacts of this development, a baseline is established. This is the standard against which any change is measured, and allows the Nature of Effect to be determined. In order to do this, the existing location and context has to be reviewed.

After identifying the baseline, the proposal is assessed to determine the significance of landscape and visual effects; simply termed the Significance of Effect. Figure 6.1 is used as an aid in this assessment, in addition to professional judgement. The following terms are used within the assessment:

- ◆ Nature of Receptor: The sensitivity / value / importance of the receptor; and
- ◆ Nature of Effect: The magnitude / probability / reversibility of the effects of a development.

The criteria shown within Figure 6.1 for the terms Nature of Effect and Significance of Effect are defined through **Error! Reference source not found.** Table 6.2As receptors vary depending on whether landscape or visual impact is being considered, the term Nature of Receptor will be investigated in the appropriate following sections.

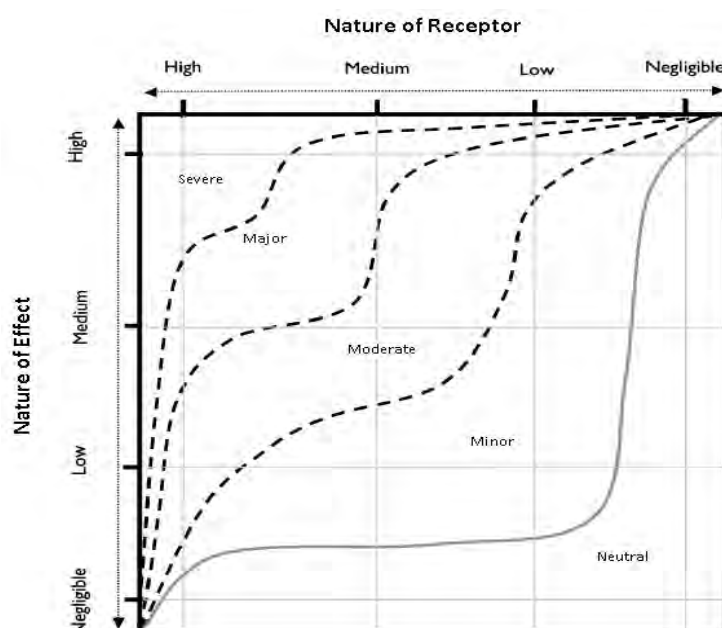


Figure 6.1: Matrix to Determine Significance of Effect¹⁸

Criteria	Definition
Negligible	Where the proposal would cause no discernible deterioration or improvement.
Low	Where the proposal would cause a barely perceptible change.
Medium	Where the proposal would cause a noticeable change.
High	Where the proposal would cause a significant change.

Table 6.1: Definition of Criteria used to Determine Nature of Effect

Criteria	Definition
Neutral	The proposal would complement the scale, landform and pattern of the landscape; maintain existing landscape quality.
Minor	The proposal would not quite fit into the landform and scale of the landscape; affect an area of recognised landscape character.
Moderate	The proposal would be out of scale with the landscape or at odds with the local pattern and landform; would leave an adverse impact on a landscape of recognised quality.
Major	The proposal would result in effects that cannot be fully mitigated and may cumulatively amount to a severe adverse effect; would be at a considerable variance to the landscape degrading the integrity of the landscape; would be substantially damaging to a high quality landscape.
Severe	The proposal would result in effects that are at a complete variance with the landform, scale and pattern of the landscape; would permanently degrade,

¹⁸ Adapted from Figure 6.3 of IEMA (2011) *The State of Environmental Impact assessment Practice in the UK*

	diminish or destroy the integrity of valued characteristic features, elements and/or their setting; would cause a very high quality landscape to be permanently changed and its quality diminished.
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Table 6.2: Definition of Terms used when Defining Significance of Effect

In this LVIA, those effects described as **Severe** or **Major** are described as significant effects as required by the Environmental Impact Assessment (Scotland) Regulations 2011. These are the effects that the assessor considers to be material in the decision making process. It should be noted that significant effects need not necessarily be unacceptable or negative, and in terms of a wind turbine development are reversible.

6.2.3. Zone of Theoretical Visibility (ZTV)

In order to aid assessment, a ZTV has been calculated to define the extent or zone within which the proposed development may be visible. This is included as Appendix 6.1. This provides a means of identifying potential receptors (areas of land used by the public and individual/groups of buildings) so that impact assessments from specific viewpoints can be undertaken. It also assists in the assessment of impact on different landscape character types and designated sites as it indicates whether a view may be obtained in these areas.

For this study, a 'bare earth' or worst case scenario ZTV, based on a digital terrain model (DTM) derived from Ordnance Survey Landform Panorama data (based on 10m height contours at a scale of 1:50,000), was prepared using Resoft™ Windfarm software. The ZTV was generated for receptors of a height of 2m, as recommended by the SNH guidance, '*Visual Representation of Windfarms*.'

As demonstrated in Appendix 6.1, the ZTV is present throughout the range studied, but is fragmented between 5km and 10km and is almost fully covered within a 2km radius. Between 10km and 15km the theoretical visibility decreases due to distance from the turbine; however, the visibility is fragmented from the north, east and south. From the west, outwith the 10km radius, the turbine will not be visible due to screening from topography and distance. Although the ZTV appears to cover a large area, as stated, this is a bare earth scenario and screening from vegetation and infrastructure has not been taken into consideration. It was also apparent from site visits and through photomontage analysis, that the general area has dense vegetation coverage particularly within a 10km radius, and therefore it is unlikely that the turbine will be visible from large sections that the ZTV covers.

6.2.4. Assessment of Landscape Effects

When assessing landscape effects, two factors have been considered when determining the Significance of Effect on the landscape by the proposed development; the Nature of Receptor (Table 6.3) and the Nature of Effect (Table 6.1).

Criteria for Nature of Receptor	
Neutral	The proposal would complement the scale, landform and pattern of the landscape; maintain existing landscape quality.
Minor	The proposal would not quite fit into the landform and scale of the landscape; affect an area of recognised landscape character.
Moderate	The proposal would be out of scale with the landscape or at odds with the local pattern and landform; will leave an adverse impact on a landscape of recognised quality.
Major	The proposal would result in effects that cannot be fully mitigated and may cumulatively amount to a severe adverse effect; are at a considerable variance to the landscape degrading the integrity of the landscape; will be substantially damaging to a high quality landscape.

Table 6.3: Definition of Nature of Receptor for Landscape

There are a number of ways in which the proposed development might impact on the existing landscape:

- ◆ Direct impact on the existing landscape fabric due to the construction of the proposal, for example removal of structures or vegetation, erection of new structures;
- ◆ Impacts on the landscape character of the area or of designated sites during the construction phase of the proposal, for example due to the erection or removal of structures and activity associated with construction;
- ◆ Impacts on the landscape character of the area or of designated sites during the operation of the proposal for example due to the presence of new structures and due to activity associated with the operation of the proposal.

6.2.5. Viewpoint Selection

Four viewpoints showing how the development will appear from key receptors have been selected using the ZTV. The photomontages have been produced in Resoft™ Windfarm and in accordance with SNH and Landscape Institute guidance. Initially, seven viewpoints were chosen and visited, however the turbine was either barely or not visible from these locations and the photomontages were discounted from the visual assessment later in this chapter.

6.2.6. Cumulative Impact Methodology

"Cumulative impacts can be defined as the additional changes caused by a proposed development in conjunction with other similar development."¹⁹

The purpose of the cumulative assessment is therefore to analyse the predicted cumulative effects on visual amenity caused by the proposed development, collectively with all the approved and proposed wind energy developments within the study area.

¹⁹ Guidelines for Landscape and Visual Impact Assessment, 2002 (Landscape Institute and IEMA)

Types of cumulative impact;

There are two types of cumulative visual impact:²⁰

1. Combined: Where the receptor is able to see two or more developments from one viewpoint. This can either be:
 - a. In combination: More than one development is observable from a single static viewpoint in one arc of view (i.e. the receptor does not turn around). This can represent particular directional viewpoints or the view from the principal aspect of a residential property;
 - b. In succession: More than one development is observable from a single static viewpoint, with the receptor turning around to encompass more than one arc view (to 360°). This can represent high and open viewpoints, or views from all aspects of a residential property;
2. Sequential: More than one development is observable by a receptor visiting a series of viewpoints. These effects should be assessed for travel along regularly-used routes such as major roads, railway lines, ferry routes, popular paths, etc. Sequential effects may be:
 - a. Frequently sequential: Where the features appear regularly and with short time lapses in between; to
 - b. Occasionally sequential: Where long time lapses exist between appearances depending on speed of travel and distance between the viewpoints.

The combined visibility of this proposal with others in the study area will be considered throughout this LVIA; Sequential visibility on key routes will be assessed specifically in the Cumulative Impact section of this chapter.

Following a Screening response from North Ayrshire Council²¹, it has been agreed to include all turbines within a 5km radius for cumulative assessment. Therefore the study area can be defined as 5km radius from the proposed development and this is illustrated in Appendix 6.12, which shows the distribution of wind turbines. The cumulative data has been accessed through North Ayrshire Council planning portal.

Table 6.4 lists all the approved and pending turbine developments within a 5km radius of Jameston Moss. They are listed in proximity to the proposed turbine.

²⁰ Landscape Institute and Institute of Environmental Management & Assessment (2013) *GLVIA3*

²¹ Screening response dated 03 March 2016; North Ayrshire Council.

Name of Site	Distance from Turbine	Number of Turbines	Height to Blade Tip (m)	Status in Planning System
Lissens Moss	0.6	1	19.8	Approved
Benthead Farm	1.1	1	61.0	Approved
Auchenskeith	1.4	2	45.0	Approved
West Muirhouse	3.6	1	30.5	Approved

Table 6.4: Wind Energy Developments within 5km of the Proposed Turbine

6.3. Landscape Impact

6.3.1. Baseline Landscape Character and Capacity

The North Ayrshire Supplementary Landscape Capacity Study was produced in 2013 and provides guidance on the sensitivity of the landscape to different types of wind turbine developments. The guidance assesses each individual landscape character type and provides information on the potential for different typologies and developments which could be accommodated within the landscape. The North Ayrshire Landscape Capacity Study has been used in this chapter as guidance and the development's location and height has been chosen in order to be compliant with this.

6.3.2. National Landscape Area

The study area lies within the North Ayrshire Lowlands Landscape Character Area, as defined by the North Ayrshire Supplementary Landscape Capacity Study for the region, and overall covers a considerably large area of North Ayrshire.

6.3.3. Landscape Type

The landscape of the Lowland River Valleys has been subdivided into smaller units of which the site falls into the North Ayrshire Lowlands Landscape Character Type (LCT).

The North Ayrshire Lowlands extends across Ayrshire where it stretches over most of the Ayrshire Basin to the north-east of Kilwinning and Irvine. The LCT has *"a variable landform which although generally undulating, can be more complex and rolling in some areas and also features small areas of flatter remnant moss on the more elevated areas close to the East Ayrshire border"*. The landscape also features small woodlands and small pastures enclosed by intact hedgerows and a pattern of small farms *'enriching the overall composition'*. The landscape surrounding the development is relatively typical of The North Ayrshire Lowlands with its relatively flat, remnant moss land within the region. Appendix 6.2 illustrates the boundaries of the North Ayrshire Lowlands and surrounding LCTs.

6.3.4. Landscape Capacity

Landscape capacity refers to the potential ability of the landscape to absorb new landscape elements without sustaining unacceptable negative effects on its character. An area's landscape capacity is best considered as being a reflection of its landscape sensitivity, visual sensitivity and value, hence capacity is usually related to factors as the scale of the landscape, its degree of enclosure and exposure, and the existing presence of other landscape elements of similar scale and/or visual appearance to the proposed development.

The key characteristics of the North Ayrshire Lowlands are its variable yet generally undulating landform. The pressures identified for the character area include:

- ◆ The predominantly small to medium scale of this landscape where the woodlands and undulating landform provide containment;
- ◆ Occasional more complex areas of rolling landform and more diverse areas of woodlands, trees and hedgerows in addition to heath, raised bog and birch woodland;
- ◆ The Lowland River Valley LCT which cuts into sections of the Ayrshire Lowlands often feature diverse policy woodland and mansion houses/castles which would be sensitive to intrusion by larger turbines seen on the skyline of containing ridges above the valley;
- ◆ Potential of cumulative effect to arise with large wind farm developments sited in the southern hills of the Clyde Muirshiel Regional Park which provide an immediate backdrop to the western part of this character type but also seen from elevated roads and settlement across the Ayrshire Lowlands.

6.3.5. Landscape Character Assessment

. Jameston Moss is located on relatively flat land with areas of moss around the site, which is typical of the North Ayrshire Lowlands LCT near to the East Ayrshire Border. There are small areas of woodlands and field trees within and surrounding the land ownership boundary and there are regular patterns of farms and settlements in the surrounding area. As Appendix 6.1 illustrates, the ZTV covers the majority of the LCT due to the flat nature of the landscape. The proposed development will not negatively impact the LCT as the relatively flat landscape results in wide and expansive views across the area. Therefore the turbine will appear as a minor feature in an area which offers long ranging views and Jameston Moss will consequently not impact or alter the character of this LCT.

6.3.6. Cultural Heritage

As a landscape which has been continuously settled for thousands of years, the study area has cultural heritage features across it which range in age and historical significance.

Garden and Designed Landscapes within 5km

- ◆ Blair Castle Estate
- ◆ Eglinton Castle Estate

Conservation Areas

- ◆ Dalry

6.3.7. Conservation Designation

Within the study area there is one landscape which has been given a conservation status called Dalry. The village of Dalry was designated a Conservation Area in 2006 due to its 18th century buildings.

6.3.8. Special Landscape Area

Within the 5km study area there are no Special Landscape Areas or National Scenic Areas. However, located 7.2km north northwest of Jameston Moss is Clyde Muirshiel Regional Park Area which covers approximately 108 square miles²². The park itself features three installed windfarms; Kelburn Estate, Dalry and Ardrossan, and two in application; Kaim Hill and Blackshaw.

6.4. Visual Impact

Visual receptors are people assumed to be equally affected by change. Visual impacts relate to the change of views and the experienced visual amenity for a number of identified receptors.

The criteria for the Nature of the Visual Receptor is set out in Table 6.5. Visual effects can also be determined by:

- ◆ Distance of viewpoint from the development;
- ◆ Proportion of the field of view occupied by the development;
- ◆ Orientation or angle of view to the centre of development;
- ◆ Background to the development;
- ◆ Extent of other built development, especially vertical elements.

Criteria for Nature of Receptor	
Negligible	-Views from towns, conurbations and heavily industrialised areas.
Low	-Those engaged in outdoor sports or recreation, other than for viewing. -Those using major roads or motorways in the region. -Those engaged in commercial activity and transport or in education, whose attention is focused on their work or activity rather than the wider landscape.
Medium	-Residential properties with less significant views from living rooms/gardens -Walkers using local network of footpaths and tracks.

²² Clyde Muirshiel Regional Park: https://en.wikipedia.org/wiki/Clyde_Muirshiel_Regional_Park

	-Transport users of local roads, train lines, rivers and canals.
High	-Residential properties with principle views from living rooms and gardens. -Important landscape features with physical, cultural or historic attributes. -Beauty spots, public viewing areas and picnic areas. -Users of strategic footpaths, cycle routes or rights of way, where attention is focused on the landscape.

Table 6.5: Definition of Nature of Receptor

6.4.1. Residences and Settlement 0-2km from Development

Small farmsteads or rural properties will be sensitive to changes in their permanent views, although these may often be mitigated by the presence of ancillary agricultural buildings and a general anticipation of industrial or agricultural activity across the landscape. Appendix 6.13 illustrates where the residential properties are located. Tables 6.6 – 6.3 assess the proposed development's potential impact on the surrounding residences.

Receptor:	Jameston Moss (Bungalow) (H1)	Nature of Receptor:	High
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Jameston Moss Bungalow is located 500m south of the turbine location. The house's primary views are south southwest and the back of the house faces north northeast. The turbine will be visible from windows at the back of the property, which also looks onto large industrial sheds. However, the property is surrounded by vegetation which is likely to screen views from certain windows of the house. The main amenity area is located at the front of the house and will not experience views to due to screening from the house and shed. The property will therefore be moderately impacted due to potential views and proximity to the site.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.6: Jameston Moss (Bungalow) Residential Receptor

Receptor:	Lissens Cottage (H2)	Nature of Receptor:	Medium
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Lissens Cottage is located approximately 504m south southwest of the proposed development. The property's primary aspect is south southwest with the rear of the house facing north northeast. A narrow belt of trees is located east northeast of the property which is likely to screen a majority of the turbine. Additionally, as noted, the property's primary views are to the south southwest with the main amenity area located at the front of the house, with views in the opposite direction of the turbine. Therefore the proposed development will have a moderate impact due to proximity which may offer potential views through the treeline.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.7: Lissens Cottage Residential Receptor

Receptor:	Jameston Moss Attached Houses (H3)	Nature of Receptor:	High
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Jameston Moss Bungalows are located 510m south of the turbine location. The houses' primary views are south southwest and the back of the houses face north northeast where the turbine will be visible from windows at the back of the property, which look onto large industrial sheds. The main amenity area is located at the front of the houses, which will not experience views of the turbine. Consequently the proposed development will have a minor impact on the residences.

Nature of Effect:	Medium	Significance of Effect:	Minor
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Table 6.8: Jameston Moss (Attached Houses) Residential Receptor

Receptor:	Jameston Moss (Applicants Residence) (H4)	Nature of Receptor:	High
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Jameston Moss is located 521m south southwest of the proposed developments and is the applicant's residence. The property will have direct views of the turbine from the front of the house. The main amenity area is located on the western side of the property and experiences expansive views from the north to the west and south, where the turbine will not dominate due to only being visible in one direction.

Nature of Effect:	High	Significance of Effect:	Severe
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Table 6.9: Jameston Moss Residential Receptor

Receptor:	Lissens Moss (North) (H5)	Nature of Receptor:	High
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Lissens Moss (North) is located 640m south southeast of the proposed turbine location. The property's main views are facing northwest where a small scale turbine sits directly in the primary view, approximately 70m from the property and dominates views. The main amenity area is located south of the property and will be screened from views of the proposed turbine due to vegetation located between the garden area and parallel road. Although the proposed development will be visible from the residence, the turbine will not dominate views due to the existing turbine which sits directly in front of the property.

Nature of Effect:	High	Significance of Effect:	Major
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Table 6.10: Lissens Moss (north) Residential Receptor

Receptor:	Lissens Moss (South) (H6)	Nature of Receptor:	High
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Lissens Moss bungalow (south) is located approximately 650m southeast of the proposed development. The primary views of the bungalow face northwest and the proposed development is located north northwest of the property. There are large agricultural sheds on site at the rear of the property and it appears that the main amenity area is located at the front of the property, however this is unclear. Lissens Moss bungalow has a small hedge line in front of the house which is likely to screen views of the turbine and the development will have to be

viewed at an oblique angle from the property and surrounding amenity area. Additionally, located approximately 75m in front of the bungalow, is a small scale turbine which dominates the views. Therefore, the property will be impacted by the turbine, however it will not dominate views due to existing turbine.

Nature of Effect:	High	Significance of Effect:	Major
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Table 6.11: Lissens Moss (south) Residential Receptor

Receptor:	North Lissens (H7)	Nature of Receptor:	High
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North Lissens Farm is located 746m north northwest of the proposed turbine site. The property's main views are north northeast and south southwest and therefore will not experience views of the proposed turbine. Additionally, the main amenity area is enclosed within the 'U' shaped building, restricting views to within the grounds.

Nature of Effect:	Medium	Significance of Effect:	Minor
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Table 6.12: North Lissens Residential Receptor

Receptor:	South Lissens (H8)	Nature of Receptor:	High
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South Lissens farm is located 975m west of the proposed development site. The residential property at South Lissens is located within a courtyard, which limits views outwith the enclosed area. Therefore, the property will not experience views of the development due to screening from surrounding outbuildings.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.13: South Lissens Residential Receptor

Receptor:	Darmule (H9)	Nature of Receptor:	High
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Darmule is located 955m south southeast of the proposed development at Jameston Moss. The main views of the property are northeast from the front of the house and southwest at the back. The turbine is located north northwest of Darmule and therefore will not be visible in primary views of the property. There are windows located at the side of the property facing northwest which will experience distant views of the turbine at an oblique angle, however, as noted, this side of the house does not feature the primary views. The main amenity area is located southwest of the property and will not experience views of the turbine as the house will screen views in the development's direction. Therefore Darmule will be moderately impacted by the proposed development.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.14: Darmule Residential Receptor

Receptor:	Blair Mill (H10)	Nature of Receptor:	High
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Blair Mill is located 1145m west northwest of the proposed development at Jameston Moss.

The property is surrounded by dense vegetation and therefore will not experience views of the wind turbine.

Nature of Effect:	Negligible	Significance of Effect:	Neutral
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Table 6.15: Blair Mill Residential Receptor

Receptor:	South Auchenmade (H11)	Nature of Receptor:	High
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South Auchenmade Farm is located 1.2km northeast of the proposed wind turbine development. The main views are to the north northwest, where the front of the house faces. It is unlikely the turbine will be visible from this property due to screening from woodland and the turbine is positioned at an oblique angle to views south southwest from the rear of the property. The main amenity area is located within a courtyard and the only views will be to the north northwest, therefore the turbine will not impact the residential property and amenity area.

Nature of Effect:	Medium	Significance of Effect:	Minor
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Table 6.16: South Auchenmade Residential Receptor

Receptor:	Benthead (H12)	Nature of Receptor:	High
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Benthead is located 1.2km south southeast of the proposed development. The property's primary views are unknown, however it appears the main amenity area is at the rear of the house which is relatively contained by agricultural sheds. There appears to be views in an easterly direction from the amenity area and therefore the turbine is highly unlikely to be visible from Benthead and the property will not be negatively impacted.

Nature of Effect:	Medium	Significance of Effect:	Minor
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Table 6.17: Benthead Residential Receptor

Receptor:	High Gooseloan (H13)	Nature of Receptor:	High
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High Gooseloan is located 1.3km south southwest of the proposed development site. The property's primary views are south southwest with the back of the property facing north northeast. The property will not experience views of the turbine due to screening from dense woodland located behind the property to the north northeast and will therefore not be impacted.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.18: High Gooseloan Residential Receptor

Receptor:	Cleeves Cove (H14)	Nature of Receptor:	High
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Cleeves Cove is located 1.3km west of Jameston Moss. The property is completely screened from the proposed site due to dense vegetation and will not experience views of the turbine.

Nature of Effect:	Negligible	Significance of Effect:	Neutral
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Table 6.19: Cleeves Cove Residential Receptor

Receptor:	Asseyfaulds (H15)	Nature of Receptor:	High
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Asseyfaulds is located 1.3km northwest of the development at Jameston Moss. The property's main views are to the south with the rear of the property facing north. The turbine will be visible from an oblique angle in views from the property but will not appear as a dominating feature in the view due to distance and angle from the development and surrounding amenity area which located around the whole of the property. Therefore the turbine will have a moderate impact on Asseyfaulds.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.20: Asseyfaulds Residential Receptor

Receptor:	Pencot Farm and Cottage (H16)	Nature of Receptor:	High
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Pencot Farm and associated cottage is located 1.5km, with the cottage 1.8km, north of Jameston Moss. The farmhouses property's primary views are to the south southeast and north northwest, however it is likely that only sections of the blades will be visible from Pencot due to screening from the Foxclover Plantation. The cottage and amenity area will not experience views of the turbine due to screening from the plantation and additionally, the primary views are focused towards the west southwest. The proposed development will therefore have a minor impact on the properties.

Nature of Effect:	Medium	Significance of Effect:	Minor
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Table 6.21: Pencot Farm and Cottage Residential Receptor

Receptor:	Leystone and North Auchenmade (H17)	Nature of Receptor:	High
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Leystone and North Auchenmade are located 1.6km and 1.7km northeast of the proposed development at Jameston Moss. Neither of the properties and their surrounding amenity areas will experience views of the development due to screening from vegetation surrounding Leystone.

Nature of Effect:	Negligible	Significance of Effect:	Neutral
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Table 6.22: Laystone and North Auchenmade Residential Receptors

Receptor:	Jameston (H18)	Nature of Receptor:	High
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Jameston is located 1580m southwest of Jameston Moss. The primary views from the property are south southeast and north northwest. There is screening from a large shed located east northeast of the property, therefore it is unlikely to experience views of the turbine and will not

be negatively impacted.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.23: Jameston Residential Receptor

Receptor:	Fairview Farm (H19)	Nature of Receptor:	High
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Fairview Farm is located 1.6km northwest of the proposed development. The property is screened from the southeast by the Foxcover Plantation and the properties primary views are to the southwest and northeast. There are also large agricultural sheds located east southeast of the residential property at the farm. Therefore the property and its amenity area are unlikely to experience views of the turbine due to screening and orientation, and will not be negatively impacted.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.24: Fairview Farm Residential Receptor

Receptor:	Dykeneuk Farm (H20)	Nature of Receptor:	High
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Dykeneuk Farm is located 1.6km southeast of the proposed turbine site. The property's primary views are facing north northwest and south southeast. It is possible that the proposed turbine will be visible in views from the residential property and its surrounding amenity area, however only at an oblique angle, and it will not appear as a main feature within the views.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.25: Dykeneuk Farm Residential Receptor

Receptor:	Laigh Gooseloan Cottage (H21)	Nature of Receptor:	High
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Laigh Gooseloan is located 1.7km south southwest of Jameston Moss. The cottage's main views are to the southeast and northwest and there are no windows on the side of the house which faces the turbine. Therefore the cottage will not experience views of the turbine. Additionally, the amenity area is unlikely to experience views of the turbine due to screening from vegetation located north northeast of the property. Therefore the proposed turbine will not negatively impact Laigh Gooseloan.

Nature of Effect:	Negligible	Significance of Effect:	Neutral
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Table 6.26: Laigh Gooseloan Cottage Residential Receptor

Receptor:	Properties at Lylestone (H22)	Nature of Receptor:	High
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The group of properties located at Lylestone are located approximately 1.7km south of the proposed development at Jameston Moss on the B778. The houses are a significant enough distance from the turbine that it will not intrude on the residential amenity areas and

additionally, the properties are relatively contained by each other. Consequently the proposed development will have a moderate effect on the properties at Lylestone.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.27: Properties at Lylestone Residential Receptors

Receptor:	Cottage southwest of Dykeneuk Farm (H23)	Nature of Receptor:	High
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The cottage southwest of Dykeneuk Farm is located 1.7km south southeast of the proposed development. The cottage's primary views are to the north northeast from the front of the house and south southwest at the rear. It is unlikely the turbine will be visible from within the property due to the oblique angle and the cottages main amenity area is located at the rear of the house with views facing south. Therefore the turbine will have a slight impact on the property's views with potential visibility of the turbine at oblique angles, however there will be no views from the amenity area.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.28: Cottage southwest of Dykeneuk Farm Residential Receptor

Receptor:	Laigh Gooseloan Farm(H24)	Nature of Receptor:	High
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Laigh Gooseloan Farm is located 1.8km south southwest of the proposed development at Jameston Moss. The farmhouse's primary views are to the east southeast and west northwest and the layout of the house results in views to the north being limited. Therefore, potential views from the farmhouse will be at an oblique angle, which is likely to be screened by the High Monredding Plantation. The proposed development will not negatively impact the property at Laigh Gooseloan.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.29: Laigh Gooseloan Farm Residential Receptor

Receptor:	Cottage northeast of Cowlinn Burn (H25)	Nature of Receptor:	High
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The cottage northeast of Cowlinn Burn is located 1.8km south southeast of the proposal. The property's primary views are to the south south east, with the turbine being potentially visible from the rear of the property which faces north northwest. The turbine will be visible from the property and its surrounding amenity area, however it is located a significant enough distance from the development site for the turbine not to dominate views and it will appear as a minor feature in the expansive views the property offers.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.30: Cottage northeast of Cowlinn Burn Residential Receptor

Receptor:	Properties at Clonbeith Castle (H26)	Nature of Receptor:	High
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The residential properties at Clonbeith Castle are located 1.9km south southeast of Jameston Moss. The properties are located within a working farm surrounded by agricultural sheds and will not experience views of the proposed turbine. The two cottages located next to the farm are contained by trees and are screened from any views facing north. The residential properties and surrounding amenity areas will not experience views of the proposal and will not be impacted.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.31: Properties at Clonbeith Castle Residential Receptors

Receptor:	Knollhead (H27)	Nature of Receptor:	High
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Knollhead Farm is located 1.9km north northeast of Jameston Moss. The residential property will not experience views of the proposed turbine as it is contained within the farmstead and is screened by surrounding sheds. The main amenity area appears to be located within the courtyard and north of the property and none of these areas will experience views of the turbine.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.32: Knollhead Residential Receptor

Receptor:	Little Auchenmade (H28)	Nature of Receptor:	High
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Little Auchenmade is located 1.9m northeast of the proposed development site. The property and amenity area is surrounded by vegetation and will likely be screened from views of the turbine and therefore will not be impacted. Additionally, the property's main views are to the north, where the turbine will not be visible from.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.33: Little Auchenmade Residential Receptor

6.4.2. Residences and Settlement 2-5km from Development

Beyond 2km there are many farms and dwellings within the landscape. These small holdings are frequently enclosed by shelterbelt plantings. This means that views of the Jameston Moss development would quickly diminish, and whilst some receptors would have clear views of the proposed turbine the majority would not. The impact of Jameston Moss would be further reduced as the distance between receptor and development increases and views contain a range of diverse elements.

Receptor:	Dalry	Nature of Receptor:	High
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Dalry is a substantial settlement located 3.3km west northwest of the proposed development. The settlement area will be completely screened from views of the turbine due to screening from topography and the woodland surrounding the Blair Estate. The residential area was visited with the aim of producing a photomontage, however it was apparent by the visuals that the turbine will not be seen. Therefore, Dalry will not be impacted by the proposed development.

Nature of Effect:	Negligible	Significance of Effect:	Neutral
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Table 6.34: Residential Receptor

Receptor:	Kilwinning	Nature of Receptor:	High
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Kilwinning is a substantial settlement located 4km southwest of Jameston Moss. As demonstrated in Appendices 6.10 and 6.11, the turbine appears as a minor feature from the town and is not intrusive from views from Kilwinning. Therefore the proposed development will not have a negative impact on Kilwinning.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.35: Residential Receptor

6.4.3. Residential Impact Summary

It is clear from the residential assessment that the turbine may be visible from selected properties and their amenity areas. However, the development will not majorly impact the properties and has been located in such a way as to minimise impact to the surrounding properties.

6.4.4. Transport Routes

Receptors travelling along main transport routes will experience a constantly changing view of the surrounding landscape. Some views will be brief, whilst others may change more gradually over distance; but all will generally be experienced briefly with the degree of impact which will alter quickly as a receptor progresses through a landscape. Tables 6.36 – 6.39 assess the impact the proposed development may have on the surrounding transport routes.

Receptor:	Unnamed Road south of development site	Nature of Receptor:	Low
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West northwest to east southeast: East southeast towards Jameston Moss from Cutteith Knowe, there will likely be no visible views until reaching South Lissens Farm due to screening from Blairmill Wood. From South Lissens to the end of the road past Jameston Moss, there will be views of the turbine at oblique angles.

East southeast to west northwest: The turbine will be clearly visible when entering the road and travelling towards Jameston Moss. However, views of the turbine will only be for a short distance as the turbine will be behind the road user after Jameston Moss and until then, will appear visible between a 45° and 90° angle to road users. The development is therefore

deemed to have a moderate impact on this roadway.

Nature of Effect:	Medium	Significance of Effect:	Moderate
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Table 6.36: Unnamed Road south of development site Roadway Receptor

Receptor:	Unnamed Road from Auchenmade to Lylestone Farm	Nature of Receptor:	Low
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Appendices 6.4 and 6.5 are representative of views from the unnamed road at Auchenmade which shows the turbine's hub and blades to be visible through the tree line. Road users will receive intermittent views of the proposed development at oblique angles, however it is not dominant and will not distract drivers. It is likely that the turbines located beside this road at Lissens Moss and large scale turbine at Benthead are more likely to distract road users and are extremely dominant from the road views due to proximity to the road.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.37: Unnamed Road from Auchenmade to Lylestone Farm Roadway Receptor

Receptor:	B707	Nature of Receptor:	Low
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The B707 runs north of the site and connects Dalry to Auchentiber. It is unlikely road users will experience views of the turbine due to screening from surrounding vegetation and topography. Additionally, the turbine would be viewed at an oblique angle and is a significant enough distance from the development site to not impact the road users.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.38: B707 Roadway Receptor

Receptor:	B778	Nature of Receptor:	Low
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The B778 travels southwest to northeast connecting Kilwinning to the A736. The closest point of the road is 1.5km from the development site and road users will view the turbine at oblique angles along the road. The turbine will appear smaller in scale from this road and road users will have to divert their vision to the side to be able to see the development. Additionally, the larger scaled turbine at Benthead will be visible for most sections of this road and is considerably more dominating in views from this road. Therefore the proposed development will not negatively impact road users of the B778.

Nature of Effect:	Low	Significance of Effect:	Minor
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Table 6.39: B778 Roadway Receptor

6.4.5. Transport Route Impact Summary

The proposed development will have a minor impact on the surrounding roads. The main transport routes within 2km are the B707 and the B778 which will both experience intermittent and distant views of the turbine at oblique angles. The surrounding unnamed roads will also experience intermittent views of the turbine with sections of the roads being screened by vegetation. The proposed development is not in close enough proximity to the roads to impact drivers and therefore has an overall minor effect.

6.4.6. Photomontage Assessment

Photomontages have been produced to illustrate the predicted views of the proposed development from a number of locations within the study area, based upon greatest significance. These viewpoints are representative of the various receptors in the area and have been used to assess the likely impact of this development from a range of distances and elevations as demonstrated in Tables 6.40 – 6.43.

Grid Reference	N:234417 N:648252	Appendices	6.4 / 6.5
Direction of View	Southwest	Distance to Turbine	1.5km
Receptor Type	Road users and some residents	Nature of Receptor	High-Medium

Predicted View: The main receptors will be cars turning out from the B707 road onto the unnamed road which leads to Jameston Moss and the B778 further south. This viewpoint is also representative of residential properties located northeast of the proposed development site such as South Auchenmade and North Auchenmade.

The proposed turbine at Jameston Moss will be visible to road users of the unnamed road, however road users will have to be looking at a 35° angle from the road to have a clear view of the turbine. Road users will be focussed on the road and therefore the turbine will not negatively impact motorists.

From this viewpoint, the turbine scales well with the surrounding landscape. The blade tip is lower in height than the existing trees and woodland which appears to be a larger feature than the turbine. The woodland visible in this viewpoint will also screen the turbine from different sections of the road and both South Auchenmade and North Auchenmade are unlikely to experience views due to the screening from this woodland.

Cumulative Effect: Located within this photomontage, there is evidence of existing and consented wind developments. The turbine located at Benthead is visible from this location and is a single development which appears dominant in an otherwise open section of land. The Benthead turbine is a significant enough distance from Jameson Moss that the landscape does not appear overcrowded. The consented development at Auchenskeith is screened by vegetation from this viewpoint and therefore causes no cumulative impact from this location.

Nature of Effect	Low	Significance of Effect	Minor
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Table 6.40: Viewpoint 1 – Auchenmade

Grid Reference	E: 230661 N:647236	Appendices	6.6/ 6.7
Direction of View	East	Distance to Turbine	2.5km
Receptor Type	Road users/ Recreational	Nature of Receptor	High-Medium

Predicted View: This viewpoint has been used as a representative view from the Blair Estate, however the viewpoint is located out with the estate's walls. As illustrated in the photomontage, only a small section of the blade tips are visible due to the extremely dense vegetation located within the area. Additionally, as stated, this viewpoint is out with the estate's boundaries and views from within the estate will be completely screened. Furthermore, there is already a considerable amount of electrical infrastructure within the vicinity, including the fairly prominent Auchenskeith development.

Cumulative Effect: From this viewpoint, as demonstrated from the wireframe in Appendix 6.6, Jameston Moss, Lissens Moss and Auchenskeith theoretically should be visible. However, as noted, only Auchenskeith is visible from this viewpoint and therefore there is no cumulative impact.

Nature of Effect	Low	Significance of Effects	Minor
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Table 6.41: Viewpoint 2 – Blair Estate

Grid Reference	E:232220 N:642786	Appendices	6.8/ 6.9
Direction of View	North northeast	Distance to Turbine	4.6km
Receptor Type	Recreational	Nature of Receptor	High-Medium

Predicted View: This viewpoint is located within the grounds of Eglinton Country Park and represents the views which will be received by recreational users of the park. Users of this section of Eglinton Park receive an open view of the landscape.

As demonstrated in Appendix 6.8, the proposed turbine at Jameston Moss is not visible due to screening from woodland located at Lylestone and High Gooselawn. Additionally, as illustrated in the wireframe, the turbine is a sufficient enough distance from Eglinton Park to appear as a minor feature within the landscape.

Cumulative Effect: From this viewpoint, the turbine located at Benthead is a dominant feature within the landscape. However, as the proposed development at Jameston Moss is not visible due to screening, there will be no cumulative impact.

Nature of Effect	Negligible	Significance of Effect	Neutral
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Table 6.42: Viewpoint 3 – Eglinton Country Park

Grid Reference	E:230130 N:644303	Appendix	6.10/ 6.11
Direction of	Northeast	Distance to Turbine	4.3km

View			
Receptor Type	Residential/ Recreational	Nature of Receptor	High
<p>Predicted View: This viewpoint is located on core path IK23 and is representative of views from the Kilwinning residential area. From this viewpoint, the proposed turbine appears as a minor feature in a generally open landscape, with the height of the turbine scaling well with the woodland surrounding the site. From this viewpoint, it is apparent that there is a considerable amount of electrical infrastructure, and as such, the proposed turbine would not look out of place from Kilwinning.</p> <p>Cumulative Effect: As illustrated from the photomontage, the two turbines at Auchenskeith and the single development at Benthead are visible. Both of these developments are notable from this viewpoint and are considerably larger in scale than the proposed development. All three developments are located a similar distance apart from each other and would not be associated together. Therefore, due to the small-scale of the proposed turbine, and the distance to Benthead and Auchenskeith developments, there will be no cumulative impact with the consented and installed existing developments.</p>			
Nature of Effect	Low	Significance of Effect	Moderate

Table 6.43: Viewpoint 4 - Kilwinning

6.4.7. Visual Impacts Summary

The proposed development at Jameston Moss will alter the landscape surrounding the development area, however the overall effect from its addition to the landscape will not be significant. The visualisations produced demonstrate that the turbine scales well with the landscape, and does not appear as a dominant feature from any viewpoint. Due to the minor impact of the proposed turbine, the cumulative effects of this when combined with other wind turbines in the area, which have a larger visual impact, are not increased. In total, seven viewpoints were visited, with three of these illustrating that the turbine was not visible from these locations due to screening from the surrounding landscape and dense vegetation. Therefore, it is apparent that the proposed development will not be highly visible from the surrounding area and where it is visible, it scales well with the landscape by not dominating the skyline.

6.4.8. Cumulative Impact Summary

Combined and successive views inclusive of the Jameston Moss turbine have been analysed in Tables 6.40 to 6.43, while sequential impacts have been assessed in Section 6.4.5.

There is some potential for cumulative impact in this landscape with the turbine being viewed along with Lissens Moss and Benthead from certain viewpoints, however these are limited. The turbine has been positioned in such a way to limit the cumulative impact as much as possible whilst protecting residential amenity and views from the surrounding area. The turbine's height has been carefully selected to prevent visual issues and it scales well with the surrounding areas, enabling the proposed development to have an overall minor impact on the landscape.

6.4.9. Residual Impacts

The predicted lifespan of this model of wind turbine is 25 years. As such, the impact of the proposed development is likely to be of medium to long term. Upon completion of the turbine's working life the development will be decommissioned and the site returned to its previous agricultural use.

Consequently this development will be fully reversible, with any predicted impacts being reduced to neutral.

7. Historic Environment

7.1. Introduction

The historic environment is defined as *"All aspects of the environment resulting from the interaction between people and places through time, including all surviving physical remains of past human activity, whether visible, buried or submerged, and landscaped and planted or managed flora"*²³. The importance of protecting this historic environment is widely recognised; however this protection is not about preventing change.

Modern wind energy, which has been developed partly to address climate change issues, can both threaten the historical landscape if sited inappropriately, and work towards protecting it in the long-term. The addition of modern developments, including wind turbines, will always have an effect on sites of archaeological significance, either directly through physical impacts (including shadow flicker and noise) or indirectly, by affecting the setting of the monument. As such, the impacts of renewable energy developments must be assessed thoroughly and, where possible, limited.

As the historic environment is an important part of society and landscape across the UK, guidance and policy have been integrated throughout Britain to allow a comprehensive, thorough and consistent analysis regardless of the location of the project. Threats from rising sea levels; increased severity and frequency of flooding; changing vegetation patterns driven by higher average temperatures; increased rainfall and weather intensity; and changes in cropping regimes from altered hydrology all present threats to archaeological sites. Wind energy therefore has a positive role to play in regards to our cultural heritage and archaeology.

7.2. Historic Setting

The greatest impact from turbines on the historic environment is the visual effect they have on their surroundings. The introduction of a modern, moving vertical element into a landscape will affect the historic setting of any monument. Historic Setting is a complicated issue and there is no singular definition of the term. Historic Environment Scotland's guidance on setting explains;

*"Setting often extends beyond the property boundary, or 'curtilage', of an individual historic asset into a broader landscape context. Less tangible elements can also be important in understanding the setting. These may include function, sensory perceptions or the historical, artistic, literary, and scenic associations of places or landscapes"*²⁴.

Historic Environment Scotland also highlights the importance of viewing monuments as interactive parts of a wider historic landscape. The three key points in the importance of the setting of monuments are:

²³ National Planning Policy Framework 2012, Page 52

²⁴ Historic Scotland, Managing Change in the Historic Environment, Setting, October 2010

- ◆ *Setting should be thought of as the way in which the surroundings of a historic asset or place contribute to how it is experienced, understood and appreciated;*
- ◆ *Monuments, buildings, gardens and settlements were not constructed in isolation. They were often deliberately positioned with reference to the surrounding topography, resources, landscape and other monuments or buildings. These relationships will often have changed through the life of a historic asset or place; and*
- ◆ *Setting often extends beyond the immediate property boundary of a historic structure into the broader landscape²⁵.*

7.3. Methodology

A thorough assessment of the cultural heritage and archaeology local to the development site at Jameston Moss has been conducted to determine the potential impacts of the proposed turbine development. The aim of this investigation is to identify the direct and indirect impacts of the turbine, cable trench, access road and other infrastructural requirements within a targeted study area around the development.

This assessment was conducted via a desk-based assessment of Historic Records using a variety of resources. A map of the local historic environment to the development site is attached to the Appendix 7.1. A ZTV overlay has been included to highlight whether there is the potential for views from the monuments or historic features to include the wind turbine proposed at Jameston Moss.

Where the character of the historic building or place can be maintained, Historic Environment Scotland support the development of renewable energy. The publication '*Managing Change in the Historic Environment: Micro-Renewables*²⁶ sets out principles to be taken into consideration when planning a wind turbine development. Although the proposed development is not a micro-renewables project the principles still apply:

- ◆ Establish significance

Determine what is important about the historic place and its setting. For example, some historical buildings were originally designed to be visible from all directions, whereas others may have parts of lesser interest or less visible elevations.

Analysing the setting of a historic asset takes into account a number of factors; including how important its surroundings are to its character and how modern development is part of the experience of the historic asset today. The number of visitors to a site does not reflect the significance of its setting, although will be taken into consideration by a local planning authority²⁷.

- ◆ Identify potential impacts

²⁵ Historic Scotland, Managing Change in the Historic Environment, Setting, October 2010

²⁶ Historic Scotland, Managing Change in the Historic Environment: Micro-Renewables, 2010

²⁷ Historic Scotland, Managing Change in the Historic Environment: Setting, 2010

These impacts can be physical and/or visual. Physical impacts can refer to deliberate alteration or accidental damage to historic buildings or their settings; or it can relate to physical impacts on the ground which can affect archaeology.

Visual impacts are also a material consideration in the planning process: a turbine may be located in principal views of a historic building, or it may interrupt the spatial relationships with other buildings or natural features. Noise and vibrations are taken into account in the following chapters, yet are important factors in regards to the historical environment.

◆ Siting and design

Sensitive planning so that not only wind turbines, but also the associated equipment and cabling, are sited to avoid principal elevations. Impacts will be minimised through, for example, specifying the maximum necessary diameter and length of cabling.

◆ Cumulative effects

There is the potential that additional wind turbine developments in the area will create a cumulative impact on the historic environment, therefore this must be taken into account.

7.4. Policy and Guidance

National planning policy and guidance aims to protect, conserve and enhance the historic environment. A number of policy and guidance documents, some geared towards proposed renewable energy developments in particular, indicate how the planning system will achieve this. These documents included are listed in Table 7.1 below.

Policy/ Guidance	Relevant Sources of Information
Policy	Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013; Planning (Listed Buildings and Conservation Areas)(Scotland) Act 1997; Historic Environment (Amendment) (Scotland) Act 2011; Town and Country Planning (Scotland) Act 1997; Planning etc. (Scotland) Act 2006; Scottish Planning Policy: Historic Environment, 2010; and Historic Scotland, Scottish Environmental Policy (SHEP) 2011.
Guidance	Historic Scotland, Managing Change in the Historic Environment: Micro-Renewables, 2010; and Historic Scotland, Managing Change in the Historic Environment: Setting, 2010.

Table 7.1: Relevant Guidance Documents

The tables below have been designed to assist in measuring how sensitive a historical asset is and how extensive the magnitude of the impact is from the proposed development. These are

not all-encompassing, as they do not take into account all of the principles identified above, such as cumulative impact, which must still be assessed separately. Neither can they be used to provide an objective result, as professional judgement is still required²⁸; however they remain a useful tool in order to easily take into account a number of important factors.

Sensitivity	Definition
High	Sites of National and International Importance, including: World Heritage Sites; Battlefields; Scheduled Ancient Monuments; Category A Listed Buildings; and Gardens and Designed Landscapes (Inventory Sites).
Medium	Archaeological sites on the Sites and Monuments record (of regional and local importance); and Conservation Areas
Low	Archaeological sites of lesser importance Non-Inventory Gardens and Designed Landscapes Category B & C(S) listed buildings.

Table 7.2: Sensitivity of Built and Cultural Heritage On-Site²⁹

Magnitude of Impact	Definition
High	Any number of wind turbines and/or ancillary development that would result in: <ul style="list-style-type: none"> ◆ The removal or partial removal of key features, areas or evidence important to the historic character and integrity of the site, which could result in the substantial loss of physical integrity; and/or ◆ A substantial obstruction of existing view by the addition of uncharacteristic elements dominating the view, significantly altering the quality of the setting or the visual amenity of the site both to and from. ◆ Where the mechanical or aerodynamic noise from any number of wind turbines (or from other neighbouring wind energy developments) that are likely to detract from site amenity of a popular built or cultural heritage site managed as a visitor attraction adjacent to a wind energy development.

²⁸ Historic Scotland (2007) *Environmental Impact Assessment (Scoping): Scoping of wind farm proposal; assessment of impact on the setting of the historic environment resource; some general considerations.*

²⁹ Use of Wind Energy in Aberdeenshire Guidance for Assessing Wind Energy Developments August 2005

Medium	<p>Any number of wind turbines and/or ancillary development that would result in:</p> <ul style="list-style-type: none"> ◆ The removal of one or more key features, parts of the designated site, or evidence at the secondary or peripheral level, but are not features fundamental to its historic character and integrity; and/or ◆ A partial obstruction of existing view by the addition of uncharacteristic elements which, although not affecting the key visual and physical relationships, could be an important feature in the views, and significantly alter the quality of the setting or visual amenity of the site both to and from. ◆ Where the noise intrusion (mechanical or aerodynamic) from any number of wind turbines (or from other neighbouring wind energy developments) may detract from the amenity of a built or cultural heritage site adjacent to a wind energy development.
Low	<p>Any number of wind turbines or ancillary developments that may result in:</p> <ul style="list-style-type: none"> ◆ A partial removal/minor loss, and/or alteration to one or more peripheral and/or secondary elements/features, but not significantly affecting the historic integrity of the site or affect the key features of the site; and/or ◆ An introduction of elements that could be intrusive in views, and could alter to a small degree the quality of the setting or visual amenity of the site both to and from. ◆ Where the noise intrusion (mechanical or aerodynamic) from any number of wind turbines (or from other neighbouring wind energy developments) is unlikely to detract from the amenity of a built or cultural heritage site adjacent to a wind energy development.
Negligible	<p>Any number of wind turbines or ancillary developments that may result in:</p> <ul style="list-style-type: none"> ◆ A relatively small removal, and/or alteration to small, peripheral and/or unimportant elements/features, but not affect the historic integrity of the site or the quality of the surviving evidence; and/or ◆ An introduction of elements that could be visible but not intrusive in views, and the overall quality of the setting or visual amenity of the site would not be affected both to and from. ◆ Where the noise intrusion (mechanical or aerodynamic) from any number of wind turbines (or from other neighboring wind energy developments) would not have any noticeable effect on the amenity of a built or cultural heritage site adjacent to a wind energy development.

Table 7.3: Magnitude of Built and Cultural Heritage Effects

Taking into account the principles explored above, an assessment of the potential impacts of the proposed development on the area's cultural heritage has been conducted. The impacts

have been analysed through a study of the Historic Records for the area. Historic Environment Scotland Records have been consulted to analyse the following:

Designation	Description
World Heritage Sites (WHS)	The 1972 UNESCO World Heritage Convention was ratified by the UK in 1984. The Convention provides for the identification, protection, conservation and presentation of cultural and natural sites of "outstanding universal value." The UK currently has 28 WHS.
Scheduled Ancient Monuments (SAMs)	Monuments of national importance given protection under the Ancient Monuments and Archaeological Areas Act 1979 by Scottish Ministers.
Listed Buildings	Listed buildings are structures of special architectural or historic interest protected under The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.
National Monuments Record of Scotland (NMRS)	These contain the national collection of material relating to Scottish archaeological and architectural heritage.
Scottish Sites and Monument Records (SSMR)	The SSMR have been compiled by, or produced on behalf of, Scottish Local Authorities.
Other Designated sites	Industrial Heritage Sites, Conservation Areas, Inventory Battlefields and Gardens and Designed Landscapes.
Development Plans	These will be consulted to analyse their policies towards cultural heritage.

Table 7.4: Table of Historical Designation

7.5. Designated Historical and Archaeological Sites within 5km of Jameston Moss

7.5.1. World Heritage Sites

From maps generated, it is possible to conclude that there are no World Heritage Sites within a 5km radius of the development site, with the closest World Heritage Site being Antonine Wall located approximately 28km northeast. As such, the proposed development will not impact negatively on such designations.

7.5.2. Scheduled Ancient Monuments

As illustrated in Appendix 7.1, there are three SAMs within the 5km study area. Only two of these sites are located within the ZTV and assessed further in this chapter.

Index No.	Name	Distance (km)	Monument Type
5675	Clonbeith Castle	1.9	Castle
4883	Kilwinning, waggonway & bridge, SE of Saugh Trees*	4.1	Waggonway & Bridge
44180	Kilwinning Abbey Church	4.9	Church
<i>*These sites do not fall within the ZTV and are therefore will not be visually impacted by the proposed development due to intervening topography. No artificial elevations need to be taken into account for any of these sites. As the proposal will have no visual impact from these locations, they will not be discussed any further within this report.</i>			

Table 7.5: Scheduled Ancient Monuments within 5km of Jameston Moss

Impacts

Clonbeith Castle is located 1.9km south southeast of the proposed development at Jameston Moss. The castle is from the early 16th century and is an oblong mansion which is now the ruins of the building³⁰. The castle is located within the middle of a working farm and therefore the historic setting of the monument has already been altered with large agricultural sheds and machinery being located around it. Additionally, the farm sheds surrounding the site screen views to and from the ruins and therefore the turbine will not be visible from the site. Therefore, the proposed development will have no negative impact on Clonbeith Castle.

Kilwinning Abbey is located 4.9km south southwest of the proposed turbine at Jameston Moss. The abbey has been previously assessed in Chapter 5 of this report as the site is regarded as a tourist attraction in addition to a SAM and an 'A-Listed Building'. It was found that the proposed turbine will not have a negative impact on the designated site as the abbey is located within an urban area and would be screened by buildings from views of the turbine. There may be possible views from the Abbey tower, however, as previously stated, the turbine will appear as a minor feature in an expansive landscape. Consequently, the proposed wind turbine development will have a negligible impact on Kilwinning Abbey.

7.5.3. Listed Buildings

Table 7.6 lists the category 'A' Listed Buildings from within a 5km study area and buildings within the ZTV are assessed further.

Index No.	Name	Distance (km)
15036	Montgreenan House	3.0
50172	Blair House*	2.8
15931	Swindridgemuir*	2.8

³⁰ Clonbeith Castle: http://www.britishlistedbuildings.co.uk/sc-7602-clonbeith-castle-kilwinning#.Vwuf8_krKUK

42056	Mercat Cross	4.8
1374	Kilwinning Abbey	4.9
<i>*These sites do not fall within the ZTV and are therefore will not be visually impacted by the proposed development due to intervening topography. No artificial elevations need to be taken into account for any of these sites. As the proposal will have no visual impact from these locations, they will not be discussed any further within this report.</i>		

Table 7.6: Grade A Listed Buildings within 5km of the proposed turbine

Impacts

Grade A listed buildings are considered to 5km as they have received the highest designation for their national or international historical importance and require significant protection³¹. Grade B Listed Buildings have been considered to a distance of 2km, as beyond this distance, the impacts of the turbines are believed to be minimal.

Montgreenan House is located 3km south southeast of the development at Jameston Moss. The designated building has also been previously assessed in Chapter 5 of this report as it is a tourist attraction within the area. The assessment revealed that the house will experience no views of the turbine due to screening from woodland and therefore the historic setting of Montgreenan House will not be altered by the addition of the turbine in the landscape. Consequently, the listed building will not be affected by the proposed turbine and the historic setting of the site will not be altered.

Mercat Cross is located 4.8km south southwest of the proposed wind turbine development. The site comprises of a cross which stands within the centre of Kilwinning to mark the town as a market town³². The structure is located within the urbanised area of Kilwinning and therefore would be screened by buildings from the proposed development. Therefore, Mercat Cross will not be negatively impacted by the proposed development and the historic setting will not be altered.

Kilwinning Abbey has been previously assessed within this chapter in section 7.5.2.

7.5.4. National Monument Records of Scotland and Scottish Sites and Monument Records

Within the land ownership boundary, there are no NMRS or SSMR, however there is one NMRS called 'Lissens Station' located 500m from the proposed development site³³.

Canmore ID	Name	Type
135965	Lissens Station	Railway Station

³¹ Historic Scotland: <http://www.historic-scotland.gov.uk/index/heritage/historicandlistedbuildings/listing.htm>

³² Mercat Cross: <https://canmore.org.uk/site/42116/kilwinning-market-cross>

³³ Pastmap: <http://pastmap.org.uk/>

Table 7.7: NMRS within 500m of the proposed developmentImpacts

Lissens Station is located 500m southwest of the proposed development at Jameston Moss and is located just out with the land ownership boundary. The site is a former station on the Giffen-Kilwinning portion of the Barrhead-Ardrossan line of the former Caledonian Railway line³⁴. The site's historic setting has been altered due to overhead lines now running along where the tracks used to be located. Additionally, the site is not visible due to vegetation coverage. Therefore the addition of the proposed turbine will not negatively affect the historic site, as the historic setting has been altered by the implementation of electrical infrastructure.

7.5.5. Conservation Areas

The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 states that Conservation Areas are "*areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance*"³⁵. Local authorities have a statutory duty to identify and designate such areas³⁶.

Within a 5km radius of the development site at Jameston Moss, there is one designated Conservation Area; Dalry.

Impacts

Dalry Conservation Area is located 4.3km northwest of the proposed development at Jameston Moss. The designated area is located around a small section of the Main Street and church of Dalry. Dalry was visited when photography was being taken for the production of visualisations, it was clear that the turbine will not be visible due to screening from the dense vegetation surrounding the area. Subsequently, the historic setting will not be negatively impacted by views of the turbine.

7.5.6. Gardens and Designed Landscapes

Within a 5km radius of the development site, there are two Gardens and Designed Landscapes called Blair Castle Estate and Eglinton Castle.

Impacts

Blair Castle Estate is located 2km west of the proposed development and features landscaped gardens surrounding a large castle. The estate has been assessed in Chapter 5 as a tourist attraction and it was found that the castle will not experience views of the turbine due to screening from the surrounding vegetation. Visitors to the designated landscape will also not experience views as the dense vegetation located around the western periphery of the estate

³⁴ Lissens Station: <https://canmore.org.uk/site/135965/lissens-station>

³⁵ Scottish Executive Development Department, A Guide to Conservation areas in Scotland: <http://www.scotland.gov.uk/Resource/Doc/37428/0009675.pdf>

³⁶ Inverclyde Council, Assessment of Proposed Kilmacoll Cross Conservation Area (2012)

will effectively screen views of the proposed development. Therefore, Blair Castle Estate will not be negatively impacted by the proposed development at Jameston Moss.

Eglinton Castle Estate is located 4km directly south of Jameston Moss and has also been previously assessed in Chapter 5 as a tourist attraction. The garden and designed landscape, as previously mentioned, will be mostly screened by vegetation which is located throughout the park. There may be some views of the turbine from the northern sections of the estate, however due to the distance from the turbine, it will appear as a minor feature in an expansive landscape as demonstrated in Appendix 6.9.

7.5.7. Physical Impacts

There will be no direct physical impact on any sites of cultural significance as there are no designated sites within the footprint of the proposed development. It is therefore perceived that construction relating to site access, ground works, drainage or turbine installation will not have any physical effects on any sites of archaeological importance.

7.5.8. Overall Impact on Historic Environment

The overall impact to the historic environment will be low. The ZTV, as illustrated in Appendix 7.1, indicates that all the historic monuments within the 5km study area, apart from those identified in the earlier tables, will be theoretically visible to the proposed turbine. However, it must be noted that the ZTV does not account for vegetation or buildings. Consequently, as mentioned through analysis of each site, the impact upon the historic environment will be reduced significantly. In the surrounding area, there are large areas of dense vegetation which offer natural visual screening of views towards the turbine, particularly around the Blair and Eglinton Estates. Therefore, the historic environment within a 5km radius study area will not be significantly impacted by the proposed wind turbine development at Jameston Moss.

7.5.9. Mitigation Measures

It is perceived that the proposed wind turbine will have a potential impact upon the areas of cultural heritage if the turbine is not sited correctly in the landscape. The historic landscape has therefore been considered with utmost importance when designing this development. Through design and siting, the turbine has been positioned to reduce the impacts posed to historical features within the local landscape, lowering the overall impact of the development to an acceptable level.

It is also important to consider that this development is of a temporary nature and is presumed to only exist in the landscape for 25 years. At this point the turbine will be removed from the site and tracks will be reinstated through the use of topsoil, and underground cables cut.

8. Noise Assessment

8.1. Introduction

This chapter has been prepared to support the planning application for a single wind turbine at Jameston Moss. It verifies that the proposed development meets North Ayrshire Council's noise limit criteria and also ensures that noise sensitive receptors in the area will not be unduly affected by noise immission³⁷.

The specification summary for the candidate turbine is presented in Table 8.1:

Candidate Turbine	Hub Height	Rotor Diameter	Tip Height
Norvento	36m	22m	47m

Table 8.1: Candidate Turbine Specification

The location of the proposed candidate turbine is shown in Table 8.2:

Easting	Northing
233210	647332

Table 8.2: Proposed Turbine Location

The locations of the nearest identified noise sensitive receptors to the proposed development are shown in Table 8.3:

ID	NSR ID	Easting	Northing	Approximate distance to proposed turbine (m)
H1	Lissens Cottage	232849	647003	488
H2	Jameston Moss *	232975	646866	521
H3	Clashindarroch	233149	646848	488
H4	1 & 2 Jameston Moss Villas	233172	646835	488
H5	Lissens Moss Bungalow	233685	646882	650
H6	Lissens Moss Farm	233719	646958	636
H7	North Lissens	232672	647850	746
H8	South Auchenmade	233974	648210	1,163

³⁷ Predicted wind turbine noise at receptor's location.

H9	South Lissens	232215	647306	967
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Table 8.3: Identified Nearest Receptors (NSR)

Note: The property identified by Jameston Moss * has financial interest (FI) in the wind energy proposal.

Although the study area's ambient noise is typically rural, it has been perceived as very noisy near to the proposed development, mainly due to the warehouses' mechanical ventilation systems and heavy vehicle traffic.

The noise impact assessment for this site requires a cumulative study as there are other wind turbines located within 2 km from the proposed development. These are listed in the table below.

Planning Ref.	Status	Turbine Site ID	No. of Turbines	Model	Eastings	Northings
09/00700/PP	Operational	Lissenmoss Farm	1	Proven 15	233657	646946
12/00226/PP	Operational	Benthead farm	1	Enercon E33	233106	646193
13/00263/PP	Operational	Auchenskeith Farm	2	Vestas V27	231672	646990
					231773	646961

Table 8.4: Identified Neighbouring Turbines

8.2. Assessment Methodology

This assessment has been carried out according to the Energy Technology Support Unit report ETSU-R-97 'The Assessment and Rating of Noise from Wind Farms' which is the standard document used for wind turbine planning applications throughout the UK.

ETSU-R-97 does not prescribe a calculation method for predicting the noise propagation of wind turbines. The noise propagation is calculated in accordance with ISO 9613-2: 'Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation' and the published agreement between noise consultants working in the field called 'Prediction and Assessment of Wind Turbine Noise'³⁸ (PAWTN). PAWTN put forward two methods to calculate turbine immission; the first was to use 'measured' noise levels (apparent sound power level) and propagation over hard ground and the second method was to use the 'warranted' noise levels (sound power level after adding the confidence level). This assessment uses the second method.

It should be noticed that VG Energy Ltd uses WindFarm³⁹ software to facilitate the complex analysis of wind turbine developments. The software's algorithm is based on the International Standard ISO 9613-2 guidelines and therefore assumes all identified receptors to be downwind

³⁸ Institute of Acoustics (IOA) Acoustics Bulletin March/April 2009

³⁹ Release 4, ReSoft Ltd.

of all identified turbines simultaneously which is representative of a precautionary approach that is unlikely to occur in reality. Consequently there is a build-up margin of safety that will allow further mitigation if necessary whilst maintaining the local amenity as per A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise (May 2013).

The ISO 9613-2 propagation model calculates the predicted sound pressure levels at the specified distance by taking the sound power level in octave frequency bands and subtracting or adding a number of factors according to the various losses and gains; including atmospheric attenuation, ground absorption or reflection effects and meteorological conditions. The results are calculated in terms of LAeq,t (dB). For wind turbine noise, the LA90,(T) noise levels are typically 2dB less than the LAeq,(T)⁴⁰ parameter.

8.2.1. Amplitude Modulation (AM) or 'Blade Swish'

Although "the causes of AM are not fully understood"⁴¹ and cannot be predicted, recent research published by Renewable UK,⁴² describes objective techniques for identifying and quantifying AM noise which will be applied in the event of noise complaints once the turbine is operational. It is understood that AM is directly related to the local meteorological factors interacting with the installed turbine's blades, in addition to the receptor's distance and orientation.

8.2.2. ETSU-R-97 Noise Limit Criteria

"For single turbines or wind farms with very large separation distances between the turbines and the nearest properties a simplified noise condition may be suitable. We are of the opinion that, if the noise is limited to an LA90,10min of 35dB up to wind speeds of 10m/s at 10m height, then this condition alone would offer sufficient protection of amenity, and background noise surveys would be unnecessary. We feel that, even in sheltered areas when the wind speed exceeds 10m/s on the wind farm site, some additional background noise will be generated which will increase background noise will be generated which will increase background levels at the property".

..."However, this limit could be varied, depending on the specific localised circumstances for instance, where the occupier of a property has some financial interest in the wind farm or turbine." In this instance of financial interest, the fixed lower level criteria are 45 dB(A).

Following discussions with the Local Council and due to the complex cumulative aspect of this area, the noise impact of the proposed turbine will be assessed against the maximum consented LA90,10min 35dB immission levels (from all approved and operational wind turbines located within the study area). Therefore, the maximum noise immission levels generated by the proposed development are set to LA90,10min 25dB.

⁴⁰ LAeq is the equivalent continuous A-weighted sound pressure level having the same energy as a fluctuating sound over a specific time period "T".

⁴¹ Research into aerodynamic modulation of wind turbine noise: Final Report, July 2007.

⁴² <http://www.renewableuk.com/en/publications/index.cfm/wind-turbine-amplitude-modulation> (December 2013).

8.2.3. Wind Shear Correction

The following simplified method has been adopted in line with the 'A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise'⁴³:

"...Applying a fixed correction by subtracting the following factors from the wind speed reference used in the turbine predictions: 1m/s for turbine hub heights of up to 30m, 2m/s for hub heights of up to 60m and 3m/s for hub heights of more than 60m. Such a generic approach would be suitable in the context of a study made using a 10m mast to limit costs, in the absence of site-specific data."

The candidate turbine hub height is 36m and therefore a fixed 2m/s wind shear correction has been added to the turbine's sound power levels.

8.2.4. Sound Propagation across Concave Ground

According to the Good Practice Guide to the Application of ETSU-R-97) "A further correction of +3dB (or +1.5dB if using $G=0.0$) should be added to the calculated overall A-weighted noise levels for propagation "across a valley", i.e. a concave ground profile, or where the ground falls away significantly, between the turbine and the receiver location. The following criterion of application is recommended:

$$hm \geq 1.5 \times (abs(hs - hr)/2)$$

Where hm is the mean height above the ground of the direct line of sight from the receiver to the source (as defined in ISO 9613-2, Figure 3), and hs and hr are the heights above local ground level of the source and receiver respectively. This may be calculated using standard topographic data with a resolution of 50m or less. Care needs to be exercised when evaluating this condition, as small changes in distance and height may trigger (or not) the criterion when the actual situation has not changed significantly. Examination of ground profiles between sources and receivers can assist in determining its application".

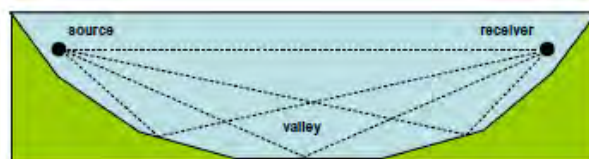


Figure 8.1: Schematic Diagram of Multiple Reflection Paths for Sound Propagation across Concave Ground

⁴³ Institute of Acoustics, ISSUE 1 May 2013.

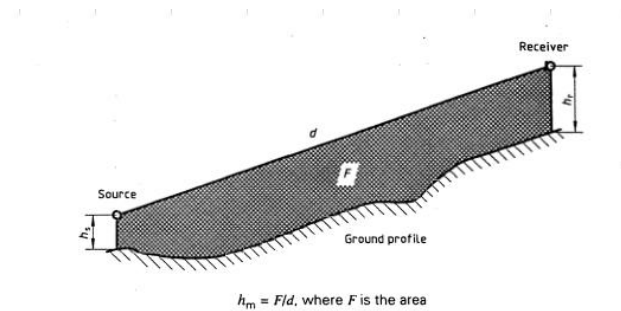


Figure 8.2: Method for Evaluating the Mean Height (ISO 9613-2, Figure 3)

8.2.5. Propagation Directivity

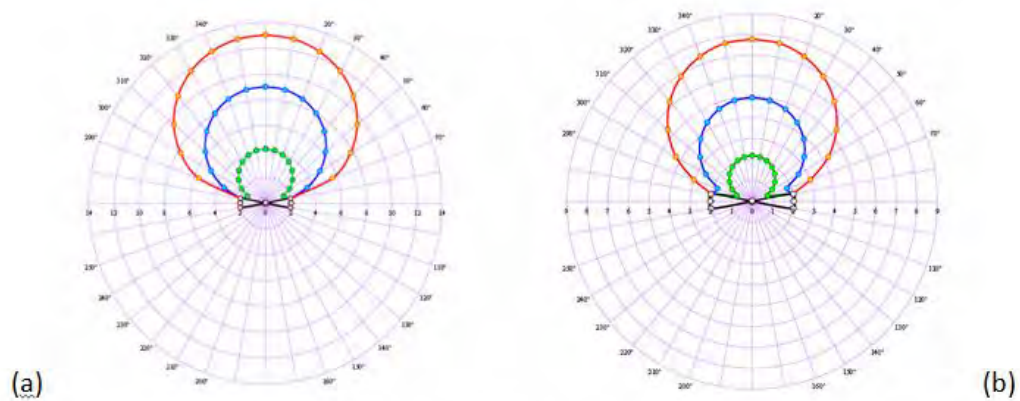
According to the Good Practice Guide to the Application of ETSU-R-97:

"Predictions made using the ISO 9613-2 standard relate to "worst-case" conditions (typically downwind propagation from source to receiver and/or downward refraction under temperature inversions). When considering cumulative noise impacts, the effects of propagation in different wind directions can be considered. Any such direction attenuation factors, if used, should be clearly stated in any assessment.

"Based on evidence from the Joule Project in conjunction with advice in BS8233:2014 and ISO 9613-2, current practice suggests that for a range of headings from directly downwind (0°) up to 10 degrees from crosswind (80°), there may be little to no reduction in noise levels; once in crosswind directions (90°) then the reduction may be around 2dB(A); and when at sufficient distance upwind the reduction would be at least 10dB(A). For intermediate directions between crosswinds to upwind, a simple linear or polynomial interpolation can be used. Such reductions (due to "shadow zone" refraction effects) will in practice only progressively come into play at distances of between 5 and 10 turbine tip heights."

Examples of the resulting propagation directivities⁴⁴ are shown in image 3 (a) for flat landscapes, and (b) for complex landscapes.

⁴⁴ Work undertaken for NASA described by Shepherd and Hubbard.



Example of assumed relationship of the change of noise levels with wind direction, 180° is where the receptor is downwind of the turbine and 0° where the receptor is upwind of the turbine. a) Flat Landscapes b) Complex Landscapes. Black = <5.25 Tip Height; Green = 7.5 Tip Height; Blue = 11 Tip Height; Red = 18 Tip Height

Figure 8.3: Noise Attenuation due to Directivity

"...If suitable predictions are used as a basis for the assessment, it should be borne in mind that in many situations receptors will not be downwind of different wind farms simultaneously and consideration of wind directional effects can be included within cumulative noise impact predictions to present more realistic impacts."

8.3. Turbine Noise

The sound power levels, LW, for the candidate turbine model were extracted from the Aresse Engineering Technical Report, attached as Appendix 8.1A.

The report states that all measurements were conducted in accordance with the International Electro-technical Commission's Standard IEC 61400-11 Ed 2.1.⁴⁵

The 'warranted' turbine noise⁴⁶ is the turbine's declared sound power level, LWD,k. This is the measured apparent sound power levels, LWA,k, with 95% uncertainty correction factor equal to 1.645.

According to the Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise:

"When comparing warranted/specified data with result of a representative test report, obtained in accordance with the IEC 61400 – 11 standard, with a reported test uncertainty δ , a margin of 1.645δ (between 1 and 2 dB(A)) between the tested and stated values over the majority of wind speeds represents a clear indication that suitable uncertainties have been incorporated;

"If the document prescribes a value of uncertainty or a correction factor applicable to the data then this can be added to the values stated, unless the above test is already satisfied;

⁴⁵ IEC 61400-11 Ed 2.1: Wind turbine generator systems – Part II: Acoustic noise measurement techniques (2006).

⁴⁶ As per the published 'Prediction and Assessment of Wind Turbine Noise,' IOA bulletin march 2009.

"If no data on uncertainty or test reports are available for the turbine then a factor of +2dB should be added."

Table 8.5 shows the derived sound power levels with added measurement uncertainties as per turbine's acoustics report. The last row shows the used sound power levels for the candidate turbine with a fixed 2m/s wind shear correction.

LW	Wind speed (m/s)								
	4	5	6	7	8	9	10	11	12
LWA,k	-	-	-	-	96.76	98.96	100.05	100.92	100.60
uncertainty	-	-	-	-	0.87	0.74	0.73	0.7	0.93
95% factor	-	-	-	-	1.43	1.22	1.20	1.15	1.53
LWD,k	-	-	-	-	98.19	100.18	101.25	102.07	102.13
Fixed 2m/s wind shear correction	96.07*	97.13*	98.19	100.18	101.25	102.07	102.13	-	-

Note: The extrapolated values have been derived by the linear slope relation of the warranted LWD,k values which equates to approximate 1.06dB/m/s

Table8.5: Declared Sound Power Levels

According to the turbine's acoustic report, the turbine has no tonal characteristics and therefore no further corrections have been added to predicted noise immission levels.

The octave band spectrum used is presented in the following figure:

Wind speed m/s	4.00	5.00	6.00	7.00	8.00	9.00	10.00	
Broadband SPL dB(A)	96.00	97.00	98.00	100.20	101.30	102.07	102.10	
Tonal penalty (dB(A))	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Turbine octave data specified				Yes ▾	Check total octave noise			
Hz	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
63	71.92	72.92	73.92	76.12	77.22	77.86	77.60	
125	78.22	79.22	80.22	82.42	83.52	84.86	84.64	
250	84.93	85.93	86.93	89.13	90.23	91.04	91.51	
500	90.89	91.89	92.89	95.09	96.19	96.95	97.27	
1000	91.93	92.93	93.93	96.13	97.23	97.79	97.62	
2000	88.84	89.84	90.84	93.04	94.14	95.23	94.91	
4000	75.40	76.40	77.40	79.60	80.70	81.69	83.70	
8000	65.06	66.06	67.06	69.26	70.36	69.77	70.79	

Figure 8.4: Proposed Turbine LW - Full Power

8.4. Assessment Results

The noise immission of the candidate turbine has been assessed at the identified noise sensitive receptors. The noise propagation calculation has been carried out with the WindFarm software. Although the summary of results are presented as a single broadband value, it has been calculated with the octave band spectra shown above.

Predicted immission	Wind speed (m/s)						
	4	5	6	7	8	9	10
H1	29.14	30.14	31.14	33.34	34.44	35.17	35.24
H2	28.10	29.10	30.10	32.30	33.40	34.13	34.20
H3	28.80	29.80	30.80	33.00	34.10	34.83	34.90
H4	28.58	29.58	30.58	32.78	33.88	34.61	34.68
H5	25.73	26.73	27.73	29.93	31.03	31.75	31.83
H6	26.10	27.10	28.10	30.30	31.40	32.13	32.21
H7	24.30	25.30	26.30	28.50	29.60	30.32	30.41
H8	19.27	20.27	21.27	23.47	24.57	25.29	25.42
H9	21.09	22.09	23.09	25.29	26.39	27.11	27.22

Table 8.6: Predicted Immission with Turbine Running on Full Power

The above predicted immission is compared to the maximum consented cumulative levels of 25dB. The following Table shows the predicted surplus or not. Compliance with the set criterion is demonstrated by negative values, i.e. predicted immission levels are less than 25dB.

Predicted immission	Wind speed (m/s)						
	4	5	6	7	8	9	10
H1	4.14	5.14	6.14	8.34	9.44	10.17	10.24
H2	3.1	4.1	5.1	7.3	8.4	9.13	9.2
H3	3.8	4.8	5.8	8	9.1	9.83	9.9
H4	3.58	4.58	5.58	7.78	8.88	9.61	9.68
H5	0.73	1.73	2.73	4.93	6.03	6.75	6.83
H6	1.1	2.1	3.1	5.3	6.4	7.13	7.21
H7	-0.7	0.3	1.3	3.5	4.6	5.32	5.41
H8	-5.73	-4.73	-3.73	-1.53	-0.43	0.29	0.42
H9	-3.91	-2.91	-1.91	0.29	1.39	2.11	2.22

Table 8.7: Calculated Surplus or Not When Compared to Criterion

The results above indicate that further mitigation to abate noise immission would be necessary in order to implement the candidate turbine. Therefore, it is proposed that the candidate turbine operates on the available low mode setting which would reduce noise immission to lower noise levels.

The following tables and figures present the sound power levels on low noise mode and the respective octave band levels.

LW	Wind speed (m/s)								
	4	5	6	7	8	9	10	11	12
LWA,k	-	-	-	93.81	96.03	96.69	96.68	94.13	94.47
uncertainty	-	-	-	1.3	1.15	1.24	1.22	1.31	1.85
95% factor	-	-	-	2.14	1.89	2.04	2.01	2.16	3.04
LWD,k	-	-	-	95.95	97.92	98.73	98.69	96.28	97.51
Fixed 2m/s wind shear correction	94.89	95.95	97.92	98.73	98.69	96.28	97.51	-	-

Table 8.8: Declared Sound Power Levels – reduced power mode

Note: The extrapolated values have been derived by the linear slope relation of the warranted LWD,k values, which equates to approximate 1.06dB/m/s.

The following figure presents the octave band spectra used:

Wind speed m/s	4.00	5.00	6.00	7.00	8.00	9.00	10.00	
Broadband SPL dB(A)	94.95	95.95	97.92	98.73	98.69	96.28	97.51	
Tonal penalty dB(A)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Turbine octave data specified	Yes ▾								Check total octave noise
Hz	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
63	68.00	69.00	71.00	72.00	72.00	70.00	73.00		
125	79.00	80.00	81.00	82.00	83.00	81.00	81.00		
250	86.00	87.00	89.00	89.00	91.00	88.00	88.00		
500	89.00	90.00	91.00	92.00	93.00	91.00	91.00		
1000	91.00	92.00	94.00	95.00	94.00	92.00	93.00		
2000	88.00	89.00	91.00	92.00	90.00	88.00	91.00		
4000	77.00	78.00	80.00	81.00	80.00	78.00	80.00		
8000	65.00	66.00	68.00	69.00	68.00	65.00	67.00		

Figure 8.5: Proposed Turbine LW - Reduced Power

The predicted noise immission at the previously identified noise sensitive receptors is again carried out with WindFarm and the results are presented as follows:

Predicted immission	Wind speed (m/s)							
	4	5	6	7	8	9	10	
H1	27.79	28.79	30.47	31.34	31.40	29.22	29.92	
H2	27.10	28.10	29.78	30.64	30.71	28.54	29.23	
H3	27.79	28.79	30.48	31.34	31.40	29.23	29.93	
H4	27.58	28.58	30.26	31.12	31.19	29.01	29.71	
H5	24.72	25.72	27.38	28.24	28.38	26.19	26.83	
H6	25.09	26.09	27.76	28.62	28.75	26.57	27.21	
H7	23.29	24.29	25.94	26.79	26.98	24.79	25.39	
H8	18.67	19.67	21.29	22.11	22.49	20.26	20.74	
H9	20.29	21.29	22.93	23.76	24.06	21.85	22.37	

Table 8.9: Predicted Immission with Turbine Running on Reduced Power

The predicted immission above is again compared to the maximum consented cumulative levels of 25dB. The following table shows whether there is a predicted surplus or not. Compliance with the set criterion is demonstrated by negative values, i.e. predicted immission levels are less than 25dB.

Predicted immission	Wind speed (m/s)						
	4	5	6	7	8	9	10
H1	2.79	3.79	5.47	6.34	6.40	4.22	4.92
H2	2.10	3.10	4.78	5.64	5.71	3.54	4.23
H3	2.79	3.79	5.48	6.34	6.40	4.23	4.93
H4	2.58	3.58	5.26	6.12	6.19	4.01	4.71
H5	-0.28	0.72	2.38	3.24	3.38	1.19	1.83
H6	0.09	1.09	2.76	3.62	3.75	1.57	2.21
H7	-1.71	-0.71	0.94	1.79	1.98	-0.21	0.39
H8	-6.33	-5.33	-3.71	-2.89	-2.51	-4.74	-4.26
H9	-4.71	-3.71	-2.07	-1.24	-0.94	-3.15	-2.63

Table 8.10: Calculated Surplus (or Not) When Compared to Criterion

The results above indicate that further evaluation is necessary to verify compliance as the predicted values are above 25dB. Where the values are negative, i.e. less than 25dB no further evaluation will be carried out as they comply with criterion.

As previously mentioned in the assessment methodology section of this report, the software used assumes spherical noise emission from the turbine which ignores the noise emission characteristics of wind turbines and directivity attenuation. Therefore, the following table presents the noise attenuation due to a calculation of directivity and summarises the results. Receptors H8 and H9 will not be further evaluated as the predicted immission levels are below 25dB as shown in Table 8.10.

NSR ID	Distance	Angle between turbine and NSR (degrees)	Curve used graph (a)	Resultant Attenuation
H1	488	227	Green/blue	-6
H2	521	206	Blue/red	-6
H3	488	187	Green/blue	-6
H4	488	185	Green/blue	-6
H5	650	133	Blue/red	-7
H6	636	126	Blue/red	-6
H7	746	315	Blue/red	-7

Table 8.11: Calculated Directivity Attenuation

Note: the curves have been evaluated by the following relation:

- ◆ Black $< 5.25 \times 47 = 247\text{m}$
- ◆ Green $7.5 \times 47 = 353\text{m}$
- ◆ Blue $11 \times 47 = 517\text{m}$
- ◆ Red $18 \times 47 = 846\text{m}$

The following table shows the predicted immission corrected according to attenuation directivity.

NSR ID	Wind speed (m/s)						
	4	5	6	7	8	9	10
H1	22	23	24	25	25	23	24
H2	21	22	24	25	25	23	23
H3	22	23	24	25	25	23	24
H4	22	23	24	25	25	23	24
H5	18	19	20	21	21	19	20
H6	19	20	22	23	23	21	21
H7	16	17	19	20	20	18	18

Table 8.12: Immission with Directivity Attenuation

The study area is relatively flat and no further correction will be added to the predicted noise immission to account for valley correction, and therefore the above predicted noise immission level complies with the consented criterion at all identified nearest noise sensitive receptors, i.e. the predicted immission is less or equal to 25dB.

8.5. Conclusion

The proposed single wind turbine development has been evaluated based on the $L_{A90,t}$ 25dB maximum cumulative consented noise limit. The predicted noise immission at all nearest identified noise sensitive receptors is below or equal to 25dB which indicates compliance with the set criterion. Therefore, it can be concluded that the proposed development would not add an adverse noise impact to the study area.

9. Shadow Flicker

9.1. Introduction

This assessment examines the potential effects of shadow flicker produced by the inclusion of a wind energy development at Jameston Moss. Shadow flicker is the term used to describe the effect on residential amenity produced by the intermittent casting of shadow upon a particular location by the rotating blades of a wind turbine.

This chapter quantifies the geographical area over which shadow flicker could potentially occur and sets out an assessment of the duration and timing of these effects under the “worst case scenario” produced in the vicinity of the Jameston Moss development. This assessment aims to alleviate concerns among those residing in the local landscape surrounding the development site. It also seeks to identify measures that could be employed to mitigate any impacts, if deemed necessary, as a result of the assessment.

9.2. Relevant Legislation, Policy and Guidance

Current Scottish Planning Policy⁴⁷, supplemented by online renewable advice note *Onshore Wind Turbines*⁴⁸, describes shadow flicker as follows:

Under certain combinations of geographical position, time of day and time of year, the sun may pass behind the rotor and cast a shadow over neighbouring properties. When the blades rotate, the shadow flicks on and off; the effect is known as “shadow flicker”. Shadow flicker occurs only within buildings where the flicker appears through a narrow window opening. The seasonal duration of this effect can be calculated from the geometry of the machine and the latitude of the potential site.

In addition to Scottish Planning Policy, both Planning Practice Guidance for Renewable and Low Carbon Energy⁴⁹ (DCLG, 2013, UK legislation) and a detailed study conducted on behalf of DECC (2010)⁵⁰, describes the conditions in the UK under which shadow flicker may occur:

- ◆ Only properties within 130 degrees either side of north of the proposed development can be affected at UK latitudes;
- ◆ Shadow flicker has been proven to occur only within ten times rotor diameter of a given developments location: there is unlikely to be a significant effect at distances greater than 10 rotor diameters;

⁴⁷ Scottish Planning Policy, <http://www.scotland.gov.uk/Publications/2010/02/03132605/12>

⁴⁸ Online renewable advice note, Onshore Wind Turbines, <http://www.scotland.gov.uk/Resource/0040/00405870.pdf>

⁴⁹ Planning for Renewable Energy, A Companion Guide to PPS22: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7779/147447.pdf

⁵⁰ Parsons Brinckerhoff Consultants, for DECC: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48052/1416-update-uk-shadow-flicker-evidence-base.pdf

- ◆ It is considered that the frequency of the flickering caused by the rotation of the turbine blades is such that it unlikely to cause any health effects or nuisance.

Furthermore, the online renewable advice note on Onshore Wind Turbines continues;

... Where this could be a problem, developers should provide calculations to quantify the effect. In most cases however where separation is provided between wind turbines and nearby dwellings (as a general rule 10 rotor diameters), "shadow flicker" should not be a problem. However, there is scope to vary layout / reduce the height of turbines in extreme cases.

9.3. Methodology

As stated, planning guidance in the UK requires developers to investigate the impact of shadow flicker upon dwellings situated within the described separation distance, but does not specify methodologies.

Currently within the UK, only Northern Ireland⁵¹ prescribes legislative requirements for the minimisation of shadow flicker. On this basis, in order to define the significance of effects, the Northern Ireland guidelines have been adopted as the reference for this project. They state that shadow flicker should not exceed, under the worst case scenario;

- ◆ 30 hours per year, or
- ◆ 30 minutes per day.

Any predicted shadow flicker effect that is less than the Northern Ireland guidelines of 30 minutes per day and/or 30 hours per year is deemed to be of *negligible* magnitude and therefore not significant.

For an accurate assessment of shadow flicker, computer modelling is required, taking into account the dimensions of the development and the movement of the sun throughout the year. This modelling was carried out under the premise of the 'worst case scenario' using Resoft Windfarm[®] software with the following imputed parameters;

- ◆ The location and dimensions of the proposed development;
- ◆ The location of properties within the vicinity of the development; and
- ◆ The estimated dimensions and orientations of windows facing the proposed development.

The 'worst case scenario' for the effects of shadow flicker can be defined as;

- ◆ Continuous sunshine throughout daylight hours with no cloud cover;
- ◆ Continually rotating turbine blades;

⁵¹ Best Practice Guidance to Planning Policy Statement 18 'Renewable Energy'
http://www.planningni.gov.uk/index/policy/policy_publications/planning_statements/planning_policy_state ment 18_renewable_energy_best_practice_guidance.pdf

- ◆ No vegetation or other obstacles are screening the receptor; and
- ◆ The wind turbine rotor plane is always perpendicular to the receptor and sun.

9.4. Health Effects and Nuisance

The March 2011 report commissioned by The Department of Energy and Climate Change "Update of UK Shadow Flicker Evidence Base"⁵² states the health effects and nuisance of the shadow flicker effect;

*On health effects and nuisance of the shadow flicker effect, it is considered that the frequency of the flickering caused by the wind turbine rotation is such that it should not cause a significant risk to health. Mitigation measures which have been employed to operational wind farms such as turbine shut down strategies, have proved very successful, to the extent that **shadow flicker cannot be considered to be a major issue in the UK.***

9.5. Baseline Information

The proposed development at Jameston Moss has a rotor diameter of 22m. The area of study was defined based upon a distance of ten rotor diameters (220m) from the proposed site, in accordance with the online renewable advice note for Onshore Wind Turbines. Onsite visits along with OS digital mapping concluded that there are no properties within this 220m study area of the development. However, in order to demonstrate that the development will not generate any shadow flicker impact, the nearest properties to the development site were included in the calculation.

9.6. Results

Appendix 9.1 illustrates the 'worst case scenario' of shadow flicker. As indicated, all properties surrounding the development site at Jameston Moss fall outwith the areas affected by shadow flicker. As a result, residential amenity will not be adversely affected by the proposed development through shadow flicker effects.

In practice it is likely that the effects of shadow flicker would occur for considerably less time than the 'worst case scenario' prediction as described, for the following reasons;

- ◆ Information provided by the Met Office⁵³ indicates that in the UK, continuous sunshine occurs for approximately 35% of daylight hours. At other times, the shadows cast by the proposed development are unlikely to be sufficiently pronounced to illicit shadow flicker effects;

⁵² Dept. of Energy and Climate Change, Update of UK Shadow Flicker Evidence Base, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48052/1416-update-uk-shadow-flicker-evidence-base.pdf

⁵³ In the UK, on average there are 4380 hours of daylight per year. Data from the closest Met Office weather station, Largs indicate that this region of will receive 1320 hours of daylight based upon the mean value recorded between the years 1981-2010.

- ◆ At times when there is insufficient wind to move the turbine, the effects of shadow flicker cannot be produced;
- ◆ Receptors with screening elements would see a further reduction of effects;
- ◆ At times when the proposed development is not perpendicular to the receptor and sun, the duration of shadow flicker effects would be reduced due to the elliptical shape of the shadow cast.

9.7. Mitigation

Where significant effects are identified, mitigation measures are to be proposed in order to prevent shadow flicker from occurring or to reduce its intensity, noting that the effects experienced in practice are likely to be much less than the 'worst case scenario'. In this instance, there are no properties which will be adversely affected by shadow flicker to the extent where it exceeds limits set in guidance. As such, mitigation at this site is deemed to be unnecessary.

10. Ecology

10.1. Introduction

An assessment of the potential effects on the natural heritage was carried out through a desk-based assessment and site survey. An Extended Phase 1 Habitat Survey was required to assess the ecological value of the area of land being used for the proposed development and any protected species or habitats bordering the area.

10.2. Relevant Legislation, Policy and Guidance

European and national legislation relevant to the proposed development is listed in the tables below.

Feature	Description
Sites of Special Scientific Interest (SSSI)	Areas of land that represent a wide range of natural features, from vulnerable plants or animals, to high-quality habitat examples, such as wetlands or meadows. Legally protected through a number of Acts including the Wildlife and Countryside Act 1981. In Scotland SSSIs are designated by SNH under the Nature Conservation (Scotland) Act 2004.
Special Protection Areas (SPA)	European designated sites, protected under The Conservation (Natural Habitats, & c.) Regulations 1994. These sites have been identified as being of international importance to rare or vulnerable bird species.
Special Areas of Conservation (SAC)	European designated sites, protected under The Conservation (Natural Habitats, & c.) Regulations 1994 for those habitats and species which are endangered, vulnerable, rare, or otherwise require special attention.

Table 10.1: Designated Environmental Sites

Legislation
The Conservation (Natural Habitats, & c.) Regulations 1994 ⁵⁴
The Wildlife and Countryside Act 1981 (as amended) ⁵⁵
The Nature Conservation (Scotland) Act 2004 (as amended) ⁵⁶

⁵⁴ The Conservation (Natural Habitats, & c.) Regulations 1994:

<http://www.legislation.gov.uk/ukxi/1994/2716/contents/made>

⁵⁵ The Wildlife and Countryside Act 1981 (as amended): <http://www.legislation.gov.uk/ukpga/1981/69>

⁵⁶ The Nature Conservation (Scotland) Act 2004 (as amended);
<http://www.legislation.gov.uk/asp/2004/6/contents>

Wildlife and Natural Environment (Scotland) Act 2011⁵⁷Protection of Badgers Act 1992 (as amended)⁵⁸**Table 10.2: Legislation**

10.3. The Study Area

The study area includes a 250m buffer from the proposed turbine location for the on-site survey (hereafter referred to as the “study area”, refer to Appendix 10.1), with this being extended to a 5km buffer for desk research to ensure any ecological features that may be of value were noted.

The access track follows an existing farm track heading south-west to north-east for 0.4km before reaching the end. At this point it is improved grassland for 0.1km to the turbine location.

10.4. Methods

10.4.1. Desk-based Study

A desk-based study was undertaken in order to inform the baseline conditions of the study area, including the presence of designated sites and species of interest within the 5km buffer. This study consisted of consulting various on-line resources such as;

- ◆ Environment Scotland⁵⁹
- ◆ NBN Gateway⁶⁰
- ◆ SNHi⁶¹
- ◆ Bird tracker⁶²
- ◆ North Ayrshire Local Biodiversity Action Plan (LBAP)⁶³

10.4.2. Field Survey

The Extended Phase 1 (Ex.P1) survey was completed in accordance with the standard guidelines (JNCC 2010) and involved the surveyor completing a walkover of the study area and recording the habitats present onto a 1:10,000 map. Linear and point features (such as hedgerows and individual trees) were also mapped. Ex.P1 is a standard technique for classifying and mapping British habitats, with the aim of providing an inventory of areas with the greatest ecological interest, especially those pertaining to the presence/likely presence of protected species. These

⁵⁷ Wildlife and Natural Environment (Scotland) Act 2011:

<http://www.legislation.gov.uk/asp/2004/6/contents>

⁵⁸ Protection of Badgers Act 1992 (as amended): <http://www.legislation.gov.uk/ukpga/1992/51/contents>

⁵⁹ Environmental Scotland: <http://www.environment.scotland.gov.uk/>

⁶⁰ NBN Gateway: <https://data.nbn.org.uk/>

⁶¹ SNHi: <http://www.snh.gov.uk/publications-data-and-research/snhi-information-service/map/>

⁶² Bird Tracker: <http://www.bto.org/volunteer-surveys/birdtrack/about/introducing-birdtrack-home>

⁶³ North Ayrshire Local Biodiversity Action Plan (LBAP): <http://www.ayrshire-jsu.gov.uk/download/LBAP/Local%20Biodiversity%20Action%20Plan%20-%20Part%209.pdf>

would be noted as target notes (TNs). Each TN includes a brief description of the feature together with a grid reference and diagram and/or photograph depending on the feature.

Botanical nomenclature in this report follows that of Scace (2010) for vascular plants and Atherton *et al* (2010) for bryophytes.

10.4.3. Survey Constraints

The survey was conducted on the 12 May 2016 which is within an optimal time of year for habitat surveys. The survey was carried out during suitable weather conditions. Not all areas were accessible due to cattle coming onto the field after over-wintering and being denied access onto neighbouring land (Appendix 10.2). Data recorded for these locations has been concluded from remote observations and Bing Maps, although areas where this has not been conclusive have been omitted from phase 1 mapping.

10.5. Results and Discussion

10.5.1. Desk-based Study

The desk based study revealed four Sites of Special Scientific Interest (SSSIs), of which three were also classified as a Special Area of Conservation (SAC) within the 5km buffer. Table 10.3 details the ecological designations. Appendix 10.3 illustrates the location of these in comparison to the site.

Name	Designation	Feature	Size of designation	Distance from Site
Dykeneuk Moss	SSSI SAC	Raised bog Active raised bog	61.65ha	0.7km
Cockinhead Moss	SSSI SAC	Raised Bog Active Raised Bog	48.4ha	2.3km
Bankhead Moss	SSSI SAC	Raised Bog Active Raised Bog	32.5ha	3.3km
Lynn Spout	SSSI	Lower carboniferous [Dinantian – Numurian (part)]	2.43ha	4.9km

Table 10.3: Designated Ecological Sites within 5km of Turbine Location

Dykeneuk Moss sits to the east of the site separated by a minor road. Although geology shows the peat extending to 0.4km beyond the designated site, it stops 0.2km from the site which sits on agricultural land.

Cockinhead Moss sits to the north east of the site and is separated by the B707 road and a minor road.

Bankhead Moss and Lynn Spout both lie at a significant distance away intersected by various roads within an agricultural landscape.

There are no avian designations within 5km of the study area.

A data search on NBN Gateway for species within 5km of the site and within the last 20 years contained records for the following:

Common Name	Latin name	Notes	Distance from Site
Badger	<i>Meles meles</i>	2 records	1.5km north west 3km north east
Common pipstrelle	<i>Pipistrellus pipistrellus</i>	1 group of records	4.1km south east
Daubenton's bat	<i>Myotis daubentonii</i>	1 group of records	4.1km south west
Common noctule	<i>Nyctalus noctula</i>	1 record	3.7km west
Otter	<i>Lutra lutra</i>	2 records	2.4km north west 4.1km south west
Water vole	<i>Arvicola amphibius</i>	1 record	2.4km north west

Please note: This is accurate to within 100m of sightings

Table 10.4: Protected Species within 5km

Local Biodiversity Action Plan (LBAP)

The Ayrshire LBAP lists key locally significant species/habitats considered to be rare or threatened in the area. Although this plan does not hold statutory force, it is good practice to take anything mentioned within this plan into consideration.

There are no habitats, wildlife sites or species noted within the site that are mentioned within the LBAP. The brown hare is the only species mentioned that could potentially use the site.

10.5.2. Field-Survey - Habitats

A field survey was undertaken on 12th of May 2016. Appendix 10.4 illustrates the habitat assessment with particular features of interest being detailed further within a target note (TN) list in Appendix 10.5.

The following habitats were recorded (in order of greatest coverage).

- ◆ Improved grassland;
- ◆ Marsh/marshy grassland;
- ◆ Fence line;
- ◆ Plantation woodland;
- ◆ Scattered trees;
- ◆ Hedge boundary

These habitats are described below. They are ordered by greatest coverage and not by ecological importance.

Improved grassland (11.98ha)

The study area was dominated by improved grassland with cattle being put onto the field in the centre of the study area that day. These fields were all enclosed by post and wire fencing.

The species found within this habitat included the following; perennial rye-grass *Lolium perene*, creeping thistle *Cirsium arvense*, meadow buttercup *Ranunculus acris*, dandelion *Taraxacum officinale*, dock *Rumex sanguineas* and nettle *Urtica dioica*.

Target notes 1-7 identify individual trees on the north west of the field in the centre. These are predominately hawthorn on an understorey of perennial rye-grass and rush species.

Neutral semi-improved grassland (2.51ha)

This area to the north east was enclosed by post and wire fencing with a small windbreak within the field boundary to the south west. Cattle were out on this field when the study was undertaken.

The habitat was grazed and species poor with drainage running into the field from the east. The most dominant species was hard rush *Juncus effuses* over perennial rye-grass *Lolium perene* with few scattered cuckoo flower *Cardamine pratensis*.

Fence line (1.15km)

Boundaries to the enclosed fields within the study area were all post and wire fencing which were stock proofed with barbed wire.

Plantation woodland (0.75ha)

Young silver birch *Betula pendula* of same age class, approx. 10-15yrs, with an understory of hard rush *Juncus effuses* and perennial-rye grass *Lolium perene*. The south west edge is bordered by post and wire fencing which has been stock proofed with barbed wire with the north east boundary being open to the neutral semi-improved grassland which was grazed by cattle.

Scattered trees (0.31ha)

Two rows of young silver birch *Betula pendula*, approximately 0.1km in length, form a windbreak from elements coming in from the south west. Spacing between the two rows are approximately 6m apart within an improved grassland field which is grazed by cattle.

Hedge boundary (0.15km)

Species poor defunct hedge consists entirely of hawthorn *Crataegus monogyna* which runs sparsely to the north eastern edge of the field to the south of the study area. This boundary line is secured with a post and wire stock proof fence.

10.6. Conclusion

The study area comprised of mainly improved grassland which is used for cattle to graze, bordered by stock proof fencing. Although it may provide some foraging habitat for species such as birds and small mammals, it is a common habitat of the area and not considered to be of notable value.

Two stands of immature broadleaved coniferous woodland form windbreaks. Both plantations are young and small in area and do not link into other woodlands, making it unlikely to be used as bat commuting corridors. They may however, offer a foraging habitat for birds and small mammals.

The survey did not find any signs for the presence of badgers.

The study area is sub optimal in its suitability for otter/water vole due to a lack of watercourses. Most of the study area is unsuitable for reptiles. However, the neutral semi-improved grassland to the north east of the site may offer some foraging habitat due the small pond adjacent to the study area to the north east, although no hibernacula structures were found.

The brown hare mentioned in the Ayrshire LBAP could potentially use the site, although this is unlikely due to the cattle in the fields.

The European designated sites are at a far enough distance and already bounded by a country road that any development within this site will not be intrusive to the nature of the designation.

11. Soil and Hydrological Assessment

11.1. Introduction

An assessment of the potential effects on soil and hydrology was carried out through a desk-based assessment and site survey. Effects on the soils and hydrology of the site can occur as a result of the various stages of development, namely construction, operation and decommissioning.

11.2. Policy and Guidance

Best practice legislation and guidance notes were consulted when conducting the assessment. Table 11.1 lists the main Scottish guidance and local policy documents which were consulted.

Policy / Guidance	Relevant Sources of Information
Scottish Planning Policy	Scottish Planning Policy relating to Planning and Flooding.
Legislation	Environmental Impact Assessment (Scotland) Regulations 2011; Water Framework Directive (2000/60/EC) (WFD); Water Environment and Water Services (Scotland) Act, 2003; The Water Environment (Controlled Activities) Regulations 2011 and the related Amendment (2013).
Policy Advice Notes (PANs)	PAN 1/2013: Environmental Impact Assessment.
Scottish Environmental Protection Agency (SEPA) - Policies and Pollution Prevention Guidelines (PPGs)	Policy No. 19: Groundwater protection policy for Scotland; Policy No. 26: Policy on the Culverting of Watercourses; PPG 1: General guide to the prevention of water pollution; PPG 6: Working at construction and demolition sites; and PPG 13: Vehicle washing and cleaning.
Guidance documents	CIRIA publications; SNH (2011) 'A Handbook on Environmental Impact Assessment'; Scottish Renewables, SNH, SEPA, Forestry Commission Scotland and Historic Environment Scotland (2015) 'Good Practice during windfarm construction, Version 3'; and Health & Safety Executive (HSE) Avoiding Danger to Underground Services.

Table 11.1: Relevant Policies and Guidance

11.3. Consultation

Table 11.2 lists any organisations which have commented on the impact of the proposed turbine on soil and hydrology.

Contact	Date of Consultation	Consultation Response
SEPA	18/03/16	SEPA Directed VG Energy to their standing advice applicable to this of small-scale development.

Table 11.2: Consultation Responses

11.4. Soil and Geology

The land at the proposed development site is formed of Limestone Coal Formation – Sedimentary Rock Cycles, Clackmannan Group Type⁶⁴. The Sedimentary Bedrock formed in the Carboniferous Period and the local environment was previously dominated by swamps, deltas and estuaries with the rocks being formed in marginal coastal plains. The superficial deposits at Jameston Moss comprise of Till, Devensian – Diamiction which are superficial deposits formed in the Quaternary Period. These rocks were formed in cold periods with ice age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits⁶⁵. The proposed development at Jameston Moss is located within 'The Central Lowlands' which extends between the Highlands and the hills of the Southern Uplands. The soil is mainly controlled by the type of material deposited by the glaciers which previously passed through the area. The soil often contains small particles and produce poorly drained soils.

11.5. Hydrology

11.5.1. Surface and Groundwater

Understanding surface and groundwater environments is critically important to designing a successful project. Surface water includes watercourses, water bodies and runoff. Groundwater includes all water stored in permeable underground strata (or aquifers). In any construction project, it is important to understand where and how these relate to each other, so that the project can be designed to minimise the risk of pollution or any other potential impacts. Surface water provides important water resources for potable and other supply; amenity; aesthetic value; conservation and ecological environments; and importantly, recharges the ground water systems. Key pollution concerns for surface water from a project like this are: sediment erosion and contained silt; contaminated ground water from any dewatering activities; and modifications or destruction of habitats. During the design phase of the development, consideration was given to the potential impacts new and used tracks could have on the hydrology of the area; this is reflected in the final layout.

An assessment of SEPA's online interactive River Basin Management Plan Map shows that the development lies within the Kilwinning bedrock and localised sand and gravel aquifers ground water body. There are two main drains located 422m to the north northeast of the proposed development and another 490m directly south, however they are sufficient enough distance

⁶⁴ British Geological Survey, Geology of Britain viewer:

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html?location=ka10%206bz>

⁶⁵ British Geological Survey, Geology of Britain viewer:

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html?location=ka10%206bz>

from the development to not be affected. There is also a ditch located 95m north of the site which may come into use if there is extreme rainfall and is shown in Figure 11.1. There is a small pond 577m north northeast and a cluster of three small ponds located 705m directly south of the proposed development. These ponds are located far enough from the proposed wind turbine development to not be negatively impacted and as previously mentioned, these ponds are not prone to flooding as identified by SEPA's flood map⁶⁶. The development has conformed to the recommended buffer zones for water courses at the site (50m minimum) and it is perceived that the development will have no significant impact on the hydrology of the site.



Figure 11.1: Ditch Located North of Proposed Site

Precautionary measures will be adopted to eliminate the risk of impacting the hydrology of the area further, especially during the construction phase of the turbines, including roads, foundations, cable trenching, and other associated works. Hydrology and the potential effects of drainage from turbine, access tracks and other ancillary development will be considered, as there could be significant effects on or adjacent to the application site. Watercourses, underground streams and private springs will be avoided, and private water supplies will not be adversely affected.

There will be no abstraction of water required for the development which could impact water supplies or the ecological systems.

11.5.2. Flood Risk

In order to establish whether the site was at risk of flooding, SEPA's online Indicative River and Coastal Flood Map⁶⁷ was consulted. Flood risk areas are defined as areas at risk of flooding

⁶⁶ SEPA Flood Map: <http://map.sepa.org.uk/floodmap/map.htm>

⁶⁷ SEPA, Indicative River & Coastal Flood Map, <http://floodline.sepa.org.uk/floodupdates/>

from rivers or the sea. The development site at Jameston Moss lies 98m AOD in an area deemed not at risk.

11.6. Potential Impacts

11.6.1. Soil

To minimise the overall impact to the soil and land within the development area, land disturbance will be kept to a minimum. Any areas where soil is disturbed, for example during excavation of foundations, will be stabilised as soon as possible post-construction. Measures will be taken to ensure topsoil and subsoil remains separate and not mixed. Any soil movement undertaken at the site will be done in accordance with best practice guidelines outlined in 'A Code of Good Agricultural Practice for the Protection of Water, Soil and Air'⁶⁸ and the 'Construction Code of Practice for the Sustainable Use of Soils on Construction Sites'⁶⁹.

11.6.2. Carbon Balance and Peat Management

As stated in Scottish Government Guidance 'Calculating Carbon savings from wind farms on Scottish peat lands – A New Approach', *"During wind farm construction, carbon is lost from the excavated peat and from the area affected by drainage"*⁷⁰. To assess the potential impacts from this development an onsite assessment was conducted. From this, it is possible to conclude that there is no peat within the vicinity of the turbine site, including the associated infrastructure. As a result, no impact will be posed to peatlands within the area. Additionally there is no potential risk to any Functional Peatland wetland typologies.

11.6.3. Disruption to Peatlands

As discussed previously, site assessments have concluded that there is no peat located within the development area for this proposal. As a result, there will be no disruption to peatlands or disposal of peat during the construction, operation or decommissioning stages of this turbine development.

Risks arise when excavated peat is not managed in a suitable manner. The placement of excavated peat in to borrow pits or bunds is not encouraged as experience has shown that peat used as cover can suffer from significant drying and oxidation, and that peat re-deposited at

⁶⁸ DEFRA, A Code of Good Agricultural Practice for farmers, growers and land managers, Protecting our Water, Soil and Air:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/268691/pb13558-cogap-131223.pdf

⁶⁹ DEFRA, Construction Code of Practice for the Sustainable Use of Soils on Construction Sites:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69308/pb13298-code-of-practice-090910.pdf

⁷⁰ Scottish Government, *Calculating Carbon savings from windfarms on Scottish peat lands – A New Approach* : <http://www.scotland.gov.uk/Publications/2008/06/25114657/1>

depth can lose structure and create a hazard when the stability of the material deteriorates⁷¹. This can create the possibility of peat slides which can pose a great threat to individuals.

No peat will be excavated during this development, therefore eliminating the risk of slides. However, any stripped topsoil and subsoil will be stored along the high side of the track in a stable 'construction', to prevent any landslip during periods of rainfall.

11.6.4. Borrow Pits

Material for the construction of the roads and access tracks will be taken from the closest quarry at Monkredding Quarry Hugh King & Co, which is located approximately 2.2km, south southwest of the proposed development. Stone will be excavated from this quarry and used onsite for this development.

All excavation activities will follow guidance set forth by, and agreed with, SEPA and the relevant authorities prior to work commencing.

11.6.5. Water Abstraction

Water abstractions are regulated under The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended). SEPA request that all abstraction of water practices must be highlighted. As a result, it is important to note that no abstraction of water will take place during this development at any stage of construction, operation or decommissioning.

11.6.6. Impact to Water Supplies

The Environmental Health department was contacted and it was stated that there are no private water supplies that will be impacted by the development, with the closest being located 981m west southwest of Jameston Moss.

Before works commence, the area will be CAT scanned to confirm where the pipes are located. Trial holes will also be dug to check the depth of the water pipe, with no mechanical digging equipment permitted within one metre either side of the pipe to eliminate risk of damage.

Private Water Supply Source Location	Source Type	Locations Served
N 232229 E647318	Unknown	South Lissens

T

Table 11.3: Private Water Supplies within 1km of Development Site

11.6.7. Engineering Activities in the Water Environment

The Water Framework Directive states that developments should be designed, where possible, to avoid engineering activities in the water environment. This includes water sources such as

⁷¹ SEPA Surplus Peat Management:

http://www.sepa.org.uk/planning/sustainable_waste_management/surplus_peat_management.aspx

burns, rivers, lochs, wetlands, groundwater and reservoirs. This turbine development has been sited to ensure that the water environment will not be impacted. In accordance with the Water Framework Directive, any engineering activities which would interfere with the water environment onsite will be avoided.

11.6.8. Water Ecology

During the planning stage of this development, the location of the turbine has been chosen to comply with the recommended separation distance between development and watercourses. No work will be undertaken within 50m of any watercourse.

However, potential mitigation measures to avoid any contamination of the water environment are highlighted in the Mitigation section to follow.

11.7. Potential Mitigation

Suitable buffer zones have been maintained for this development, with no watercourses within 50m of the turbines or associated infrastructure. As such, the development will not impact the water sources at the site, however potential mitigation measures have been highlighted below.

Potential mitigation measures
During construction and operation, appropriate drainage systems will be in place to minimise risk of groundwater contamination from run-off.
Straw bales could be used as filtrations systems onsite (downstream) to ensure that no sediment enters the watercourses near the development site ⁷² . Bales will be checked regularly, and once saturated with material, they will be discarded 'in an appropriate manner subject to relevant waste legislation' ⁷³ and replaced with new bales.
Ditches will be checked for blockages, kept clear and in good order on a regular basis. Guidance suggests that growing vegetation should be left in place, as this will aid in the filtering of some of the sediment.
Silt traps could be used to capture suspended solids in the water courses generated during construction.
Due to the permeable nature of the tracks installed, water run-off will be reduced with no additional drainage systems required.
Access tracks will be designed efficiently to avoid the need of culverts.

Table 11.4: Potential Mitigation Measures

⁷² Good Practice during Windfarm Construction: <http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=1618>

⁷³ Good Practice during Windfarm Construction: <http://www.snh.gov.uk/publications-data-and-research/publications/search-the-catalogue/publication-detail/?id=1618>

As there are no water systems within the immediate vicinity of the development and the proposal has conformed to the recommended buffer zones for water courses at the site, it is perceived that the development will have no significant impact on the hydrology of the site.

12. Traffic and Transport

12.1. Introduction

This chapter addresses the logistical concerns associated with the installation of a single nED100 wind turbine at Jameston Moss.

The following concerns will be discussed in this report:

- ◆ The specifications of vehicles used to deliver the turbine components;
- ◆ The preferred delivery route for the turbine components; and
- ◆ The intended number of site deliveries and tonnage for all aspects of temporary and permanent works.

12.2. Development Specifications

The proposed development includes the proposed Norvento nED 100kW turbine, foundation, access track, crane pad and associated infrastructure, including an on-site control unit system and a meter house.

A nED100 turbine has been selected as it is considered to be the most suitable typology of turbine for the site and the surrounding landscape. The weight and dimensions of the nED100 components which will be transported to the site at Jameston Moss are outlined in Table 12.1.

Turbine Component	Length (m)	Width (m)	Height (m)	Net weight (tonnes)
Nacelle in transport frame	4.007	1.809	2.245	8.505
Hub	Ø 1.371	Ø 1.371	1.885	1.004
3 blades in container	10.597	6.7	1.214	1.110
Tower top section	11.6	1.6		2.677
Middle Section	11.6	1.6		3.517
Tower base section	11.6	2.14		5.011

Table 122.1: Size and Weight of Norvento Components

12.3. Width, Length and Weight Allowances

The length, width and weight allowances for vehicles using the public road network are set out in the Roads and Vehicles (Authorisation of Special Types) (General) Order 2003.

As part of the Traffic Management Plan, the haulage company will inform the relevant authorities which delivery vehicles exceed the allowances and require notifications. For the development at Jameston Moss, no orders will be sought for the vehicles transporting the nacelle and hub, tower sections and blades as they are not in excess of the permitted length, width and/or weight allowances for the public highway and will be transported on three articulated trucks.

12.3.1. Delivery of Turbine Components

The turbine will be dispatched from overseas and delivered to the nearest port in accordance with UK policy. From the port of entry, the turbine components will be delivered to the site via the public road network. The available routes have been analysed utilising aerial mapping. This has led to the identification of a preferred route to access the proposed development site. The Port of Entry is assumed to be King George V, Glasgow.

- ◆ Upon leaving King George V dock vehicles will travel along Renfrew Road;
- ◆ Turn onto the A8, before merging with the M8 at Junction 26;
- ◆ Then merge with the A737;
- ◆ Exit onto the B707 at Highfield;
- ◆ Take a right at Auchentiber to an unnamed road;
- ◆ Take the first right onto the unnamed road leading to Jameston Moss;
- ◆ The development site is accessed from the unnamed road via a new access track.

The proposed route is illustrated in Appendix 12.1 in the Appendix of this document.

It is important to note that the proposed delivery route has been selected through using aerial imagery and mapping, and as a result, may need to be amended at a later date. The final delivery route will be outlined within the Traffic Management Plan composed by the haulage company and submitted to the relevant authorities prior to any works taking place.

12.4. Delivery Vehicles

With the delivery of a single nED100 and the associated materials required for the construction of the development, a number of vehicular movements will be necessary. The likely specifications of vehicles to be used in conjunction with this project are detailed in Table 12.2. Component delivery schedules will be confirmed in detail a minimum of 5 weeks prior to the date of construction, with the haulage company composing and submitting an agreed Traffic Management Plan.

'Vehicle Movements' is a singular vehicular movement; from an external point, to the development site. The return journey of the vehicle is then considered as an additional movement (*i.e.* A – B = 1 movement, B – A = 1 movement).

Components/ Requirements	Materials	Delivery Specifications	Vehicle Dimensions	Vehicle Movements
Track and Crane Pad	Stone (Type 1 MOT)	528.6 tonnes delivered by 20 tonne Lorries	6.2m L x 2.5m W x 3.4m H	54
Foundations	Concrete	66m ³ concrete delivered by 6m ³ wagons	8.2m L x 3.0m W x 3.8m H	11
	Rebar	12 tonnes rebar delivered by Flatbed Lorry	17.5m L x 2.5m W x 2.5m H	2
Excavation	Excavator	Delivery on Low Loader	17.5m L x 2.5m W x 3.5m H	2

		Dump truck	7.5m L x 2.5m W x 2.9m H	2
Work and Plant for Foundations	Transporting Workmen to/from site	Transit Vans	Standard	50
	Mobile welfare unit	Flatbed	17.5m L x 3.0m W x 4.0m H	2
	Ancillary plant/materials	4 No. 20 tonne Flatbeds	17.5m L x 2.5m W x 3.0m H	4
	Storage Container	Flatbed	17.5m L x 2.5m W x 4.0m H	2
Electrical Works	Meter Houses/ transformers	20 tonne Lorries	6.2m L x 2.5m W x 3.4m H	2
	Electrical Cabling	20 tonne Lorry	6.2m L x 2.5m W x 3.4m H	2
	Excavator for Cable Trench	Flatbed	17.5m L x 2.5m W x 3.5m H	2
Turbine Erection	100 tonne Crane	Self-propelled	17.9m L x 3.0m W x 6.2m H	2
	330 tonne Crane Support Vehicles	Flatbed	17.5m L x 2.5m W x 2.5m H	2
	110 tonne Crane	Flatbed	13.9m L x 3.0m W x 4.0m H	2
	110 tonne Crane Support Vehicle	Flatbed	17.5m L x 2.5m W x 2.5m H	2
	Tower base section	5 axle steering semi low loader	22m L x 3.15m W x 4.6m H (loaded weight 48 tonnes)	2
	Tower top section	Steering flat trailer	31m L x 2.5m W x 4.2m H (loaded weight 45 tonnes)	2
	Nacelle and Hub	Low Loader	17.5m L x 2.5m W x 4.0m H (loaded weight 48 tonnes)	2
	3 Blades in Container	4 axle Blade Trailer	35m L x 3.26m W x 4.20m H (loaded weight 38 tonnes)	2

Table 12.2: Turbine Components

12.5. Decommissioning

The decommissioning of the turbine at the end of its life will follow a reversed construction process. Prior to decommissioning, a further traffic assessment would be carried out and traffic management procedures agreed with the appropriate authorities. The levels of traffic associated with decommissioning are however likely to be lower than those required during construction.

12.6. Potential Impacts

12.6.1. Noise, Road Safety and Air Quality

Concern is often raised with regards to the increase in traffic levels on the public road network as a result of the construction of a wind energy development. In response to this, VG Energy highlights the following mitigation measures to minimise potential effects associated with the proposal:

Concern	Measures
Noise emitted during construction	Working times will fall within the normal working hours: Mon - Fri: 8am - 6pm Sat: 8am - 1pm
Road Safety	The construction of the proposed turbine would result in a small temporary increase in traffic levels on the proposed access routes; not to levels which would be to the detriment of public safety.
Air Quality	The Contractor will ensure that the numbers of vehicles used for the construction of this development are kept to a minimum. To ensure that the generation of dust is minimised, the Contractor will implement a dust control programme to maintain a safe working environment, minimising nuisance for the surrounding area, and reducing impact to the natural vegetation near the site.

Table 122.3: Mitigation Measures Relating to Noise, Road Safety and Air Quality

12.7. Additional Information/ Mitigation

A Traffic Management Plan will be drawn up by the haulage company and agreed with once planning permission has been passed. Potential management measures to mitigate the impacts of this development are set out in Table 12.4.

Phase of Development	Potential Mitigation Measures
During project	Arrangements for escort for larger turbine components during

development	delivery (either provided by the haulage company or the Police).
	Signage warning other road users of the turbine movements.
	Ground preparation including protection of services.
	Arrangements for road maintenance and cleaning.
	Timing of deliveries outside of peak traffic.
	Arrangements for parking restrictions along access route.
	Temporary speed restriction in the vicinity of the site entrance.
	Wheel cleaning/dirt control arrangements at key stages of construction.
	Provision of temporary signs and traffic control where necessary.
Mitigation Measures for site operation and maintenance during construction	All material delivery lorries (dry materials) should be sheeted to reduce dust, and stop spillage onto public roads.
	Specific training measures should be established to ensure the highest standards are maintained.
	To prevent construction vehicles from carrying mud and debris onto the carriageway, wheel wash facilities will be established at the site entrance.

Table 12.4: Mitigation Measures

13. Existing Infrastructure

13.1. Introduction

When designing a new development, it is important to consider the existing infrastructure within the area, including utility infrastructure such as electricity, gas and water mains, and telecommunication and television infrastructure. Construction activities such as excavation has the potential to damage subterranean infrastructure and, as such, consultation with relevant authorities and ground investigations are important stages of design development.

Wind turbines also have the potential to interfere with electro-magnetic signals passing above ground. Interference can occur with communication networks utilising civil aviation and safeguarding radars communication networks, and other types of infrastructure such as seismic monitoring stations. Various types of civilian and military communication that can be affected include microwave and cellular radio communications and various navigational control systems. This chapter presents the results of the assessment conducted for the proposed turbine at Jameston Moss to ensure it does not generate unwanted 'noise' on existing infrastructure.

13.2. Policy and Guidance

Table 13.1 outlines the key guidance documents used in the assessment of the impact of the proposal on electromagnetic infrastructure and aviation interests.

Policy / Guidance	Relevant Sources of Information
Electro-magnetic infrastructure	Scottish Government (2014) ' <i>Onshore wind turbines</i> '; Ofcom (2009) ' <i>Tall structures and their impact on broadcast and other wireless systems</i> '; Bacon (2002) ' <i>Fixed-link wind turbine exclusion zone method</i> '; and BBC & Ofcom (2009) ' <i>The impact of large buildings and structures, including windfarms, on terrestrial television reception.</i> '
Aviation activities	Scottish Government (2014) ' <i>Onshore wind turbines</i> '; BWEA (2002) ' <i>Wind Energy and Aviation Interests, Interim Guidelines</i> '; CAA (2013) ' <i>CAP 764, CAA Policy and Guidelines on Wind Turbines</i> '; CAA (2013) ' <i>CAP 670, GEN 01: Wind Farms</i> '; and CAA (2013) ' <i>CAP 168 Licensing of Aerodromes.</i> '

Table 13.1: Relevant Policy and Guidance

13.3. Consultation

In order to determine if the proposed turbine at Jameston Moss would impact any infrastructure, a number of organisations were consulted. The responses from these organisations are detailed in Table 13.2.

<i>Consultee</i>	<i>Date of Consultation</i>	<i>Nature and Purpose of Consultation</i>
Joint Radio Company (JRC)	10.05.16	The proposal was 'cleared' with respect to radio link infrastructure operated by Scottish Power and Scotia Has Networks.

Table 13.2: Consultation Responses

13.4. Aviation, Radar and Ministry of Defence (MOD)

It is possible for wind turbines to interfere with aviation and radar systems if sited in sensitive areas. Turbine blade movement can cause intermittent detection by radar if in the line of sight of radar antenna and due to the height of turbines, they can also impact upon airports and airfields if they project into the safeguarding surface above and around them.

VG Consulting has a suite of Geographic Information Systems (GIS) based maps for the MOD and National Air Traffic Systems (NATS) en-route and Air Traffic Control (ATC) radars. These maps illustrate that the proposed turbine development should not be in the line of sight to any of these installations, although consultation with the relevant parties during the planning application process will confirm this.

13.5. Mitigation

The results of the consultation presented in Table 13.2 indicate that the proposed turbine is unlikely to have an adverse effect on local infrastructure, including electricity, gas, TV and communication networks. The desk-based radar assessment conducted also illustrates that the proposal is unlikely to interfere with aviation, including MOD operations.

It is therefore unlikely that mitigation measures will be necessary. However if there are objections during the planning process due to potential interference, or, for example complaints are received once the turbine is operating, there are methods which can be adopted. Examples of mitigation include fitting the turbine with aviation lighting in the event of an objection from an airport, or providing an alternative means of transmission to a household affected by TV disruption. However, the latter is unlikely to be necessary as digital signals are less susceptible to the effects of turbines in comparison to the old, now redundant, analogue signals.

14. General Safety

14.1. Introduction

A number of health and safety considerations have been taken into account during the design and development of this development, such as:

- ◆ Health and safety during construction;
- ◆ General turbine safety;
- ◆ Public safety and access;
- ◆ Safe distances; and
- ◆ Extreme weather.

14.2. Health and Safety during Construction

Construction projects have a potential to create hazards for the general public and contractors. The greatest hazards occur during the construction, repair works and decommissioning of the turbine, however the risks will be minimised by ensuring work complies with the regulations listed in Table 14.1.

Legislation/ Guidance	Date of Consultation
Legislation	Health and Safety at Work Act 1974; The Management of Health and Safety at Work Regulations 1999; Work at Height Regulations 2005; Lifting Operations & lifting Equipment Regulations 1998; Control of Substances Hazardous to Health Regulations 1999; and Provision and Use of Work Equipment Regulations 1998.
Guidance	SEPA publications relating to construction; ⁷⁴ RenewableUK (2015) ' <i>Onshore Wind Health & Safety Guidelines</i> '; and RenewableUK (2015) ' <i>Wind Turbine Safety Rules</i> '

Table 14.1: Relevant Policies and Guidance

14.3. General Turbine Safety

Modern wind turbines are designed to operate to high standards of safety and reliability, and have an excellent safety record. The wind turbine type proposed will have a certification of safe operation from an internationally recognised organisation, such as Norvento.

⁷⁴ Links to SEPA guidance publications: http://www.sepa.org.uk/customer_information/construction.aspx

Furthermore, a computerised central control system housed within the substation building acts as the primary safety system of the turbine. This system monitors the efficiency of the development ensuring it is working efficiently and safely and detects any problems which have arisen. Any problems which cannot be resolved by the central control system will be referred to the operator via the computer's modem link and addressed as soon as possible.

Regular maintenance will be required for the turbine to further ensure it is a safe feature.

14.4. Public Safety and Access

During the construction and decommissioning phase of the development there will be no access to the public to the site. Furthermore, appropriate warning signs will be in place to prevent people entering restricted areas.

14.5. Safe Distances

In Chapter 3: Project Description, Table 3.1 highlights that the development has been sited using appropriate separation distance from public roads, settlements, overhead power lines etc. As such no safety concerns are predicted.

14.6. Extreme Weather

14.6.1. Ice Throw

Ice can accumulate on the turbine blades, nacelle and tower during cold weather conditions. Wind turbines can continue to operate with a very thin accumulation of snow or ice, but will shut down automatically as soon as there is sufficient build up to cause aerodynamic or physical imbalance of the rotor assembly. Potential light icing conditions affecting turbines in Scotland can be expected 2 to 7 days per year.⁷⁵ If these conditions occur, there is a possible risk of ice throw. Monitoring systems and protocols are in place to ensure the turbines are stationary during icy conditions and are restarted in a controlled manner to ensure safety. There have been no recorded incidences of ice throw injuries at any wind turbine site in the UK in recent winters.

14.6.2. Lightning Strike

Wind turbines can be inclined to lightning strikes due to their height and blades. Modern wind turbine blades are now protected with an inbuilt lightning protection system (LPS) which means that if struck by lightning, the turbine will automatically shut down.⁷⁶

⁷⁵ Wind Energy Production in Cold Climate

<http://cordis.europa.eu/documents/documentlibrary/47698271EN6.pdf>

⁷⁶ Supergen Wind http://www.supergen-wind.org.uk/docs/presentations/2010-09-24_8_1_Peesapati_Lightning%20Protection%20of%20WT.pdf

14.6.3. Extreme Wind

Extreme wind speeds may occur due to severe weather conditions such as storms. Such events can lead to damage or failure of wind turbine components. However, modern turbines are programmed to switch off during high wind speeds in order to prevent damage.

Appendix 2



KAREN YEOMANS : Executive Director (Economy & Communities)

No N/16/01126/PP
(Original Application No. N/^^)

REFUSAL OF PLANNING PERMISSION

Type of Application: Local Application

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT, 1997,
AS AMENDED BY THE PLANNING ETC (SCOTLAND) ACT 2006.
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND)
REGULATIONS 2013

To : Mr Robert Miller
c/o VG Energy Fao Clare Esler
Waterside Farm
Glasgow Road
Galston
KA4 8PB

With reference to your application received on 22 November 2016 for planning permission under the above mentioned Acts and Orders for :-

Erection of a wind turbine (36m to hub and 47m to blade tip), formation of access track and associated infrastructure

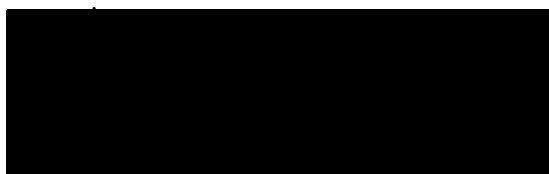
at Jameston Moss
Dalry
Ayrshire
KA24 4HA

North Ayrshire Council in exercise of their powers under the above-mentioned Acts and Orders hereby refuse planning permission on the following grounds :-

1. The proposed development would be contrary to criteria (a), (b), (c), (h) and (i) of Policy PI 9 of the Adopted North Ayrshire Local Development Plan by reason of:
 - (a) the inappropriate design and scale of the development in relation to its surroundings;
 - (b) the significant adverse effect of the development on the intrinsic landscape quality of the area, the visual impact of which could not be mitigated due to the siting/scale of the turbine on a visually prominent, flat, open field;
 - (c) the 'high sensitivity' of the area for small-medium typology turbines within the Landscape Capacity Study for Windfarm Development in North Ayrshire;
 - (h) the unacceptable cumulative impact on the local countryside, in combination with nearby turbines at Dove Hill, Benthead, Lissens Moss and operational windfarms at Baidland Hill (Dalry Community Windfarm/Millour Hill) and Kelburn.
 - (i) the proposal would not satisfy the contents of the Ayrshire Supplementary Guidance: Wind Farm Development (October 2009) and the Landscape Wind Capacity Study (June 2013).

all to the detriment of the rural character of the area.
2. The proposal would be contrary to the General Policy in respect of (a) unacceptable siting, design and external appearance; (b) adverse impact on residential amenity and (c) adverse impact on landscape character.

Dated this : 20 January 2017



.....
for the North Ayrshire Council

(See accompanying notes)



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
AS AMENDED BY THE PLANNING ETC (SCOTLAND) ACT 2006.
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND)
REGULATIONS 2013 – REGULATION 28

KAREN YEOMANS : Executive Director (Economy & Communities)

FORM 2

1. If the applicant is aggrieved by the decision to refuse permission for or approval required by a condition in respect of the proposed development, or to grant permission or approval subject to conditions, the applicant may require the planning authority to review the case under section 43A of the Town and Country Planning (Scotland) Act 1997 within three months from the date of this notice. The notice of review should be addressed to Committee Services, Chief Executive's Department, Cunninghame House, Irvine, North Ayrshire, KA12 8EE.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

REPORT OF HANDLING



North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

Reference No:	16/01126/PP
Proposal:	Erection of a wind turbine (36m to hub and 47m to blade tip), formation of access track and associated infrastructure
Location:	Jameston Moss, Dalry, Ayrshire, KA24 4HA
LDP Allocation:	Countryside/Rural Community
LDP Policies:	PI9 / General Policy /
Consultations:	Yes
Neighbour Notification:	None Required
Advert:	Regulation 20 (1) Advert Published on:- 30.11.2016 Expired on:- 28.12.2016 Schedule 3 Published on:- 30.11.2016 Expired on:- 28.12.2016
Previous Applications:	None
Appeal History Of Site:	

Description

It is proposed to erect a wind turbine with the following specifications on a rural site on land associated with Jameston Moss which lies approximately 3.6km to the north east of Kilwinning and 3.6km south east of Dalry. The site is situated approx. 400m north of the applicant's dwellinghouse and business property. The closest dwelling which is not financially involved would be Arranview Cottages which are situated approx. 300m south west of the site. In the rural area beyond, there are many more farms and isolated houses.

The development is anticipated to have an operational period of 25 years. A description of the proposal is as follows:

Height to blade tip:	47m
Height to hub:	36m
Rotor diameter:	22m - 3 blades
Turbine capacity:	100kw

Infrastructure: New access track formed from existing track through field to the north of Jameston Moss, 166m in length.

The landscape around Jameston Moss is lowland and pastoral in character. There are many farms and isolated houses within a rolling landscape of small fields bounded by hedgerows and tree belts. Many of the farm steadings are situated on the top of the low hills providing views over the local landscape. The farm steadings provide landmarks and reference points within the countryside. There are also extensive broadleaved and coniferous woodland plantations within the local landscape, many of which have been planted on sloping ground. The Dusk Water has cut a narrow valley through the landscape to the west and north of the site. The uplands of the Renfrew Heights to the north west form the distant backdrop to this lowland area. The upland area near Ardrossan also provides a distant backdrop to the south west. Both of these upland areas have large wind farm developments situated on the hill tops. To the east the ground is relatively flat and there are distant views towards the Whitelee Windfarm. The topography falls gradually towards the south west and south east, and on higher ground there are long views across the Ayrshire plain and towards the Firth of Clyde to the south west.

There are long views from the B707 to the north of the site and when approached from the south from the minor road just off the B778, including direct views from the A737 (Kilwinning - Dalry) to the west and other minor roads within the vicinity.

There are 3 existing turbines within 1.5km of the site including consent for a 4th which has not yet been erected. All figures given below relate to blade tip heights:-

Dove Hill: 2 no. x 45m high turbines - 1.5km west of the site. One turbine has been erected.

Benthead: 1 no. 61m high turbine - 1km south of the site.

Lissens Moss: 1 no. 15m high turbine - 550m south east of the site.

The application site is located within the countryside as identified in the adopted LDP. The proposal requires to be assessed against Policy PI 9 (Renewable Energy) and the relevant criteria within the General Policy of the adopted Local Development.

Also relevant are the Ayrshire Supplementary Planning Guidance (SPG) on Wind Farm Development and the Landscape Capacity Study for Wind Farm Development in North Ayrshire - Phase Two Report. In addition, a supplementary Landscape Wind Capacity Study 2013 was approved by the Council's Planning Committee on 14th August 2013. This supplementary guidance provides greater clarity on some of the Landscape Character Types in the 2009 study where it found there to be some potential to accommodate wind turbines. It also considers the more settled lowland areas where there has been recent interest in developing single and smaller turbines.

A design, access and planning statement together with photo montages has been submitted in support of the proposal. The planning statement includes commentary on planning policy, natural heritage, cultural heritage, residential amenity (including noise impacts), landscape/visual impacts, in addition to other considerations such as national policy on renewable energy. A noise information report and several technical data sheets on the candidate turbine have also been submitted.

Consultations and Representations

The application was subject to the statutory neighbour notification procedures, which included a notice in a local newspaper for amenity reasons.

20 representations objecting to the proposal have been received which raise concerns over cumulative impact, impacts on residential amenity, noise disturbance, shadow flicker, impact on environment and the suitability of the road to transport equipment.

Response: It is agreed that the proposal would result in an unacceptable cumulative visual impact to the detriment of residential amenity (see Analysis). However, there would be sufficient distance between nearby residential properties and the turbine (approx. 300m), such that shadow flicker is unlikely to be an issue. In relation to noise, Environmental Health has no objections to the proposal subject to the imposition of conditions with respect to noise imissions to noise sensitive premises (see below). The applicants have also confirmed that no works would be undertaken within 50m of any water course and that a field survey undertaken in May 2016 concluded that the site is of common habitat and not considered to be of notable ecological value. NAC Transportation (Roads) also advise that additional information with respect to the transport route of equipment/materials should be submitted for consideration (see consultation response, below).

3 representations supporting the proposal on the basis that the applicant's existing agricultural machinery hire business supports around 20 staff from the local area and that the proposal would also be a green project to offset carbon footprint.

Response: The LDP supports proposals for renewable energy subject to satisfying the relevant criteria contained within Policy PI 9 and the relevant criteria within the General Policy. Also relevant are the Ayrshire Supplementary Planning Guidance (SPG) on Wind Farm Development and the Landscape Capacity Study for Wind Farm Development in North Ayrshire - Phase Two Report and the supplementary Landscape Wind Capacity Study 2013. It is acknowledged that the applicant already operates a business. The turbine, if approved may contribute to electricity costs. However it is not considered that the size and location of the turbine is appropriate as it would have an unacceptable cumulative visual impact and would not satisfy the requirements of Policy PI 9, the General Policy and Landscape Capacity Studies(see analysis).

Consultations

NAC Transportation (Roads) - Further information detailing the transport route within North Ayrshire, a swept path diagram and max. size of vehicle should be submitted for consideration.

Response - Noted. This could be addressed through the imposition of an appropriate condition.

NATS - No objections.

Response - Noted.

Glasgow Prestwick Airport - No objections. The turbine does not conflict with safeguarding criteria.

Environmental Health - No objections subject to the imposition of conditions with regards to noise emission levels the development to noise sensitive premises.

Response: Noted. This could be covered by the imposition of appropriate conditions.

Analysis

As noted, the site is located within the countryside where there is a general presumption against new development in terms of Policy ENV 1 of the adopted LDP. However, as the proposal is for a renewable energy development, the main determining issue is whether the proposal accords with Policy PI 9 (Renewable Energy) of the LDP and the relevant criteria of the General Policy.

The 'Ayrshire Supplementary Planning Guidance on Wind Farm Development', published by the Ayrshire Joint Planning Unit in February 2009, the 'Landscape Capacity Study for Wind Farm Development in North Ayrshire - Phase Two Report' (2009) and the supplementary wind capacity study (2013) are also relevant to this proposal. For ease of reference, these documents will be referred to as part of the assessment against Policy PI 9.

In terms of Policy PI 9, renewable energy development shall accord with the LDP subject to meeting a range of criteria. Comments against each individual criterion are as follows:

Criterion (a) requires that development is appropriate in design and scale to its surroundings. In terms of the 'Landscape Capacity Study for Wind Farm Development in North Ayrshire - Phase Two Report', the site is located within the 'Ayrshire Lowlands' Landscape Character Type' (LCT).

The area is predominantly farmed with gently undulating to rolling pastures enclosed by hedges with clumps of woodland. In terms of the Phase Two report and 2013 Supplementary Study, the overall sensitivity of Ayrshire Lowlands is medium to high. The study describes the area as generally a diverse landscape, characteristically 'Ayrshire' in its rolling, small enclosed pastures and traditional, white-rendered farmsteads. It is of medium to small scale depending on the complexity of landform and landcover.

The 2009 capacity study indicated that there is limited capacity within this area for turbine developments below 60m with care required in terms of cumulative landscape and visual impacts arising. Further detailed assessment undertaken as part of the 2013 supplementary study advises that there is a noticeable threshold for "smaller" turbines (which are defined as those under 50m high to blade tip) at around 30-35m and that over this height, a turbine will quickly become a dominant feature in many lowland landscapes. The study also advises that there are some very limited opportunities for turbines 30-50m high identified, although turbines of this size would be best located in the flatter and more open areas of pasture fringing the remnant mosses to the east of Kilwinning. The study further identifies increased opportunities for turbines 15-30m which could be sited to be partially back-dropped

by low hills and ridges with existing woodland areas providing additional screening thus reducing their intrusion.

The proposed turbine would be 47m to blade tip and would be considerably higher than the preferred turbine height of below 30m as recommended in the 2013 capacity study. Accordingly, it is not considered that the development would be "appropriate in design and scale to its surroundings".

Criterion (b) requires that "it can be demonstrated that there is no significant adverse effect on the intrinsic landscape qualities of the area, (especially for areas with a specific landscape designation, and coastal areas)."

In terms of this criterion, proposals must demonstrate that there would be "no significant adverse effect." The site relates to a relatively flat open landscape where there is no natural backdrop. Given the height/scale of the proposed turbine together with its proximity to existing turbines at Benthead, Dove Hill and Lissens Moss, it is not considered that the visual impact would be acceptable. No mitigation of landscape and visual impacts would be possible at this choice of site, particularly in relation to cumulative impacts with existing nearby turbines at Benthead, Dove Hill and existing operational windfarms to the west at Baidland Hill/Kelburn.

The proposal would break the skyline when viewed from many locations north and south of the site, where there would be no backdrop of higher ground against which the proposal could be contained. The skyline of the high ground to the west is already dominated by wind turbines at Baidland Hill and Kelburn. This lack of mitigation - due to the combination of site selection and cumulative impact with nearby turbines (all within a 1.5km radius) and existing operational windfarms - is considered to be a key issue in the consideration of the proposal, adding greatly to the significant adverse landscape and visual impacts. PAN 45 provides further guidance on the assessment of cumulative landscape and visual impacts of multiple wind farm developments and states that "it may be appropriate to provide significant protection to the areas between wind farms or clusters of wind farms when analysis shows that their visual separation should be maintained". The countryside at Jameston Moss has a medium to high sensitivity to wind turbine development, with a leaning towards high sensitivity due to its relative proximity (over open farmland) to the Lowland River Valleys character area through which the Dusk Water flows. Accordingly, the proposal fails on criterion (b).

Criterion (c) states that "in the case of individual wind turbine or wind farm development, that the proposed development is not in an area designated as a "high sensitivity" in the "Landscape Capacity Study for Wind Farm Development in North Ayrshire."

In terms of this criterion, there is a high-medium sensitivity to the small-medium typology (turbines 30-50m) within the Landscape Capacity Study which states that there is no scope for the medium or small-medium typologies (turbines >30m) to be accommodated in this landscape.

Criterion (d) states that a proposal shall not result in unacceptable intrusion, or have a significant adverse effect on the natural, built, cultural or historic heritage of the locality.

The applicant has submitted commentary on the natural and built heritage. Whilst it is accepted that the proposal would have no significant adverse impact in terms of intrusion on these topic areas, it is considered that visual intrusion would occur. In terms of natural heritage, the site and surroundings comprise improved grassland which is intensively farmed, with no evidence of any special natural heritage interests nearby that the development could affect. The limited number of scheduled monuments and listed buildings in the local area would not be significantly affected by the proposal, either visually or otherwise.

Criterion (e) states that it should be demonstrated that there are no unacceptable adverse impacts on the operation of tourism or recreation interests. It is not considered that the proposal would significantly conflict with tourism or outdoor recreation interests.

In terms of criterion (f), NATS and Prestwick Airport have no objections to the proposal with regard to safeguarding.

Criterion (g) requires that the proposal can be satisfactorily connected to the national grid without causing negative environmental impact. The proposal is acceptable in terms of criterion (g).

Criterion (h) states "when considered in association with existing sites, sites formally engaged in the Environmental Assessment process or sites with planning permission, including those in neighbouring authorities, there are no negative impacts due to the cumulative impact of development proposals."

It is considered the proposal would result in an unacceptable cumulative visual impact due to the close proximity of existing turbines at North Lissens, Dove Hill, Benthead and existing operational windfarms as discussed above. Given the proximity to the nearby turbines within a 1.5km radius, the erection of an additional turbine would create a cluster of turbines and would have a significant cumulative impact on the rural landscape.

In view of the above, it is considered that there would be a negative cumulative impact, which would be unsympathetic to the character and amenity of this attractive rural area, since the turbine would result in a form of visual clutter of the landscape that cannot be mitigated due to its height above ground level. Whilst there are no statutory designations affecting this landscape, nor is it listed as being within a sensitive landscape in terms of the adopted Local Development Plan, the absence of such formal designations should not be taken to imply that this area of countryside has no scenic value nor attraction in its own right, especially given its proximity to the settlements of Dalry and Kilwinning, its proximity to various roads which cross the area such as the B707, B778 and a network of other minor roads, all of which provide numerous viewpoints from many sensitive receptors, including dwellinghouses. Isolated or sporadic development can have a damaging effect in the countryside and no mitigation can be offered which would offset the cumulative visual impact. Accordingly, the proposal fails on criterion (h).

With regards to criteria (i), for the above reasons, the proposal would not satisfy the contents of the Ayrshire Supplementary Guidance.

Criterion (j) primarily relates to proposed developments which would serve major industry, which is not applicable to this proposal.

In view of the above, it is considered that the proposal would not meet the requirements of criteria (a), (b), (c),(h) and (i) of Policy PI 9.

With regards to the General Policy, it is considered that criteria (a), (b) and (c) are relevant.

In relation to (a) siting, design and external appearance, for the reasons discussed above, it is considered that the siting, design and external appearance of the proposed turbine would be unsatisfactory within the context of the surrounding landscape given its height and close proximity to existing turbines all within a 1.5km radius. The proposed development would result in a cluster of turbines over a small area and together with the large scale windfarms at Baidland and Kelburn, would result in an unacceptable cumulative impact on the surrounding rural landscape.

As discussed above, it is considered that the proposed development, together with existing turbines, would result in unacceptable visual intrusion to the surrounding landscape and to a number of visual receptors, in particular the houses and farms within approximately 300m - 1000m of the site, and to a lesser extent, the settlements of Dalry and Kilwinning.

The main issue with respect to siting, design and external appearance is related to the visual and landscape impacts which would occur on a scale that cannot be effectively mitigated.

With regards to (b) amenity, the applicant has indicated that the proposed turbine would not give rise to unacceptable noise. However, a minimum separation distance of 700m is recommended in the 'Ayrshire Supplementary Planning Guidance on Wind Farm Development' - the proposal would fail on this issue since there are dwellinghouses within this distance (eg. Arranview Cottages are situated approx. 300m. south west of the site). However, other than visual and landscape impacts, Environmental Health has offered no objections subject to conditions with respect to noise emissions, and there are unlikely to be any adverse impacts through shadow flicker experienced at the nearest houses to the site. The turbine would be sited more than 10 times the rotor diameter (220m) from the nearest house.

In relation to (c) landscape character, for similar reasons to those outlined above, principally relating to the sensitivity of the landscape and its capacity to absorb such a development without adverse effects, it is considered that the proposal does not comply with this criterion. The proposed turbine would be readily visible and would break the skyline, given its position on a flat field. It is considered that the introduction of a single turbine measuring 47m to blade tip in close proximity to existing turbines would set an undesirable precedent for the rest of this landscape character type. The 2013 landscape capacity study indicates a stated preference for less than 30m to help avoid any cumulative effects arising with the nearby operational wind farms and turbines thus minimising clutter in the landscape. It also states that multiple turbines >30m associated with the majority of land holdings would have significant cumulative landscape and visual effects due to the relatively dense spacing of small farms characteristic of this landscape, quickly becoming a dominant feature. In view of the above, it is considered that the proposal would fail on criterion (c).

There are no other material considerations, other than to note that Scottish Planning Policy is supportive of renewable energy developments as a vital part of the response to climate change, but critically, highlights that a key role of planning is to guide development to appropriate locations. In summary, this is considered to be an unacceptable proposal by reason of the scale of the development for the site, and the consequent adverse visual effects it would have on the rural landscape, rural houses and nearby settlements.

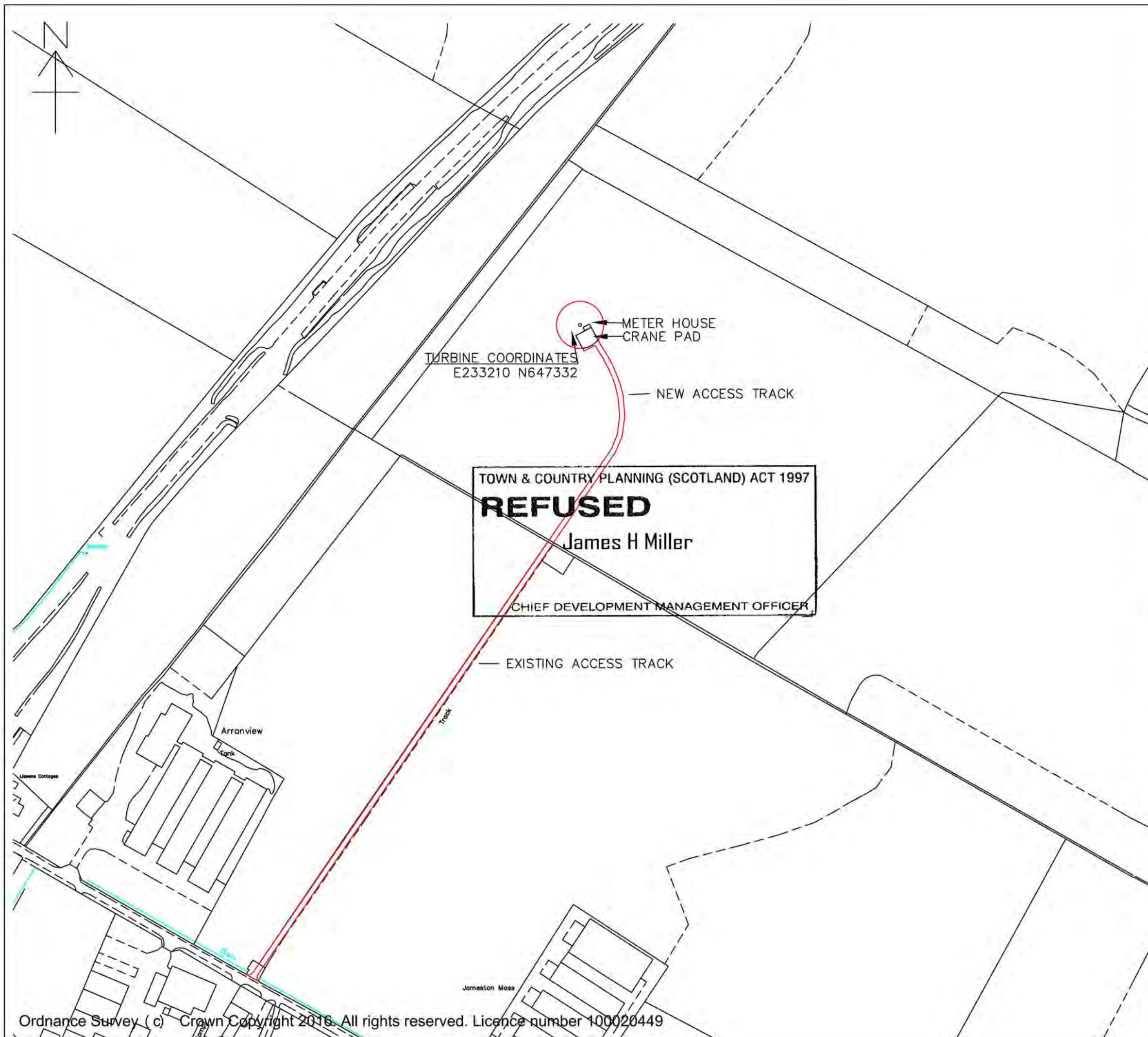
Decision

Refused

Case Officer - Mrs Fiona Knighton

Appendix 1 - Drawings relating to decision

Drawing Title	Drawing Reference (if applicable)	Drawing Version (if applicable)
Location Plan		
Site Plan		
Block Plan / Site Plan		
Proposed Elevations		



APPENDIX 3.2: SITE LAYOUT

TOTAL DEVELOPMENT AREA AMOUNTS TO 2620 SQUARE METRES.

PROJECT SPECIFICATIONS:

TURBINE TO BE AN nED100 WITH A TIP HEIGHT OF 47 METRES. FINAL COLOUR TO BE LIGHT GREY, RAL 7035, WITH A NON-REFLECTIVE MATT FINISH.

TURBINE POSITIONING TO INCORPORATE A 5 METRE MICROSITING ALLOWANCE, RESULTING IN A 32 METRE TURBINE CIRCLE.

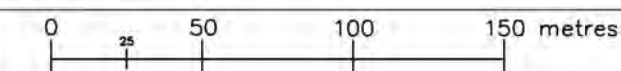
METER HOUSE TO BE 5.0 METRES LONG BY 2.5 METRES WIDE, 2.5 METRES TALL. SUBSTATION WILL BE A BRICK-BUILT STRUCTURE.

CRANE PAD TO BE 12 METRES BY 12 METRES. ACCESS TRACK WILL BE 3.5 METRES WIDE.

CRANE PAD AND ACCESS TRACK COMPOSED OF TYPE 1 COMPACTED STONE AGGREGATE TO A DEPTH BELOW GROUND LEVEL OF 0.3 METRES.



SCALE 1:2500






PROPOSED ERECTION OF ONE 47 metre TO TIP WIND TURBINE for MR MILLER at JAMESTON MOSS, DALRY, KA24 4HB.

SITE REFERENCE	DRAWING NUMBER
07471	07471/033/B
DRAWN BY	DATE
CE	09/06/2016

Appendix 10.1: Site and Buffers Location Map

Legend:

-  Proposed Turbine Location
E:233210 N:647332
-  5km Buffer
-  250m Buffer

0 0.5 1 2 Kilometers

1:40,000

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Site Name: Jameston Moss
Client Name: Mr Miller
Site Reference: 07471
Drawing Reference: 07471/024/b
Date: 04/11/2016
User: T.W

Appendix 4

To: alittle@north-ayrshire.gov.uk

History: This message has been replied to.

With reference to proposed wind turbine at Jameston Moss, Dalry,

As I have seen 200 acres plus of woodland has been planted to the north and west side (Dalry side) of the proposed site, this will in due course obscure any views from that side.

Looking at the number of green energy wind turbines in East Ayrshire,(which can be seen from many miles of) , North Ayrshire would seem to be lacking behind in its encouragement of green energy.

The local council should be actively encouraging local business men to offset their carbon footprint with such projects.

As the proposed turbine is smaller than the existing one at Benthead, the visual impact would be minimum to the area.

Wind Turbines only have a life expectancy of 20 to 25 years, and after that time if some other means of generating green sustainable energy has been brought to advantage, these wind turbines can all be taken down and recycled.





Fw: Planning Application N/16/01126/PP [OFFICIAL]

eplanning to: Angela Little

Sent by: **Lorna Carson**

10/05/2017 09:52

Hi Angela

Further support comment for above application.

kind regards

Lorna

----- Forwarded by Lorna Carson/Legal/North Ayrshire Council on 10/05/2017 09:51 -----

From: [REDACTED]
To: <eplanning@north-ayrshire.gov.uk>
Date: 07/05/2017 20:26
Subject: Planning Application N/16/01126/PP

Dear sir

I wish to make comment as follows regarding refusal of the above planning application which I support and urge NAC Planning department to reconsider.

I feel that it is utter nonsense to suggest that the turbines of Dalry Community Windfarm, Millour Hill and Kelburn have any bearing on the proposed location of the above application. Given that over 200 acres of trees have been planted since the above application was made which in a short space of time will eradicate any visual impact from 90% of the current residential properties.

200 acres of tree planting will have a much larger impact on the local landscape. This is 200 acres of agricultural land taken out of much needed food production when we are only producing around 60% of our country's requirement.

We have in North Ayrshire a desperate requirement to increase sustainable employment not least in the agricultural and rural sector. The trees in this area which I consider to be a blight on the landscape will produce very little employment. There are many more areas of Scotland including North Ayrshire where tree planting would have less effect on food production.

If granted the wind turbine generator would help to sustain the employment of 20 employees and provide much needed opportunities for training of apprentices.

Regards

[REDACTED]

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Focus. Passion. Inspiration.

EFQM
Recognised for excellence
3 star - 2015

[Public] Intended for public disclosure

[Official] Restricted to Council staff and contractors, with possible controlled public release on request

[Official-Protect] Personal or business sensitive data intended to be shared only with named recipients and requiring protection