Fred. Olsen Renewables

Rothes III Wind Farm

Volume 1: Non-Technical Summary

February 2019

Document history

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PREFACE

An Environmental Impact Assessment Report (EIAR) has been prepared in support of an application submitted by Natural Power Consultants (Natural Power) on behalf of the applicant Rothes III Limited. The application seeks consent under Section 36 of the Electricity Act 1989 and the EIAR has been prepared in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 as amended. The application also seeks a direction under Section 57(2) of the Town and Country Planning (Scotland) Act 1997 as amended that planning permission for the development be deemed to be granted.

This EIAR contains the information relating to the Environmental Impact Assessment to develop a wind farm comprising of up to twenty nine turbines and associated infrastructure (the proposed development). The proposed development is located approximately 4 km west of Rothes village in the Moray Council area.

The Environmental Impact Assessment Report and application may be viewed at the following address:

Moray Council

Elgin Council Offices

High Street

Elgin

IV30 1BX

This is Volume 1 of 4, of the EIAR. This volume presents a Non-Technical Summary (NTS) of the proposed development.

Other volumes include:

Volume 2 of the EIAR contains the written statement and all figures (with the exception of the figures associated with Chapter 8: Landscape and Visual and Chapter 9: Cultural Heritage) on the findings of the environmental impact assessment.

Volume 3a of the EIAR contains landscape and visual figures and visualisations.

Volume 3b of the EIAR contains landscape and visual and cultural heritage figures and visualisations.

Volume 4 of the EIAR presents the technical appendices of the EIAR Chapters.

The EIAR is also supplemented by accompanying documents including a Planning, Design and Access Statement and Pre-Application Consultation (PAC) Report.

Copies of the full Environmental Impact Assessment Report and Non-Technical Summary can be obtained from Natural Power, Ochil House, Springkerse Business Park, Stirling, FK7 7XE. Tel: 01786 542300.

Non-Technical Summary in printed form	£10
Environmental Impact Assessment Report in printed form (Volumes 1-4)	£900
Environmental Impact Assessment Report in PDF file format on CD (Volumes 1-4)	£10

An electronic copy (accessible free of charge) of the Environmental Impact Assessment Report can also be found on the Fred. Olsen Renewables website: https://fredolsenrenewables.com/windfarms/rothes-iii/

Contents

1. Introduction

1.1. Application

1.1.1. This Non-Technical Summary (NTS) summarises the main findings of the environmental studies carried out to build and operate the proposed wind farm development, Rothes III (the proposed development), located in the vicinity of the hill of Carn na Cailliche, approximately 4 km west of Rothes in Moray. The environmental studies have been completed as part of the Environmental Impact Assessment (EIA), the full results of which are presented in the Environmental Impact Assessment Report (EIAR). These findings can be found in Volume 2 of the EIAR, which is referenced throughout this NTS. Volume 2 incorporates more detailed information about the proposed development including its location, design and potential environmental impacts. The EIAR has been prepared to accompany an application (the application) submitted by Natural Power Consultants Ltd, on behalf of Rothes III Limited. The application seeks consent under the Section 36 of the Electricity Act 1989, and the EIAR has been prepared in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

1.1.2. This is Volume 1, of 4, of the EIAR. This volume presents a Non-Technical Summary (NTS) of the proposed development.

- Volume 2, of the EIAR, contains the full written statement of findings of the EIA (including all figures except the Chapter 8: LVIA and Chapter 9: Cultural Heritage figures and visualisations.
- Volume 3a, of the EIAR, contains Chapter 8 figures and visualisations.
- Volume 3b, of the EIAR, contains Chapter 8 and Chapter 9 figures and visualisations.
- Volume 4, of the EIAR, contains the technical appendices of the EIAR chapters.

1.1.3. The application is also supplemented by a Planning, Design and Access Statement and a Pre-Application Consultation (PAC) report.

1.1.4. Copies of the full Environmental Impact Assessment Report can be obtained from Natural Power, Ochil House, Springkerse Business Park Stirling, FK7 7XE, Scotland, UK: Telephone: +44 (0) 1786 542 300. Separate copies of Volumes 2, 3 and 4 can also be obtained from Natural Power.

- Environmental Impact Assessment Report in printed form (Volumes 1-4) £900
- Environmental Impact Assessment Report in PDF file format on CD or USB stick £10

1.2. The Applicant: Rothes III Limited

1.2.1. Rothes III Limited is a subsidiary company of Fred. Olsen Renewables Ltd (FORL). FORL has been developing and operating wind farms since the mid 1990's and is fully committed to the Scottish and UK renewables energy generation market, with an operational portfolio generating capacity of over 569 MW. This includes the existing operational Rothes I and Rothes II wind farms and the nearby Paul's Hill wind farm.

1.3. The Lead Agent: Natural Power Consultants Ltd (Natural Power)

1.3.1. The proposed development has been designed and assessed by the applicant in association with their lead consultants, Natural Power. Natural Power has been appointed to coordinate and produce this EIAR and associated EIA documentation.

1.3.2. Natural Power has been providing expertise to the renewable energy industry since the company was formed in 1995 and is one of the UK's leading wind farm consultants. As well as development and EIA services, Natural Power also provide expert advice and due diligence consultancy, site construction

management, site operation and maintenance. Natural Power currently employs over 360 people working full time on providing wind energy services internationally.

1.3.3. Natural Power has also commissioned the following specialist consultants (Table 1) to provide professional advice for specific assessments in relation to the EIA of the proposed development.

Table 1: Specialist Consultants involved in the production of this Environmental Impact Assessment Report

CONSULTANTS		
LANDSCAPE ARCHITECTURE CONSULTANCY		
MVGLA Ltd	Cairndhu Dundas Street Comrie PH6 2LN	Tel: 01764 670506 *Contact: Marc van Grieken*
CULTURAL HERITAGE CONSULTANCY		
CFA Archaeology Ltd	Old Engine House, Eskmills Park, Musselburgh, East Lothian, EH21 7PQ	Tel: 0131 273 4380 *Contact: George Mudie*
NOISE CONSULTANCY		
Hayes McKenzie Partnership Ltd	Unit 3, Oakridge Office Park, Whaddon, Salisbury, Wiltshire, SP5 3HT	Tel: 01722 710 091 *Contact: Rob Shepherd*
FORESTRY CONSULTANCY		
Cawdor Forestry Limited	Cawdor Estate Office, Cawdor, By Nairn, Nairnshire, IV12 5RE	Tel: 01667 402415 *Contact: Steve Connoly*
AVIATION CONSULTANCY		
Coleman Aviation Ltd	Grenville House, 9 Boutport Street, Barnstaple, EX31 1TZ	Tel: 01494 564704 *Contact: Mike Coleman*

1.4. The Proposed Development

1.4.1. The application is seeking consent for a proposed wind farm comprising of:

- Up to 29 wind turbines, 3 of a maximum height base to tip not exceeding 149.9 m, 8 of a maximum height base to tip not exceeding 200 m and 18 of a maximum height not exceeding 225 m;
- External transformer housing;
- Site tracks;
- Crane pads;
- Turbine foundations;
- Anemometry mast;
- Underground electricity cables
- 2 Substations/Control buildings;
- Temporary construction and storage compounds
- Up to 6 borrow pits
- Associated works/infrastructure;
- Forest felling and restocking;
- Water crossings and drainage attenuation measures as necessary; and
- Health and safety signage.

1.4.2. The proposed development is located in the vicinity of the hill of Carn na Cailliche, approximately 7 km north east of Upper Knockando in Moray (see NTS Figure 1.1 for the location of Rothes III in a regional context.) The proposed development is centred on the British National Grid Coordinates 320933E 848356N. See NTS Figure 1.2: Proposed Development Area. NTS Figures are included at the end of the NTS.

1.4.3. The location of the proposed turbines are provided in Table 2 below:

Table 1: Location of Proposed Turbines

Turbine Number	Easting	Northing	Maximum Tip Height (m)	AOD (m)
1	318889	849248	200	283.38
2	318848	848801	200	321.95
3	319318	848898	200	315.05
4	319793	849194	200	312.98
5	318694	848185	200	356.94
6	319206	848337	200	352.04
7	319837	848715	200	329.77
8	320320	849349	225	311.25
9	319126	847808	149.9	381.81
10	319797	848164	225	329.58
11	320362	848509	225	307.14
12	320600	849021	225	301.89
13	319990	847630	149.9	344.66

Turbine Number	Easting	Northing	Maximum Tip Height (m)	AOD (m)
14	319501	847630	149.9	368.85
15	320705	847949	225	301.62
16	321353	848360	225	284.54
17	320135	847094	225	308.49
18	321062	847574	225	307.02
19	321545	847962	225	302.79
20	322127	848307	225	282.62
21	320664	847055	225	296.14
22	321383	847259	225	296.46
23	321890	847726	225	301.34
24	321021	846715	225	268.20
25	321649	846943	225	285.54
26	322086	847360	225	300.00
27	321554	846445	225	249.84
28	322185	846568	225	265.33
29	322407	847117	200	302.75

1.4.4. The proposed development will act as an extension to the operational Rothes I and II Wind Farms. The wind farms became operational in 2005 and 2013 respectively and comprise of the following:

Rothes I – 22 turbines with maximum height base to tip not exceeding 100 m

Rothes II – 18 turbines comprising 15 with maximum height base to tip not exceeding 125 m and 3 with maximum height base to tip not exceeding 110 m

1.4.5. The proposed development is shown in the following NTS Figures, included at the end of the NTS:

- NTS Figure 1.1: Regional Context Map;
- NTS Figure 1.2: Proposed Development Area;
- NTS Figure 1.3: Constraints to Site Design;
- NTS Figure 1.4: Layout Evolution;
- NTS Figure 1.5: Layout Evolution Wirelines;
- NTS Figure 1.6: Blade Tip ZTV.

1.4.6. The proposed development is expected to have an operational life of 35 years.

2. Policy Context

2.1.1. Chapter 2: Policy Context, in Volume 2 of the EIAR, describes in detail the policy relevant to the proposed development. This includes a review of the guiding legislation and policy in relation to renewable energy and planning at the local, regional, national and international levels.

2.1.2. The chapter has given due consideration to the Scottish Energy Strategy (2017) and the associated Scottish Onshore Wind Energy Policy Statement (2017). Both of these documents duly recognise that the economic landscape for onshore wind turbine development changed following the removal of subsidies in 2015, and therefore if onshore wind is to remain a viable form of energy generation wind turbines will need

to become larger (taller in overall height with larger rotors). These turbines increase efficiency and maximise the use of the available wind resource, and also reduce the turbine numbers per unit area of land.

2.1.3. Consideration has also been given to planning policy and supporting guidance in Moray, which supports a general move towards a low carbon economy for the area and recognises there is scope for further development in the area around the existing Rothes I and II Wind Farms. Further details on how these matters have been considered are referenced throughout this EIAR. Attention has also been given to the Cairngorms National Park's policies, as the proposed development lies approximately 18 km from the park and is visible from certain viewpoints within the park. The visibility from the park and the impact upon the Special Qualities of the park is considered in detail in the Landscape and Visual Impact Assessment chapter (Chapter 8) of the EIAR. An overall assessment of how these policy matters have been considered in relation to the proposed development is set out in the Planning, Design and Access Statement which accompanies this application.

3. Site Selection and Design Evolution

3.1.1. Chapter 3: Site Selection and Design Evolution, in Volume 2 of the EIAR, describes the steps that have been considered in the design evolution of the proposed Rothes III Wind Farm. This chapter demonstrates how the site design and the layout of the turbines evolved through the initial site selection process, identification of various constraints (see NTS Figure 1.3) and site specific factors, and highlights the key design criteria applied.

3.1.2. With reference to NTS Figure 1.4 and NTS Figure 1.5, a layout was identified comprising of turbines up to 225 m. An assessment of the landscape and visual impact of the turbine layout of this scale and size was conducted by the project landscape architect. Following a final review of the layout and taking into account the overall design strategy and the identified site constraints, the decision was taken to reduce the hub height and increase the rotor diameter (although not increasing the overall tip height) for 26 out of the 29 proposed turbines. The final layout (Option C shown on NTS Figure 1.4) is considered to be a well-balanced design from key viewpoints and receptors whilst also giving due consideration to key constraints. It is also considered that with this layout there are significant improvements in the proportions of the turbines across the range of assessment viewpoints, but is particularly well illustrated in NTS Figures 1.5. The proportions of the turbines are considered to be compatible with the proportions of the existing Rothes turbines. The visibility of the proposed Rothes III Wind Farm is illustrated in the Zone of Theoretical Visibility (ZTV) figure, NTS Figure 1.6. ZTVs assume a bare earth model and are created using the proposed turbine dimensions.

3.1.3. The final design has sought to balance the technical requirements of the project with the environmental considerations highlighted by consultees and the public during early consultation.

4. Public Consultation

4.1.1. Engagement with consultees commenced prior to scoping on the 10th March 2017. In accordance with the Scoping Guidelines provided by the Scottish Government's Energy Consents and Deployment Unit (ECDU), Natural Power undertook an initial pre-scoping meeting with the ECDU, Scottish Natural Heritage, Cairngorms National Park Authority, Forestry Commission Scotland, Scottish Environmental and Protection Agency and Moray Council (Historic Environment Scotland was also invited although elected not to attend).

4.1.2. A scoping report was then submitted on the 5th of September 2017 and formal consultation responses were then received. A summary of the consultation responses is set out in Chapter 3: Site Selection and

Design Evolution in Volume 2 of the EIAR. The full Rothes III Scoping Opinion received from the Scottish Government is presented in Appendix 1.2 in Volume 4 of the EIAR.

4.1.3. In addition, a specific Landscape & Visual meeting took place on the 19th of April 2018 at which Moray Council, SNH, the Cairngorms National Park Authority, the Energy Consents Unit and Natural Power and the Applicant were present. At this meeting the scope and details of the landscape and visual assessment were agreed.

4.1.4. Natural Power also went through the gatecheck process with the ECDU, where the scoping responses received and post scoping consultations were described and discuss how these responses and concerns were addressed within the EIAR to be submitted. This process also required input from Moray Council, Scottish Natural Heritage (SNH), the Cairngorms National Park Authority, Scottish Environment Protection Agency (SEPA), Historic Environment Scotland (HES), Forestry Commission Scotland (FCS) and Marine Scotland. These consultees were provided with a layout plan of the proposed development, a proposed development boundary plan, the proposed structure of the EIAR and timeline for its submission, a summary of engagement with consultees and communities to date along with the scoping responses and how these had been dealt with in the EIAR. Those present at the gatecheck were invited to comment on these documents.

4.1.5. Non-statutory consultees were also consulted as part of the formal scoping process and where required throughout the EIA process. These include:

- Marine Scotland
- Spey Fishery Board
- RSPB Scotland
- Scottish Wildlife Trust
- Fisheries Management Scotland
- The Crown Estate
- The Mountaineering Council of Scotland
- Scottish Wild Land Group
- Garden History Society in Scotland
- John Muir Trust
- Historic Environment Scotland
- Scottish Water
- Forestry Commission Scotland
- Transport Scotland
- Aberdeen Airport
- Atkins Global (to advise on telecommunication links)
- Highlands and Islands Airport
- Highland Gliding Club
- BAA Aerodrome Safeguarding
- The Coal Authority
- British Telcom (BT)
- Civil Aviation Authority
- Defence Infrastructure Organisation (DIO)
- Joint Radio Company (JRC)

- Scotways
- NATS Safeguarding
- Visit Scotland
- British Horse Society
- Nuclear Safety Directorate (HSE)

Communities Consulted

4.1.6. The proposed development is located entirely within the boundary of Moray Council. There are twelve communities which have been consulted as part of the scoping process. These are represented by a variety of organisations including Community Councils, Community Associations and Village Councils. The communities consulted include Heldon Community Council; The Rothes Council; Innes Community Council; Lennox Community Council; Strathisla Community Council; Dufftown and District Community Council; Knockando Community Association; Elgin Community Council; Speyside Community Council; Carron Cardhu Community Association; Aberlour Community Association and Archiestown Village Council.

4.1.7. Natural Power have communicated with all communities (see Appendix A) and have liaised extensively with The Rothes Council, Innes Community Council, Archiestown Village Council, Heldon Community Council, Aberlour Community Association, Knockando Community Council, Elgin Community Council and Speyside Community Council during the scoping and post scoping period, ensuring that they were fully informed of the proposed development at an early stage and that they received appropriate notification regarding public exhibitions.

4.1.8. Telephone and email communications were also made to other community councils and associations listed in 4.1.6 above with the offer of providing presentations to communities if required.

Public Exhibitions

4.1.9. Public exhibitions were held on the 3rd, 4th, 5th and 6th of July 2018. These took place in Dallas at the Houldsworth Institute (3rd July); Rothes at the Grant Hall (4th July), Archiestown at Archiestown Village Hall (4th July), Aberlour at the Fleming Hall (5th July) and Elgin at the Community Centre (6th July). A total of 33 members of the public attended the exhibitions. A flier was created and made available for the public exhibitions for attendees to take away.

4.1.10. Prior to the public exhibitions, a public notice was published in the Northern Scot newspaper, which appeared on Friday the 22nd June 2018. This notice also provided an email address so that readers could contact Fred. Olsen Renewables Ltd. if they had any comments relating to the proposed development. The notice also provided a link to a website where further information on the proposed development could be found.

4.1.11. A poster for the public exhibition was also distributed to community groups and displayed in several locations in Dallas, Rothes, Archiestown, Aberlour and Elgin prior to the public exhibitions. Representatives of these community councils and associations also informed other members of their groups of the public exhibitions and some shared the details on their social media pages.

Community Benefit and Shared Ownership

4.1.12. The proposed development will continue to provide support for community initiatives for the 35 year life of the wind farm, as have the existing Rothes I and II Wind Farms since they became operational, so allowing local communities to invest in their long term future.

4.1.13. In response to Scottish Government ambitions to encourage increased shared ownership opportunities, there is the potential in relation to the proposed Rothes III Wind Farm for community organisations and

Forestry Commission Scotland to take up such an opportunity. Initial information about this opportunity (Stage 1 leaflet) has been disseminated to community organisations in the area and there is an ongoing process in place for community organisations to explore this opportunity in more detail as the proposed development moves forward. The shared ownership opportunity also exists for Forestry Commission Scotland, which will help in diversifying its sources of income. In taking up this opportunity, community organisation will still be able to receive community benefit payments as has traditionally been the case, albeit that these community benefit payments could be used as a potential source of their investment in the project (if they so choose). Full details of all options available to community organisations will be provided during the process.

5. Development Details

5.1.1. Chapter 4: Description of Development, in Volume 2 of the EIAR outlines the details of the proposed development, including specifications of turbines, access tracks and electrical infrastructure. It also describes the general construction methodology, timescales and typical construction equipment likely to be used. Operational and decommissioning phases are also described within the chapter.

5.1.2. The construction methods detailed build on best practice methodologies developed at other wind farms to comply with Health and Safety requirements for construction, operations and follow relevant guidelines including the Scottish Environmental Protection Agency's (SEPA) Pollution Prevention Guidelines, SNH's Good Practice During Wind Farm Construction and SNH's/Forestry Commission Scotland's Floating Roads on Peat guidance.

5.1.3. Further construction and mitigation details will be provided in the Construction Method Statement (CMS), which will include the Construction Environmental Management Plan (CEMP). This will be produced pre-construction when a principal contractor has been appointed.

5.1.4. It is proposed that, as far as is practical, the planning conditions that applied to the Rothes II Wind Farm consent in 2010 (see Appendix 1.3 in Volume 4 of the EIAR) should also be applied to the proposed development (Rothes I Wind Farm conditions are less relevant to this application now as this is the older set of conditions – consented in 2003). This will ensure that there is, in general, duplicate sets of similar conditions applying to Rothes II and Rothes III Wind Farm's, with the new set recognising the use of shared infrastructure for the lifetime of the new phase of development.

5.1.5. It is also proposed, as far as practical, that existing infrastructure will be utilised thus ensuring disturbance to the environment is kept to a minimum and prolonging its useful life. Existing infrastructure to be used includes tracks, the existing substation and electricity cabling.

5.1.6. The list of elements of the wind farm are provided in 1.4.1 above.

Substation Control Building

5.1.7. Two new on site substations are proposed from which the proposed development will connect to the wider network. The impact on the local environment is anticipated to be minimal and is assessed in the various chapters throughout the EIAR.

Construction Activities

5.1.8. Construction of the proposed development would begin following granted consent from the Scottish Ministers, within the period stated within the consent. The general order of on-site activities is summarised in Table 3 below:

Table 3: List of general order of on-site activities

Construction Elements
Site investigation
Mobilisation of civil and electrical contractor
Construction and upgrades to access and site tracks
On-site temporary construction compound and site storage compound
Track reinstatement
Excavation and construction of turbine foundations
On-site cabling
Construction of the substation
Preparation of crane pads
Installation of turbine transformers
Mobilisation of turbine supply contractor
Turbine delivery
Turbine erection
Reinstatement around turbines
Turbine fit-out
Connection to substation and grid connection
Commissioning of wind farm
Reliability testing
Demobilisation
Forestry felling and restocking

Construction Programme

5.1.9. The construction period for the whole of the proposed development is envisaged to last for approximately eighteen months, from commencement of construction through to installation and commissioning of the turbines, ending with site reinstatement and demobilisation (as shown on the typical construction programme below):

5.1.10. A typical 18 month construction programme is presented in Table 4 below.

Table 4: Typical Construction Programme

Month > Task Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Mobilisation to site	X																	
Forestry	X	X	X															
Access and site tracks	X	X	X	X	X	X	X	X	X									
Crane hardstanding	X	X	X	X	X	X	X	X	X									
Turbine Foundations			X	X	X	X	X	X	X	X	X	X						

Month > Task Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Substation			X															
Cabling									X	X	X	X	X					
Turbine transformers									X	X	X	X	X	X				
Turbine deliveries									X	X	X	X	X	X				
Demobilisation/ site clearance																	X	X

* Pre construction surveys will take identify sensitive receptors, such as breeding birds, and where such receptors are found appropriate action will be taken to avoid these receptors applying a suitable buffer distance and/or applying appropriate mitigation and good practice. It will be the aim of the construction programme to minimise construction activity during the winter months when there is high precipitation to ensure that run off and siltation is minimised.

Installation and Operation of Turbines

5.1.11. The selected turbines would be of a modern design with three blades mounted on a horizontal axis, attached to a nacelle, housing the generator, gearbox and other operating equipment. The nacelles would be mounted on a tubular tower which allows access to the nacelle. There are 3 different blade tip heights of turbines proposed; 3 turbines of an overall height from base to tip not exceeding 149.9 m, 8 turbines of an overall height from base to tip not exceeding 200 m and 18 turbines of an overall height from base to tip not exceeding 225 m. It is expected that the turbine cut in wind speed will be approximately 3m/s and they will rotate clockwise when viewed from the front.

5.1.12. Where possible, the delivery of the turbine components would be scheduled, weather dependent, to allow for direct lift off the transport trailers. Otherwise, turbine components would be stored on, or adjacent to, the crane pad areas. Alternatively, components may be delivered to the construction compound for internal distribution by a separate tractor unit. The tower sections would be erected, followed by the nacelle and hub. Following erection of the tower sections and the nacelle, the blades would either, be lifted and attached individually to the hub in position, or the hub and blades would be raised together, as a unit, and attached to the nacelle. The cranes would then move to the next turbine location.

5.1.13. Once installed and fully commissioned, the wind turbines would operate automatically and can be controlled remotely or from the on-site metering building. Regular visits will be made by technicians to infrastructure and turbines in four-wheel drive (4WD) vehicles or similar. In addition, longer servicing visits would be required, typically every six months, along with irregular unscheduled maintenance, as may be necessary. Occasional use of larger vehicles, such as cranes or lorries similar to those used during construction may be necessary, should there be a requirement for replacement of major turbine components.

5.1.14. Wind farm performance would be remotely monitored using the existing permanent anemometer masts, together with a Supervisory Control and Data Acquisition system (SCADA) that would monitor the individual turbines and the grid connection.

Offsite Access Route

5.1.15. The full details of the access route are contained in the Abnormal Load Assessment (Appendix 12.1 in Volume 4 of the EIAR) and in Figure 12.1 (in Chapter 12: Traffic and Transport in Volume 2 of the EIAR). The Route assessed during in study is as follows:

- Exit Invergordon Port onto the B817;

- Join the A9, from the B817;
- Travel along the A9, across the Cromarty Bridge;
- Travel along the A9, across the Kessock Bridge;
- Continue along the A9, then onto the A96 at the Raigmore Interchange;
- Continue on the A96 through Nairn (eastbound);
- Continue on the A96 through Forres (eastbound);
- Continue on the A96 to Elgin, then at roundabout with the A96 / South Street, take South Street;
- Continue along South Street onto the A941;
- Continue along the A941 till roundabout with Moss Street, then take A941 (southbound);
- Continue along A941 for approximately 4.6 miles;
- Turn off A941 onto unclassified road at Birkenband Cottage (access to site);

5.1.16. The abnormal load assessment was carried out using visual inspections and swept path analysis of typical turbine components of the turbine size being proposed and is based on OS Mastermap data. Further detailed assessments for the specific turbine model eventually chosen for the site will be undertaken to confirm the findings of the abnormal load assessment.

Offsite Grid Connection

5.1.17. There will be an electricity connection between the onsite substation control buildings (1 and 2) and the SSE grid connection point to the north (1) and Blackhillock (or Aberlour) (2) to the east (see NTS Figure 1.2: Proposed Development Area) subject to confirmation and approval of exact specification and cable route from SSE as the grid operator. Onsite, cables will be laid alongside the access tracks.

Construction Employment

5.1.18. During the construction period there could be approximately 100 - 150 construction operatives carrying out the works on site that have been described. There would also be indirect local benefits arising from the construction phase, including use of hotels, B&Bs and other accommodation, hire of local equipment and plant, temporary employment of local work force and potential contracting of local subcontractors. The construction mobilisation would likely be spread over an 18 month period.

Operational Employment

5.1.19. It is envisaged that the turbines at the proposed development would be included within a wider portfolio of operational wind turbines and that persons and/or technicians would be on site as required. For the first few years of operation the turbines would be expected to be under warranty and maintenance would be performed by the turbine manufacturer. During these years there would be approximately 18 – 27 full time jobs in Scotland, with 8 - 12 of these being in Moray. The site would support a site manager to be based in the local area. Other contract personnel would attend the site as required to maintain the civil and electrical infrastructure as well as carrying out duties in relation to ecological monitoring and reporting. Site personnel would make use of the onsite control building, which has been designed to include office space and welfare facilities.

Decommissioning

5.1.20. At the expiry of the consent or the end of the wind farm's useful life, it is proposed that the turbines, transformers and the on-site substation would be removed. The upper section of the turbine foundations, to a depth of at least 1 m, would be removed and backfilled with appropriate material. Tracks will be left and allowed to grass over, or would be covered with soil and reseeded). At least six months prior to the

decommissioning of the site, a Decommissioning Method Statement would be prepared, for agreement with the local authorities and relevant consultees.

Safety of the Public

5.1.21. Throughout the construction phase of the proposed development the relevant statutory requirements would be adhered to. All potentially hazardous areas would be fenced off and all unattended machinery would be stored in the site compound or immobilised to prevent unauthorised use. In addition, temporary construction safety signs would be placed at each possible entrance to the site and in areas where there may be further danger, e.g. around settling lagoons and borrow pits.

5.1.22. Throughout construction, measures to manage diversion routes would be put in place. The diversion routes would be clearly marked and for safety reasons would direct the user away from any areas of construction.

6. Summary of EIA

6.1. Approach to the EIAR

6.1.1. Chapter 5: Approach to the Environmental Impact Assessment Report, in Volume 2 of the EIAR outlines the process and methodology regarding the application of Environmental Impact Assessment (EIA) used during the preparation of this EIAR to guide the specific elements of site assessment and design.

6.1.2. The EIA is based on various legislation, in particular, the Electricity Works (Environmental Impact Assessment) (Scotland) regulations 2017 (the EIA Regulations). Under the EIA regulations, the proposed development is classed as Schedule 2 development, requiring the project to be screened for EIA. The Applicant determined following an internal screening process that an EIA was required.

6.1.3. As part of the EIA process, scoping exercises were undertaken to identify the environmental effects that might result from a development with the characteristics defined during the early stages of the development process, with reference to the environmental receptors specific to the area in the vicinity of the proposed development. An essential part of this involved identifying the sensitive environmental receptors of the proposed development and its surroundings.

6.1.4. A number of existing data sources were collected and reviewed prior to the initiation of survey work targeted directly on gathering data for the EIA of the proposal. This included information and understanding of the site and surrounding area from the existing Rothes I and II Wind Farms. It was understood that existing data sources would, in most cases, be unlikely to provide sufficient data alone to use in the EIA but would provide a valuable initial stage with which to form methodologies for further survey.

6.1.5. Baseline surveys were carried out by specialist consultants in a number of different study areas. These were aimed at gathering sufficient data to form a picture of the current status of the environmental and human elements in the vicinity of the proposed development, and filling any gaps in existing historical data. The ultimate aim was to allow the prediction of the potential effects of a subsequent detailed development proposal upon these elements. Baseline survey methodologies and coverage are described in detail in the relevant assessments in chapters of this EIAR.

6.1.6. As a result of the consultation process, baseline studies and surveys the goal was to design a wind farm within the boundaries of technical and economic constraints that would avoid any unacceptable environmental impacts.

6.1.7. Each of the impact assessments detailed in the relevant chapters of this EIAR have been generally formulated in a similar way, giving an evaluation of the baseline conditions, the magnitude, sensitivity and

significance of impacts and then the residual impacts following the implementation of the stated mitigation measures and resultant beneficial effects.

6.1.8. As stated above significance of impacts is determined an evaluation of the baseline conditions, the magnitude, sensitivity and is assisted by the use of a significance matrix as shown in Table 5 below:

Table 5: Example Significance Matrix

Significance Matrix			
MAGNITUDE OF CHANGE			
High	Moderate	Moderate/Major	Major
Medium	Minor/Moderate	Moderate	Moderate/Major
Low	Minor	Minor Moderate	Moderate
Negligible	Negligible/Minor	Minor	Minor/Moderate
	Low	**Medium**	**High**
			SENSITIVITY OF RECEIVING ELEMENT

6.1.9. Significant effects are typically indicated as 'major' or 'moderate/major', although 'moderate' may also be considered as significant depending upon the context and the judgment of the assessor.

6.1.10. If any significant impacts are identified it is the aim to design out or reduce the significance of unacceptable adverse effects to an environmentally (or otherwise) acceptable level. This is known as mitigation by design or embedded mitigation (meaning mitigation that has been incorporated into the design of the development). If however it is not possible by applying such mitigation to eliminate adverse impacts to an acceptable level, additional specific mitigation will be proposed in order to do so. This is known as impact mitigation and is proposed to eliminate these residual effects. Details of any impact mitigation are summarised in Table 17.1 and 17.2 of Chapter 17: Summary, Residual Effects and Mitigation, in Volume 2 of the EIAR.

Cumulative Impacts

6.1.11. The EIA Regulations require the likely cumulative impacts of the proposed development to be assessed as part of an EIA. Hence, cumulative impacts are considered in each of the EIAR chapters. These can be broadly defined as impacts that result from incremental changed caused by other developments, plans, or projects together with the proposed development. The EIA regulations state that all likely significant cumulative effects resulting from the existence of the development, use of natural resources and the emission of the pollutants, the creation of nuisances and the elimination of waste should be considered within the EIA.

6.2. Summary of Assessment

6.2.1. Baseline surveys were carried out by specialist consultants in a number of different study areas. This allowed sufficient data to be collected and analysed to form an accurate account of the current status of environmental and human elements in the vicinity of the proposed development. It is proposed that for any data gaps that exist, further surveys will be completed prior to construction, as required.

6.2.2. The prediction of the potential effects from the proposed development and any mitigation measures were then considered to ensure that the proposed development has the fewest impacts possible.

6.2.3. Baseline Survey Methodologies and coverage are described in detail in the relevant assessments in the chapters of this EIAR. A summary of the findings of each assessment are provided in the sections below.

6.3. Ecology

6.3.1. Chapter 6: Ecology, in Volume 2 of the EIAR, describes the non-avian ecological interest at the proposed Rothes III Wind Farm and assesses the predicted effects of the proposed development on these interests. It details the methods used to identify the baseline ecological community within the proposed Rothes III development and surrounding locale, and the process used to determine the nature conservation value of the ecological features present. The chapter then sets out the potential effects of the proposed development on ecology during construction, operation and decommissioning, and assesses the significance of potential impacts on important ecological features, including cumulative impacts, at an appropriate bio-geographic scale.

6.3.2. The majority of the habitat surveyed within the proposed development area (1,397.44 ha), consists of commercial conifer plantation of varying ages (768.64 ha/ 55% of the surveyed area). This habitat is typically of low ecological value. There are also seven proposed turbine locations in areas that are currently open moorland on the northern slopes of Carn na Cailliche. This open moorland primarily comprises blanket bog, the second most extensive habitat on site (220.44 ha/16% of the surveyed area), with some smaller areas of heath, marshy grassland and flush. In addition to these habitats, surveyors recorded a habitat not described in National Vegetation Classification (NVC) or Phase 1 methodology that we have referred to on maps as Community x. Community x is a mossy, highly shade-modified assemblage which has developed on peat in a few locations that are shaded by adjacent forestry.

6.3.3. Of the plant species recorded in National Vegetation Classification (NVC) surveys, only two species were of conservation concern. These were: marsh stitchwort and slender sedge.

6.3.4. In relation to mammals, following scoping consultation, detailed assessment has been undertaken in the Ecology chapter for bats, pine martin and red squirrel. In addition, impacts on otter and other qualifying species were assessed during the Habitat Regulations Assessment (HRA) for the River Spey SAC.

6.3.5. Six confirmed species of bats were recorded during the activity surveys: common, soprano and Nathusius' pipistrelle, Daubenton's bat, Natterer's bat and brown long-eared bat. The highest levels of bat activity recorded during the static detector surveys were in September 2014 and August 2017. Activity during September in 2014 was greater than the total recorded activity across the three previous survey periods in 2014. In August 2017 activity was roughly three times that recorded in May and July 2017.

6.3.6. Evidence of pine marten recorded during the mammal surveys in 2014 and 2015 consisted of 38 scats, predominantly on tracks and in woodland clearings. Both fresh and older scats were recorded. This indicates that pine marten regularly use the Rothes III development area with activity focused around edge habitat.

6.3.7. There were 17 records of squirrel feeding activity in the forestry at the proposed Rothes III Wind Farm development made during squirrel surveys in 2015. Although species of squirrel cannot be discerned from feeding signs alone, the geographic location of the proposed Rothes III Wind Farm means that the feeding signs are almost certainly those of red squirrel.

6.3.8. Mitigation by design has been implemented and turbines and associated infrastructure have avoided sensitive habitats where practical. Where infrastructure is located close to Ground Water Dependent Terrestrial Ecosystems (GWDTE's) it will be designed to maintain hydrological connectivity in the surrounding habitat. Prior to commencement of construction works, pre-construction surveys will be carried out. These will include: surveys for mammals, birds, fish and water quality surveys.

6.3.9. A fish monitoring programme will be developed in consultation with Findhorn, Nairn and Lossie Fisheries Trust to safeguard the future of isolated trout populations in the watercourses connecting to the Rothes III Wind Farm development area. This will include up-dated pre-construction surveys and surveys during and post construction.

6.3.10. During the operational phase, with the exception of the operation of the wind turbines and general maintenance of the turbines, there will be little on-site operational activity and therefore embedded mitigation requirements during operation are minimal.

6.3.11. In relation to cumulative impacts only Important Ecological Features with negligible predicted impacts (as no other Important Ecological Features have greater impacts predicted) at Rothes III have been considered. These are bats and red squirrel. Of all protected mammal species observed, bats are most likely to be affected by additional wind farm development. Bat activity within the proposed Rothes III Wind Farm was low and following implementation of specific mitigation measures no significant impact on bats is predicted.

6.3.12. In summary, an assessment has been made of the potential for significant effects of Rothes III Wind Farm on habitats and non-avian species. By applying effective mitigation measures, mainly through the design process, and following best practice guidelines during construction, it is considered that the impacts upon ecological features will be **not significant** in terms of the EIA Regulations.

6.3.13. A specific Habitat Regulations Assessment (HRA) was undertaken to assess potential impact on the River Spey SAC. A Natura 2000 site with ecological qualifying features within 5 km of the proposed Rothes III Wind Farm. The most likely route to impact to all qualifying features of the SAC (otter, Atlantic salmon, freshwater pearl mussel and sea lamprey), is water pollution including siltation. The mitigation measures proposed will reduce the risk of such a pollution event occurring to the level that any significant effect on the conservation objectives of the SAC or its qualifying features is highly unlikely. With the successful implementation of all of the mitigation, it is concluded that potential effects for all qualifying features of the River Spey SAC will be reduced to negligible, and there will be no adverse effect resulting from this proposed wind farm development alone.

6.4. Ornithology

6.4.1. Chapter 7: Ornithology, in Volume 2 of the EIAR, describes the ornithological interests at the proposed Rothes III Wind Farm and assesses the predicted impacts of the proposed development on these interests. It details the methods used to identify the baseline bird community within the proposed development and surrounding locale, and the process used to determine the nature conservation value of the bird populations present. The chapter then sets out the potential impacts of the proposed development on birds during construction, operation and decommissioning, and assesses the significance of potential impacts on bird populations, including cumulative impacts, at an appropriate bio-geographic scale.

6.4.2. In line with good practice guidelines, a scoping document for the proposed development was issued to a range of consultees in September 2017. This document contained details of the proposed assessment methodology and ornithological features proposed for full Ecological Impact Assessment (EcIA) or to be scoped out of the EcIA. All ornithological features with the exception of the following were proposed to be scoped out on the basis that construction and operation of the wind farm would not be likely to result in significant impacts on them:

- Pink-footed goose;
- Greylag goose;
- Goosander;
- Black grouse;
- Capercaillie;
- Goshawk;
- Golden plover; and
- Crossbill sp

6.4.3. In view of the target species identified as potentially occurring within the proposed wind farm development area, and following consultation with SNH, the surveys listed below were undertaken, in line with SNH guidance:

- Breeding season VP surveys (mid-March to August inclusive);
- Non-breeding season VP surveys (September to mid-March, inclusive);
- Breeding raptor surveys: April to July 2014 and 2015;
- Black grouse lek survey: April and May 2014, 2015 and 2017;
- Capercaillie lek survey: April to May 2014, 2015 and 2017;
- Capercaillie brood counts: July/August 2014, 2015 and 2017;
- Upland breeding bird survey: April to July 2014 and 2015;
- Winter walkover: January and February 2015; and
- Hen harrier roost survey: January and February 2015

6.4.4. For each target species, results from surveys have been obtained through a combination of vantage point surveys, upland breeding season and winter walkover surveys in combination with specific surveys (e.g. Black grouse survey), if applicable. The results are all set out in Chapter 7 of the EIAR and the accompanying appendix. For the majority of target species, the results show that there will be limited impacts. The mitigation measures proposed are expected to reduce the effects for all Important Ornithological Features (IOF's) to which they apply, in the short and long-term. Following the implementation of mitigation measures, residual significance for all IOF's (except capercaillie) is considered to be **not significant**.

6.4.5. Due to the high sensitivity of capercaillie, extensive capercaillie surveys were carried out between 2014 and 2017 and the results assessed in combination with historic data (obtained in 2011 and 2012) and data from third parties. The results showed a continued presence of capercaillie on the site.

6.4.6. In order to fully assess the impact on this species three different scenarios have been used in the impact assessment for capercaillie as follows:

- Scenario 1: the 'do nothing' scenario. What is the most likely future status of the lek in the absence of the proposed development?
- Scenario 2: Construction of the wind farm in the absence of mitigation and positive enhancement measures
- Scenario 3: Construction of the wind farm with mitigation and positive enhancement measures

6.4.7. It is considered that only scenario 1 (if the proposed development does not get consented) or scenario 3 (as this is what is being proposed if consented) are likely. In scenario 3, mitigation measures proposed as part of the Habitat Management Plan (HMP), such as bog restoration and planting of scattered native trees and shrubs, will provide alternative diverse foraging, brood rearing and commuting habitat for capercaillie and black grouse at the north of the proposed development on land owned by Rothes Estate. It is considered that further measures for capercaillie may be better suited to off-site locations as part of a more integrated approach to conservation of this species at a regional level. To this end, rather than considering further measures for this species in the vicinity of the proposed development, it is suggested that opportunities are explored for providing financial support for existing third party conservation initiatives for capercaillie elsewhere in the region. An approach to support would need to be voluntarily agreed between the applicant, stakeholders and any relevant third parties

6.4.8. It is considered that the proposed mitigation and enhancement measures outlined above will provide regional level benefits for capercaillie in both the medium and longer-term.

6.4.9. In relation to cumulative impacts, it has been assessed that the following species may be impacted with a higher than negligible magnitude residual effect:

- Pink-footed goose (collision);
- Greylag goose (collision);
- Black grouse (disturbance/displacement);
- Capercaillie (disturbance/displacement and collision);
- Goshawk (disturbance/displacement and collision); and
- Merlin (disturbance/displacement).

6.4.10. Cumulative developments considered, including a total of 248 turbines are as follows: Rothes I, II and III; Paul's Hill I & II; Berry Burn; Hill of Towie I & II; Hill of Glaschyle; Edintore, Dorenell and Cairn Duhie.

6.4.11. It has been assessed that there will be no significant cumulative effects upon these species, with the exception of disturbance of capercaillie at a local level, but with the habitat enhancement proposed as part of this EIAR there are expected benefits for this species at a regional level.

6.4.12. The Ornithology Chapter also includes Habitat Regulation Appraisals (HRA's) assessing the potential impact of the proposed development on four designated Special Protection Areas (SPA's) and their qualifying features. These include:

- Loch Spynie SPA;
- Moray & Nairn Coast SPA;
- Darnaway & Lethen Forest SPA;
- Anagach Woods SPA.

6.4.13. Due to the distances involved between the SPAs and the proposed Rothes III Wind Farm, any adverse impacts to the SPA populations is predicted to be indirect and over the long- rather than short-term.

6.4.14. In relation to impacts on capercaillie, a programme of mitigation is proposed to reduce the risk of disturbance and collision impacts within the wind farm, and to enhance habitat connectivity in the medium to long term for this species outwith the wind farm. Following implementation of the mitigation measures it is considered there will be no adverse effects on site integrity arising as a result of the proposed development.

6.5. Landscape and Visual

6.5.1. Chapter 8: Landscape and Visual Impact Assessment, in Volume 2 of the EIAR, considers the potential effects of the proposed Rothes III Wind Farm development ('the proposed development') on landscape character, views and visual amenity. Landscape and Visual Impact Assessment (LVIA) is used to identify and assess the effects of change resulting from development, on both the landscape as an environmental resource in its own right, and visual amenity.

6.5.2. Effects on the landscape as a resource may be caused by changes to the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape. Effects on views and visual amenity, as experienced by people, may be caused by changes in the appearance of the landscape resulting from the proposed development. The assessment also considers throughout the potential effects of aviation lighting that is required for turbines over 150 m to blade tip. To mitigate the effects of aviation lighting it is the intention to install radar activated aviation lighting for the proposed Rothes III Wind Farm.

6.5.3. The LVIA follows on from the initial work carried out in preparation of the Rothes III Wind Farm Scoping Report. The potential landscape and visual receptors within 40km of the proposed development were analysed for the likelihood of effects in the Scoping Report. The receptors for which significant effects were identified as being possible, are assessed in this LVIA.

6.5.4. To allow a focussed assessment, where receptors are unlikely to be affected by the proposed development, either through having little or no theoretical visibility, or being distant from the proposed

development, those receptors have been scoped out of the LVIA. The exception to this is when long distance viewpoints are requested by consultees and have been retained to provide evidence of likely visibility from these locations, even though effects are unlikely to be significant.

6.5.5. This assessment assumes that aviation lights will be on between dusk and dawn, although mitigation measures to reduce the intensity and duration of lighting will substantially limit these effects (see section .2 in Chapter 8: LVIA).

6.5.6. Potential effects of the construction and decommissioning phases will include temporary (short term) effects on the landscape fabric of the proposed development area and temporary effects on the landscape character and visual amenity of the immediate area. The potential effects of these phases have been assessed in the landscape assessment, for the proposed development area and the immediate area surrounding the proposed development, within Landscape Character Type (LCT)10 Upland Moorland and Forestry, and found not to be significant due to the temporary and reversible nature of the works.

6.5.7. In relation to the landscape assessment the assessment finds significant effects for the proposed development area and the host LCT, LCT 10 Upland Moorland and Forestry due to the direct effects on landscape character and the increase in extent of the area with turbines that may be described as a 'wind farm landscape' to include the development area. It is noted that the LCT will not become a 'wind farm landscape' as a whole. Significant effects have also been identified within 8 km of the proposed development area for LCT7 Broad Farmed Valley which covers the Spey valley, due to the introduction of the turbines as large and prominent features on the horizon to the north. No further significant effects on landscape character were identified.

6.5.8. In relation to the visual assessment in addition to viewpoints within settlements and on routes across the study area, viewpoints were also selected to represent and assess the visual impacts of the proposal that would be seen by various groups of people. The viewpoint list is a representative selection of locations agreed with the statutory consultees. It is not an exhaustive list of locations from which the proposed development will be visible. Eighteen viewpoints were selected through desk study, site work and discussions with Moray Council, SNH and CNPA. These viewpoints include:

- Representative viewpoints selected to represent the experience of different types of receptor;
- Specific viewpoints selected because they are key vantage points (sometimes promoted as such); and
- Illustrative viewpoints chosen specifically to demonstrate a particular effect.

6.5.9. The viewpoints used are provided in the Table 6 below including their reason for selection:

Table 6: Viewpoint Locations (including reasons for selection)

VP ID.	Name	Easting	Northing	Reason for selection
1	A941, South of Lossiemouth	322930	867625	From sequential route; Main approach to and from coastal attractions; Within CT4 Coastal Farmland.
2	A96 East of Elgin	325072	861749	From sequential route along A96; Main approach to Elgin; Within CT4 Coastal Farmland.
3	B9016, Aultmore	340334	853059	From sequential route; Within CT8 Upland Farmland.
4	Ben Aigan	330958	848130	Selected VP for Paul's Hill and Berryburn operational wind farms; Popular recreational hill summit and Moray

VP ID.	Name	Easting	Northing	Reason for selection
				Council's 'Landmark Hill'; Within Spey Valley AGLV; Within CT9: Rolling Forested Hills.
5	A95, East of Craigellachie	330115	844778	From sequential route along A95; Within CT7: Broad Farmed Valley.
6	A95 South of Aberlour	324093	840352	From sequential route along A95; Within Spey Valley AGLV and CT7 Broad Farmed Valley LCT.
7	Ben Rinnes	325507	835452	Selected VP for Paul's Hill and Berryburn operational wind farms; Popular recreational hill summit and Moray Council's 'Landmark Hill'; Within Spey Valley AGLV; Within CT12a: Open Uplands with Steep Slopes.
8	Carn a Ghille Chearr summit, Hills of Cromdale	314000	829978	Selected VP for Berryburn operational wind farm; Popular recreational hill summit;
9	Dallas Castle	312424	853106	Only possible view from Dallas settlement; LCT5a Rolling Farmland and Forests with Valleys.
10	Minor road, Knockando to Dallas, nr Aultnahuish	314362	849292	Selected VP for Paul's Hill operational wind farm; Sequential route of minor road; Within CT10: Upland Moorlands and Forestry.
11	B9102, West of Archiestown	319924	843134	Sequential route; Within CT10: Upland Moorlands and Forestry.
12	Old Military Road Balmore to Cawdor	289157	845195	Only easily accessible VP to the west of the proposed development within MRN9: Upland Moorland and Forestry
13	The Duke of Gordon Monument in Elgin	321166	862795	This represents the only view from within the town unrestricted by the presence of intervening structures. See also A96 approach road, VP2. Within urban area.
14	Carn na Loine	307000	836100	Hill view to the south, see also VP8; within CGN2 Uplands and Glens
15	Carn Diamh	318205	824941	Hill view to the south, see also VP8; within CGN2 Uplands and Glens
16	Cnap Chaochan Aitinn	314579	809989	Very distant view; No significant effects likely from this far south into the CNP, but retained on request; within CGN2 Uplands and Glens
17	Bynack More	304193	806334	Very distant view ; No significant effects likely from this far south into the CNP, but

VP ID.	Name	Easting	Northing	Reason for selection
				retained on request
18	Blacksboat Bridge near Speyside Way	318073	838331	View from close to the popular long distance walking route, from which there are no open views; within CT7 Broad Farmed Valley

6.5.10. A summary of visual effects is provided in the table below:

Table 7: A Summary of Visual Effects

Receptor	Result
Viewpoint 1: A941, South of Lossiemouth	not significant (moderate/minor)
Viewpoint 2: A96 East of Elgin	not significant (moderate/minor)
Viewpoint 3: B9016 Aultmore	not significant (negligible)
Viewpoint 4: Ben Aigan	significant (major/moderate)
Viewpoint 5: A95, East of Craigellachie	significant (moderate)
Viewpoint 6: A95, South of Aberlour	significant (major)
Viewpoint 7: Ben Rinnes	significant (moderate)
Viewpoint 8: Carn a Ghille Chearr Summit, Hills of Cromdale	not significant (moderate)
Viewpoint 9: Dallas Castle	not significant (negligible)
Viewpoint 10: Minor Road, Dallas to Knockando	not significant (minor)
Viewpoint 11: B9102, West of Archiestown	significant (major/moderate)
Viewpoint 12: Old Military Road Balmore to Cawdor	not significant (negligible)
Viewpoint 13: The Duke of Gordon Monument, Elgin	not significant (moderate)
Viewpoint 14: Carn na Loine	not significant (minor/negligible)
Viewpoint 15: Carn Diamh	not significant (minor)
Viewpoint 16: Cnap Chaochan Aitinn	not significant (negligible)
Viewpoint 17: Bynack More	not significant (negligible)
Viewpoint 18: Speyside Way Blacksboat Bridge	significant (moderate)

6.5.11. A summary of visual assessment considers that the proposed development will be seen as an extension to Rothes I and II, but from most locations the difference in size of the turbines may not be obvious.. This is because we tend to interpret similar objects as being of similar size, and not all people will perceive differences in scale as being other than differences due to perspective. This will seem to compensate for the differences in turbines sizes in some views, for example:

- Views from the north-west, where the proposed turbine are visible through/beyond Rothes I and II, and the foreshortening effect of perspective will make them seem to be amongst the existing turbines (e.g. VP10);
- Views from the south-east, where the proposed turbines are in front of Rothes I and II, and will appear to be closer to the viewer than smaller turbines would be, or Rothes I and II will seem further away than they are (e.g.VP4).

6.5.12. The proposed development will introduce additional turbines close to an existing group of turbines when seen from high or distant locations. Significant effects will occur where the proposed development will extend notably across the view (VP6, VP7 and VP13), or where turbines will be (or will appear to be) brought notably closer to the viewer (VP4 or VP7). There will also be a significant effect on the views where the proposed development will be framed in the view by wooded valleys, such as from the A95 East of Craigellachie (VP5) and from Blacksboat Bridge (VP18). Although this latter location is close to the Speyside Way, there will not be significant effects on views from that long distance walking route along the Spey valley.

6.5.13. Settlements within the study area are located on the valley sides, or on the coastal lowlands. Because of screening by local buildings and trees within the settlements, whilst there may be views of the proposed development, the visual effects on settlements are judged not to be significant.

6.5.14. When moving around the landscape on roads and paths, the proposed development will be visible in sequential views, on the hills beside Rothes I and II, and relating to other wind farm developments in the surrounding area. Significant visual effects are identified for the B9102 and B9010 which are minor roads that run to the north and south of the hills of the proposed development, and therefore will have close views of it. Significant effects will also occur for a section of the A95 between Cragganmore (Ballindalloch) and Aberlour, where there will be intermittent views across the Spey valley to the proposed development on the horizon to the north.

6.5.15. Significant effects have also been identified for one path route that crosses the proposed development area over open ground, Right of Way GM7, known as the Mannoch Road. Effects on another route across the proposed development area, core path SP01, will not be significant, due to the forest screening along that route, and the experience of it as a route through forest with views of existing wind farms that will not be changed substantially by the introduction of the proposed development.

6.5.16. In relation to cumulative effects, there were only limited cumulative effects identified. In the event that Hunt Hill turbines are constructed, there will be significant cumulative visual effects experienced from four static viewpoints, (VP4, VP5, VP6 and VP7), and three sequential routes (A95, B9102 and Core Path SP01 Pikey Hill to Burn of Rothes). This is due to the contrast in scale between the Hunt Hill turbines and the proposed development, and because it will be introduced between Hunt Hill and Rothes I and II Wind Farms.

6.5.17. Otherwise cumulative effects were considered to be significant in relation to the consented Hill of Towie II Wind Farm at VP4 Ben Aigan and with the proposed Paul's Hill II Wind Farm. No other significant cumulative effects were identified.

6.5.18. Overall, the scale and topography of the receiving landscape is considered appropriate to accommodate the proposed development. Significant effects have been identified although these are relatively limited given the scale and size of the proposed Rothes III Wind Farm. Given that 26 of the 29 turbines will be fitted with mandatory aviation lighting there will be periodic effects during night time hours, although radar activated aviation lighting together with mitigation to limit the intensity of the lights when lit between dusk and dawn will substantially limit these effects.

6.6. Cultural Heritage

6.6.1. Chapter 9: Cultural Heritage, in Volume 2 of the EIAR, considers the likely significant effects of the proposed Rothes III Wind Farm development (the proposed development) on cultural heritage (historic environment sites and features, archaeology and built heritage); hereafter referred to as 'heritage assets'. The assessment has been carried out by CFA Archaeology Ltd (CFA) using information provided by Historic Environment Scotland (HES) and the Aberdeenshire Council Archaeology Service (ACAS) on behalf of Moray Council.

6.6.2. The effects of the proposed development on heritage assets have been assessed on the basis of their type (direct effects, impacts on setting and cumulative effects) and nature (beneficial or adverse). The

assessment takes into account the relative sensitivity of the heritage asset and, where relevant, its setting, and the magnitude of the predicted impact.

6.6.3. A desk-based assessment and targeted field survey have been carried out informed by comments and information supplied by Historic Environment Scotland (HES) and Moray Council's cultural heritage advisors ACAS.

6.6.4. Forty heritage assets have been identified within the Inner Study Area. These are mostly remains of medieval/post-medieval settlement and associated agrarian features.

6.6.5. Six potential direct impacts on heritage assets have been identified, arising from construction of the proposed development. Two of these are assessed, in the absence of mitigation, as being potentially of moderate significance; the other impacts are assessed as being not significant.

6.6.6. The archaeological potential of the Inner Study Area has been assessed as being low to moderate, with the possibility of surviving remains of medieval and post-medieval date in areas of unmodified moorland. Taking into account the limited extent of the necessary ground disturbance footprint required for construction of the proposed development the likelihood of encountering remains of archaeological significance is considered to be low across the moorland areas and where construction work crosses areas of forestry plantation the potential is considered to be negligible.

6.6.7. Six Scheduled Monuments, one of which is also a Category B Listed Building, four Category A Listed Buildings, 29 other Category B Listed Buildings and one Conservation Area have been identified within the 10 km Outer Study Area, from which there predicted visibility of the proposed development. One Category C Listed Building has been identified within 5 km from which there is predicted visibility of the proposed development. In no case would the settings of these assets be significantly adversely affected by the construction and operation of the proposed development.

6.6.8. The cumulative effect of the proposed development in combination with other existing and proposed wind energy developments in the vicinity is considered to be of no more than minor significance.

6.6.9. A programme of mitigation works would be proposed in a Written Scheme of Investigation (WSI) and agreed with Moray Council to offset the predicted loss of cultural heritage sites within the proposed development area. No significant residual effects are anticipated in relation to cultural heritage interests and the development proposals are considered not to be in conflict with the aims of national, regional and local planning policy as regards cultural heritage.

6.7. Hydrology, Geology and Hydrogeology

6.7.1. Chapter 10: The Hydrology, Geology and Hydrogeological Chapter, in Volume 2 of the EIAR, has assessed the impacts on the hydrological, geological and hydrogeological environment of the proposed Rothes III Wind Farm development and the potential impacts resulting from the construction, operation and ultimate decommissioning of the proposed turbines and associated infrastructure.

6.7.2. This chapter details the existing baseline conditions in terms of the hydrological, geological and hydrogeological conditions present within the proposed development area. The assessment covers the construction, operation and decommissioning phases of the proposed development and identifies elements which have the potential to influence the existing baseline environment.

6.7.3. Following the submission of the scoping report in 2017 detailed scoping responses relating to the hydrological, and hydrogeological environment were received from the Scottish Environmental Protection Agency, Scottish Water, Scottish Natural Heritage and Marine Scotland. Details of these responses are provided in section 10.2 of chapter 10 and the responses received have been addressed in this chapter and the associated appendices.

6.7.4. The greatest risk of the proposed development affecting the hydrological and hydrogeological environment will occur during the construction phase, with effects reduced during the operational and

decommissioning phases. Taking this into account the following issues will be addressed during all phases of the proposed development:

- Changes to existing drainage patterns;
- Effects on base flow;
- Effects of cumulative flooding;
- Effects on erosion and sedimentation;
- Effects on groundwater and surface water quality;
- Effects on groundwater levels;
- Effects on water resources;
- Effects on impediments to flow;
- Pollution risk; and
- Effects on hydrological integrity of peat bodies

6.7.5. In terms of the approach applied the assessment has involved the following:

- Consultation with relevant statutory and non-statutory bodies as part of the scoping exercise;
- Detailed desk studies and site visits to establish conditions of the area;
- Evaluation of the potential effects of the proposed development and the effect that these could have on the current site conditions;
- Identification of embedded good practice measures to avoid and mitigate against any identified adverse effects resulting from the proposed development;
- Evaluation of the significance of these effects by consideration of the potential embedded mitigation measures, taking into account the sensitivity of the baseline features of the site, the potential magnitude of these effects and the probability of these effects occurring; and
- Evaluation of the residual significance of the potential effects following the consideration of additional mitigation measures.

6.7.6. During assessment the potential effects on the surface waters, groundwater, peat, designated sites, GWDTE, public water resources and private water supplies that have been considered are:

- Pollution Incidents;
- Erosion and sedimentation;
- Changes to water resources i.e. Glenlatterach Reservoir and private water supplies;
- Modification of surface water and groundwater flows;
- Modification of natural drainage patterns;
- Impediments to flow and flood risk;
- Peat instability; and
- Compaction of soils.

6.7.7. Following the identification and assessment of the key receptors, taking into account the potential effects listed above, a comprehensive suite of mitigation and best practice measures has been incorporated into the design, including extensive buffer areas. In addition, a site specific Construction Environmental Management Plan (in the Construction Method Statement) as well as detailed design of infrastructure and associated embedded mitigation will be implemented to protect the groundwater and surface water resources from pollution and minimise changes to the hydrological environment.

6.7.8. The impact assessment has taken into account the hydrological regime, highlighting that the principal effects will occur during the construction. Assuming the successful design and implementation of

embedded mitigation measures, the significance of construction effects on all identified receptors is considered to be of minor or no significance. The assessment of predicted ongoing and operational effects has also determined that the significance of effects on all receptors to be of minor/moderate, minor or no significance.

6.7.9. Overall, the significance of effects on the site hydrological, hydrogeological and geological conditions are considered to be not significant under the terms of Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

6.7.10. Embedded mitigation can be secured through an appropriate planning condition stating that a Construction Method Statement (CMS) shall be submitted to and approved by the Local Authority, SNH and SEPA prior to construction. The CMS will include a CEMP.

6.8. Forestry

6.8.1. Chapter 11: Forestry, in Volume 2 of the EIAR, describes forestry aspects for the proposed Rothes III Wind Farm. The chapter was prepared by Cawdor Forestry Ltd (CFL). Forests are a continually changing habitat due to standard silvicultural practices such as; felling and restocking, and natural events. This EIAR chapter therefore describes the proposed development plans for felling, restocking and forest management practices, and the process by which these were derived.

6.8.2. The proposed development straddles three landowners on the Mannoch Hill and Hill of Stob area to the west of Rothes village. Turbines; 2, 5, 6, 9, 10, 13 and 14 are situated on Knockando Estate where no forestry related work is required. The remaining turbines and infrastructure are located on Forestry Commission Scotland land and Rothes Estate land where forestry related work is required.

6.8.3. The forestry management proposals have been developed to:

- Identify areas of forest to be removed for the construction and operation of the proposed development (therefore, revising areas that would have been felled as part of ongoing commercial forestry operations);
- Identify those areas which may or may not be replanted as part of the proposed development;
- Identify the extent of any woodland loss and compensatory planting requirements;
- Identify sensitive habitat that will benefit from restoration management;
- Propose management practices and techniques for the outlined forestry works.

6.8.4. The current species composition of the woodlands within the proposed development area (total 1099.08 ha) is shown in Table 8 below:

Table 8: Baseline Species Composition of the proposed development area.

Species	Area (ha)	Area (%)
Sitka spruce	406.52	36.99
Sitka spruce/Lodgepole pine	251.82	22.91
Lodgepole Pine	104.60	9.52
Sitka spruce/Norway spruce	68.29	6.21
Mixed Conifer	56.54	5.14
Sitka spruce/Scots pine	31.82	2.90
Scots pine/Mixed conifer	21.54	1.96
Scots pine/European larch	17.66	1.61
Scots pine	4.41	0.40
Native broadleaf	0.52	0.05

Species	Area (ha)	Area (%)
Open ground	96.93	8.82
Unplanted	36.49	3.32
Quarry	1.94	0.18
Total	1099.08	100.00

6.8.5. The table below shows the effect that the proposed development will have on the future species composition of the forest (assuming no future changes in forest design plans proposed by landowners), comparing the baseline and wind farm restocking plans.

Table 9: Comparison of Baseline and Wind Farm Restocking Plans

Species	2021 Species Composition (%)	Baseline Restock (%)	Wind Farm restock (%)	Difference (%)
Sitka spruce/Lodgepole pine	32.42	36.36	27.51	-8.85
Sitka spruce/Other conifer	6.21	14.82	13.81	-1.00
Sitka spruce/Scots pine	2.90	12.94	11.56	-1.38
Sitka spruce	36.99	5.00	4.72	-0.28
Scots pine/Other conifer	9.11	3.85	3.86	0.01
Scots pine/Native broadleaf	0.00	2.22	6.13	3.91
Native broadleaf	0.05	4.31	4.10	-0.21
Wind farm open ground	0.00	0.00	7.04	7.04
Open ground/Habitat Restoration	12.14	20.33	21.06	0.73
Quarry	0.18	0.19	0.19	0.00

6.8.6. Compensatory planting proposals will ensure that there is no net loss of woodland as a result of the proposed development. The applicant will source compensatory planting for the 65.75ha of forest area used due to the wind farm construction, in line with the Scottish Government's Control of Woodland Removal Policy, which will include appropriately designed broadleaved and commercial forestry either within the proposed development area or outwith the wind farm. Details of the compensatory planting plans will be provided pre construction for approval by the planning authority in consultation with Forestry Commission Scotland and SNH.

6.8.7. Forestry management practices and responsibility for their implementation will be agreed with the forest managers and land owners prior to commencement of construction of the proposed development. Crops of sufficient tree size (>0.15m^3) and standing volume (>100m^3/ha) will be harvested conventionally using conventional low ground pressure mechanical harvesting and forwarding equipment. Premature crops will be cleared by alternative methods to create the turbine keyholes, access tracks and allow habitat restoration. Restocking will be carried out to current best practice, guidelines and in accordance with the UK Forestry Standard and UKWAS as a minimum. The methodology will vary depending on the type of restocking being carried out. The exact planting requirements would be agreed with the forest managers and land owners in advance of planting.

6.8.8. Aftercare establishment works would include, but are not limited to, the following:

- Beating up (replacement of failures) to ensure satisfactory stocking levels by year 5 from planting;
- Weeded as necessary to ensure satisfactory establishment by year 5, although the requirement will be limited due to the generally infertile soils;
- Protection against pine weevils by management inspections and remedial treatment as necessary, browsing damage from wild and domestic animals & fire; and

- Fertiliser will be applied as necessary to ensure satisfactory establishment and growth

6.8.9. As a result of the proposed development:

- 65.75 ha of forest will be felled due to the infrastructure buffers and compensatory planting mitigation, either within the proposed development are or outwith the wind farm, will be undertaken to ensure no net loss of forestry due to the proposed development;
- The species composition will change, and the primary conifer species (SS & LP mixtures) will decrease by 119.7 ha from 69.1% to 58.2%.
- The proportion of secondary conifer species remains the same at 3.9%.
- The proportion of native woodland increases by 16.8 ha from 6.53% to 10.3%.
- The total area of open ground increases by 87.4 ha, from 20.5% to 28.5% due to the incorporation of the proposed development infrastructure and peat land restoration.
- The pattern of timber harvesting changes with felling programmes being advanced compared with the baseline plans.
- 100ha of inappropriate, very poorly growing, Sitka spruce to be removed from inappropriate deep peat sites and some of this will be restored to peatland.

6.9. Traffic and Transport

6.9.1. Chapter 12: Traffic and Transport, in Volume 2 of the EIAR, assesses the impacts due to transport and access for the proposed Rothes III Wind Farm, the proposed development resulting from the wind farm construction, operation and decommissioning of the proposed development against a worst case baseline condition of traffic flows on the roads network.

6.9.2. Traffic generated by the proposed development would almost entirely be limited to vehicle movements relating to the construction phase and decommissioning phase of the wind farm. During the operation of the proposed development, traffic would be minimal, since much of the operation would be automated and would be monitored as part of the wider management of the existing Rothes I and II Wind Farms.

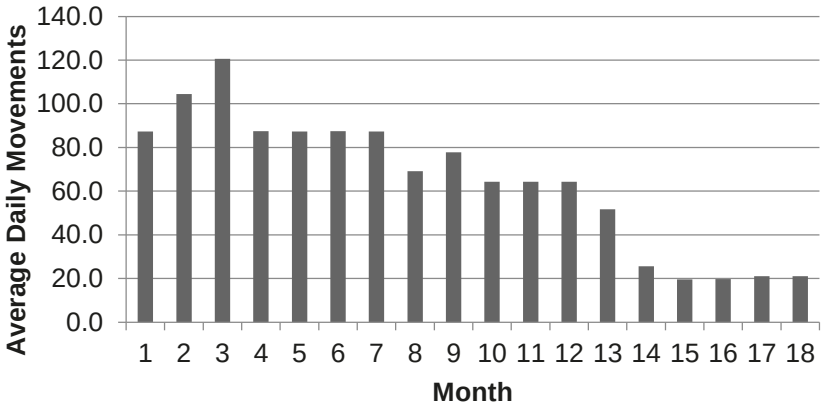
6.9.3. Construction traffic required to deliver the wind farm falls into three broad categories; namely Abnormal Indivisible Loads (AIL), Heavy Goods Vehicles (HGV) and Light Goods Vehicles (LGV).

6.9.4. The construction of the proposed development is expected to last approximately 18 months, from site mobilisation through to installation and commissioning of the turbines, ending with site re-instatement and demobilisation.

6.9.5. Turbine components, electrical equipment, concrete or the raw materials for concrete (water, cement and aggregate), steel for turbine foundations and electrical cabling would all need to be transported to the site using the public road system. It is envisaged that traffic on public roads during the construction period would be minimised as far as possible through the use of borrow pits located within the site for material for the proposed Rothes III tracks.

6.9.6. Within the chapter the increase in traffic movements that would be generated by the proposed development have been assessed against the baseline traffic flow figures for the A941, A95 and minor roads near site. 6 locations have been used for the assessment which includes: **A** – A941 South of Elgin; **B** – A941 South of the Site Entrance; **C** – A941 South of Rothes; **D** - A95 at Craigellachie; **E** – C13e North of Upper Knockando; **F** – B9102 South of Knockando.

6.9.7. The construction of the proposed wind farm is estimated to lead to around 6220 deliveries by HGVs and 6542 light personnel and delivery vehicles over the proposed 18 month period. Month 3 is expected to generate the most Average Daily Movements as shown in the chart below. Therefore, this month has been assessed further within Chapter 12.



Average daily vehicle movements over proposed 18 month construction period

6.9.8. Estimated Traffic increases for the busiest construction month are shown in the table below:

Table 10: Estimated daily traffic increases, for the busiest construction month.

Location	Calculated Total Traffic flow (2021)	Estimated Total Traffic Increase	Increased Total Traffic Flow	% Total increase	Calculated HGV Flow (2021)	Estimated HGV Increase	Increased HGV Flow	% HGV increase
A	24027	121	24148	0.5%	702	67	769	9.5%
B	5878	121	5999	2.1%	502	67	569	13.3%
C	6291	121	6412	1.9%	582	67	649	11.5%
D	7099	121	7220	1.7%	707	67	774	9.5%

6.9.9. As HGV traffic is less than 30% and the overall traffic increase is less than 10% further assessment is not required. However, for completeness a full assessment was undertaken and through the combination of Negligible magnitude of impact and Low sensitivity leads to a significance of Negligible / Low which is considered to be 'Not Significant' with respect to the terms of the EIA regulations.

6.9.10. Through the operational life of the wind farm there would be irregular and limited traffic movements consisting almost entirely of cars or vans that would be required for the service and maintenance of the site. The number of vehicle movements during operation is infrequent and of a very low number. Due to the low number of vehicles it is considered to be of Negligible/Low Significance leading to 'Not Significant' in EIA terms.

6.9.11. During construction typically, the slower turbine delivery vehicles would have the largest effect on other road users. Therefore, a Traffic Management Plan will be prepared should the proposed development be consented and will be sent to the local authority for approval.

6.9.12. In relation to potential cumulative impact, if the construction of another wind farm site were to coincide with that of the proposed development and was considered to have an unacceptable joint impact, then discussions would be held between developers and other relevant parties (in conjunction with the Roads Authorities) prior to the commencement of the projects, with a view to mitigating any such effects.

6.9.13. Overall, the traffic and transport assessment concludes that there will be no significant traffic effects associated with the proposed development.

6.10. Noise

6.10.1. Chapter 13: Noise, in Volume 2 of the EIAR, contains an assessment of the operational, construction, and decommissioning phases of the proposed Rothes III Wind Farm development. The assessment has been undertaken by the Hayes McKenzie Partnership Ltd.

6.10.2. The operational noise assessment has been undertaken by comparing predicted noise levels from the proposed Rothes III Wind Farm at surrounding residential properties with noise limits for Rothes II Wind Farm which are based on ETSU-R-97, *The Assessment and Rating of Noise from Wind Farms*, which is referenced within the Scottish 'web based planning guidance', referred to in PAN1/2011. Cumulative operational noise level has also been compared with the existing noise limits imposed for the operational Rothes II Wind Farm.

6.10.3. The assessment has been performed with reference to the guidance contained within the Institute of Acoustics document, *A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise*, which is endorsed by Scottish Government.

6.10.4. Construction and decommissioning noise on-site has been assessed with reference to BS:5228:2009, *Code of practice for noise and vibration control on construction and open sites.*

6.10.5. For the proposed development, as set out in the Scoping Report, noise from Rothes III was initially be assessed against a 28 dB L_{A90} noise limit, whereby if noise from the proposed development is 10 dB or below the Rothes II minimum noise limit then the contribution can be considered to not be significant.

6.10.6. The nearest residential receptors to the proposed Rothes III Wind Farm have been identified, and the predicted noise levels for Rothes III have been calculated for each location for a standardised 10 m height wind speed of 10 m/s. Under non-downwind propagation conditions and, at lower wind speeds, when the rotational speed of the turbines is slower, the predicted noise levels would be lower. The results are shown in Table 11 below:

Table 11: Rothes III Predicted Noise Levels (dB L_{A90})

Location	Easting	Northing	Predicted Noise Level (dB L_{A90})
Bauds*	317144	852633	26
Craighead	317426	854082	24
Bodnamoor*	318426	853928	25
Glenlatterach	319987	854303	25
Brylach	325405	852364	24
Brauchhill*	325800	848947	27
Burn of Rothes	325273	847814	29
Dounie Cottage	325887	847919	27
Allachrow	325203	846501	29
Heatherlea	322947	844545	32
Lynes	321693	844349	32
Heatherbell Cottage	318670	844131	29
Knocknagore	318143	845004	31
Lyne of Knockando	317602	845267	30
Aldivonie	317063	845397	30
Aultahuish	314038	849467	25

Location	Easting	Northing	Predicted Noise Level (dB L_{A90})
Yellowbog*	314699	848996	26
Scottackleys	312910	850420	23
Clashdon	315172	851730	25
Blackhills	315243	853111	24
Tombreck	314044	852660	23
Park	314565	853111	23
Bodnastalker	316289	853137	25
Blackbanks	317341	853636	25
Kellas House	316581	853914	24
Bardonside	321142	854157	25
Properties marked with an asterisk '*' have been identified as derelict			

6.10.7. The results show that predicted noise levels from the proposed Rothes III Wind Farm are below 28 dB $L_{A(0}$ at all except 8 residential properties. Predicted cumulative noise levels have been calculated at these properties including the contribution from Rothes I, Rothes II, Kellas, Meikle Hill, and Hunt Hill wind farms, with the results shown in the table below, including the predicted contribution from each wind farm.

Table 12: Cumulative Predicted Noise Levels (dB L_{A90})

Location	Cumulative Noise Level	Rothes I	Rothes II	Kellas	Meikle Hill	Hunt Hill
Burn of Rothes	34	20	28	9	12	29
Allachrow	34	20	27	8	11	31
Heatherlea	34	21	28	8	13	26
Lynes	35	23	29	9	14	23
Heatherbell Cottage	34	26	30	11	18	15
Knocknagore	36	28	33	13	20	15
Lyne of Knockando	36	29	33	14	21	14
Aldivonie	36	30	33	14	22	13

6.10.8. The results presented show that predicted cumulative noise levels from all wind farms in the area are below the 38 dB L_{A90} noise limit.

6.10.9. In summary, an operational noise assessment has been undertaken for the proposed Rothes III Wind Farm by comparing predicted noise levels in isolation with a noise limit set 10 dB below the levels already consented for the operational Rothes II Wind Farm. Where Rothes III Wind Farm predicted operational noise levels were above 28 dB LA90 a cumulative assessment was undertaken comparing predicted cumulative operational noise levels with a limit of 38 dB LA90 (the lowest noise limit level for the consented Rothes II Wind Farm). Predicted operational noise levels were either below the limit for Rothes III Wind Farm in isolation, or cumulative noise levels were below the 38 dB LA90 noise limit, and therefore operational noise is deemed to be not significant.

6.10.10. A construction noise assessment has been undertaken with reference to BS5288:2009, Noise and Vibration Control on Construction and Open Sites, which indicates that noise from construction activities will be significantly below the adopted daytime noise limit of 65 dB LAeq, and therefore no significant

construction noise impacts are predicted. Noise associated with off-site highways improvements and cabling requirements to the grid connections is not significant due to the relatively short term impacts. Mitigation will be implemented such that, although blasting activities may be detected at residential properties, the impact is not significant.

6.10.11. No significant impacts are predicted for road traffic noise generated by construction traffic accessing the site during the construction phase of the development.

6.11. Aviation and Existing Infrastructure

6.11.1. Chapter 14: Aviation and Existing Infrastructure, in Volume 2 of the EIAR, has given consideration to the potential for impact upon civil aviation interests, Ministry of Defence (MoD) interests, communication operations and existing site infrastructure. The chapter assesses such potential impacts and demonstrates the consultation process undertaken and provides details of any impacts and outlines mitigation where it is deemed necessary.

6.11.2. This assessment was undertaken using two desktop study methods. These were: GIS searches using published constraints data and consultation with statutory bodies and network operators. The initial feasibility assessment has also included input from aviation consultant, Coleman Aviation, who has discussed with the MoD and Highlands and Islands Airport Limited (HIAL) and provided advice on potential impacts and mitigation measures related to RAF Lossiemouth radar and Inverness Airport radar respectively.

6.11.3. Whilst the applicant has sought as far as possible to assess the likely impacts of the proposal on aviation and other infrastructure using published information and knowledge of the likely constraints, the limitations in the consultation procedures of infrastructure providers means that it has not been possible to confirm the applicant's initial findings.

6.11.4. Based on the applicant's knowledge and initial responses from the MoD, it is expected that the proposed development will have an effect on the Air Traffic Control (ATC) Radar at RAF Lossiemouth. It is the Applicant's understanding that a mitigation solution can be agreed with the MoD and secured through an appropriately worded planning condition.

6.11.5. A potential effect of the proposal was also identified on Highland's and Island's Airport Limited (HIAL) radar, prompting an information request from HIAL. Although this was undertaken and in the Applicant's view confirmed that the proposed development would not have a significant effect on the HIAL radar, this has still to be confirmed by HIAL.

6.11.6. As 26 of the turbines at Rothes III Wind Farm will be above 150m, there will be a requirement for mandatory 2000 candela aviation lighting on the nacelles of these turbines. Additionally, at least three (to provide 360 degree coverage) low-intensity lights (32 candela) lights should be provided at an intermediate level of half the nacelle height.

6.11.7. To mitigate the effects if aviation lighting it is the intention to install radar activated aviation lighting for the proposed Rothes III Wind Farm. Aviation detection systems for wind turbine obstruction lighting operation are sensor-based radar-type systems designed to detect aircraft as they approach an obstruction or group of obstructions; these systems automatically activate the appropriate obstruction lights until the aircraft exits a defined volume around the obstruction(s). The benefits of use of aviation obstruction lighting detection systems include a substantial reduction (suggested by SNH to be around 2% of the normal operation) in the impact of night-time light pollution and extending the life expectancy of obstruction lights.

6.11.8. Further mitigation will include the lights being reduced to 200 candela (10% of full 2000 candela luminescence) in clear visibility conditions. Agreed mitigation can be secured through an appropriate planning condition.

6.11.9. There are currently no other known aviation related constraints associated with the proposed development.

6.11.10. There are no fixed microwave links or radio communication links that will be impacted by the proposed development.

6.11.11. As part of the proposed development area falls within the catchment of the Scottish Water abstraction from Glenlatterach Reservoir considerable care will have to be taken to ensure that this Drinking Water Protected Area (DWPA) is protected. With the implementation of the proposed embedded mitigation measures outlined in Chapter 10 of this EIAR, it is not considered there will be any significant adverse impact on this and any other DWPA located within the same catchments of the proposed development.

6.11.12. In relation to existing infrastructure, there are known pipelines and cables in the area particularly associated with the existing Rothes I and Rothes II Wind Farms. Further investigations will be carried out pre construction to confirm that all existing infrastructure is identified and where necessary avoided prior to construction start.

6.11.13. In terms of the potential impact of ice throw it is considered that turbine procurement together with good practice site management procedures including the use of visual warnings signs and restricted access to turbines where ice is present on blades there will be no significant impact for the public or for site workers using the site.

6.11.14. In relation to shadow flicker, as there are currently no residential properties identified within 10 rotor diameters of the nearest turbines there has been no need to undertake an assessment within this EIAR.

6.12. Socioeconomics

6.12.1. Chapter 15: Socioeconomics, in Volume 2 of the EIAR, considers the socioeconomic context of the area in which the proposed development is situated, outlining the 'baseline' within the area, were wind farms are already present. The baseline is that there is an established population in Moray who could potentially benefit from further development at Rothes Wind Farm.

6.12.2. It has also outlined the community projects which have resulted from the benefits of the existing Rothes I and II Wind Farms and the potential employment opportunities during the construction and operational phases of the proposed development.

6.12.3. The Applicant has successfully been developing wind farms in the area since 2005. Developments in Moray include Rothes I and II Wind Farms and nearby Paul's Hill Wind Farm. Based on this experience of operating wind farms in the Moray area to date, there will be additional benefits to the area stemming from the proposed development. Furthermore, the project itself represents a further substantial investment in the local area which will provide additional employment and contracting opportunities, which would not exist if the wind farm did not go ahead. The proposal will also add substantially to the provision of renewable energy within the local area which will help to ensure that communities and businesses in the Moray area can continue to develop and grow and be at the forefront of decarbonising both the local as well as the wider Scottish economy.

6.12.4. The proposed development will continue to provide support for community initiatives for the 35 year life of the wind farm, as have the existing Rothes I and II Wind Farms since they became operational, so allowing local communities to invest in their long term future.

6.12.5. Based on national surveys and local experience it is the Applicant's view that the wind farm can be built and operated without having a significant adverse impact on the tourism sector of the local economy. Indeed, as the tourism sector follows the decarbonisation of the wider economy, it will become increasingly reliant on the supply and distribution of renewable electricity for power, heat and transport. It is the Applicant's view therefore that in the longer term, the proposed development will have an indirect but positive impact on the infrastructure required to support the projected growth in the regions tourism sector.

6.12.6. Overall, the direct and indirect catalytic effects of the proposed development are considered to be entirely consistent with local and national policies to diversify and decarbonise the economy and there will be a net positive effect for the local economy and communities.

6.13. Access

6.13.1. Chapter 16: Access, in Volume 2 of the EIAR, provides an assessment of the impact of the proposed Rothes III Wind Farm on access during the construction, operation and decommissioning of the proposed development. A description of the baseline access network in the area is provided and consideration is given to the areas the network that are likely to be impacted during the various phases of the proposed development.

6.13.2. There a number of recreational public access routes within or dissecting the proposed development area. Some of these will be directly and/or indirectly impacted by either the construction, operational or decommissioning activities. This chapter initially identifies all of the access routes that will be potentially affected. The chapter continues by assessing the likely potential impacts on these access routes, and then assesses the potential effects and outlines mitigation measures to ensure safety and continued access, with appropriate temporary diversions created if necessary.

6.13.3. Mitigation measures for the management of traffic and access for affected routes will include:

- Temporary diversion implemented during peak periods of construction activity and delivery of abnormal loads;
- Continuous management of access along the sections of routes affected throughout all phases of the wind farm;
- Diversion and Safety signs erected at appropriate locations at each end sections affected.

6.13.4. Full details of how access will be managed during the construction, operational and decommissioning period will be provided in the Access Plan in the CMS.

6.13.5. With the implementation of mitigation it is considered that impacts on the existing access network can be managed. Following the construction of the wind farm there will be improvements to a number of existing paths including Core Path SP01 and public right of way GM7. In addition, there is the potential for an improved access link connecting core path SP20 and SP21 and the wider core path network to the south.

6.13.6. It is anticipated that there will be temporary impacts and potentially significant effects across a number of the access paths/tracks within the proposed development area at various times throughout the construction, operational and decommissioning phases.

6.13.7. During construction and decommissioning, SP01 and GM7 will experience significant effects and mitigation will be required. With the implementation of embedded mitigation and some specific mitigation measures it is considered that the residual effects will be **not significant** in EIA terms.

6.13.8. During operation, GM7, will also experience significant effects at one particular crossing point. Again, with the implementation of embedded mitigation and some specific mitigation measures it is considered that the residual effects will be not significant in EIA terms.

6.13.9. One of the benefits of the proposed development for access will be the potential improvement of an access link that connects SP20 to SP21 and the wider core path network. Further details can also be provided in an Access Plan which would be sent to the local authority for approval, should the proposed development be consented.

7. Final Summary

7.1.1. The EIAR has highlighted that the only residual significant effects that have been identified during the EIA process are as a result of local landscape and visual impacts, and potential local level disturbance of capercaillie.

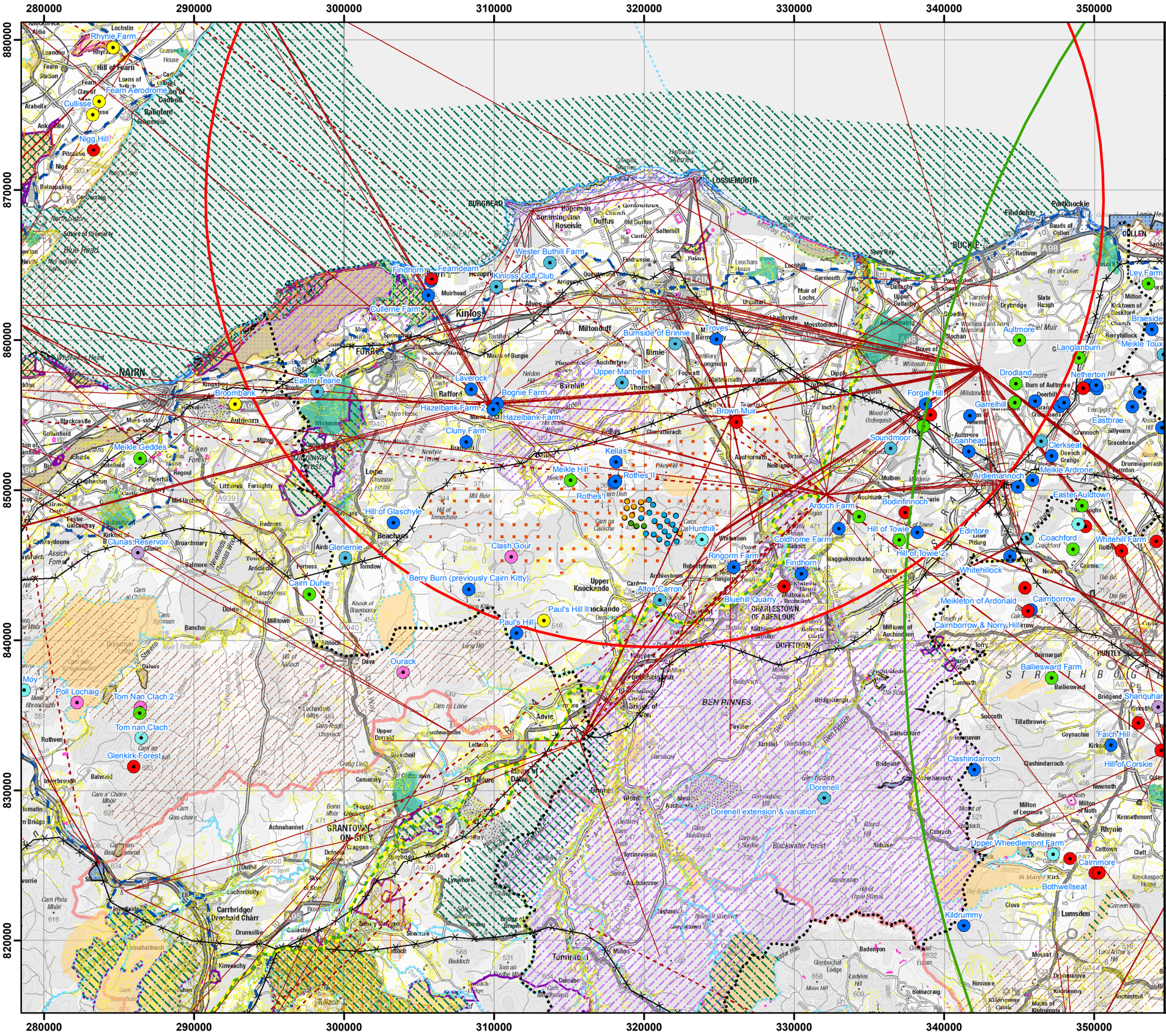
7.1.2. It is judged that having undertaken a robust LVIA process that the proposed development will have some significant landscape and visual effects on the surrounding landscape and visual receptors. These significant effects are to be expected in a project of this scale and need to be balanced with the positive contribution that the proposed development will make towards increasing the installed renewable energy capacity at a local and national level, meeting the aims outlined within the Scottish Energy Strategy 2017 to reduce greenhouse gas emissions whilst also helping to further diversify, strengthen and move towards a low carbon economy. See Chapter 2: Policy Context for details of these aspirations.

7.1.3. The assessment has considered the location and scale of turbines relative to the existing wind farms of Rothes I and II and others, as well as cumulative effects with consented and proposed schemes in the wider landscape. Significant effects have been identified for landscapes (the host LCT and part of one other LCT to approximately 8 km away), and for some of the selected viewpoints (up to 12 km), and from some sections of sequential routes around the study area. This indicates that significant effects are relatively limited in extent given the scale of the proposed development.

7.1.4. In relation to disturbance of capercaillie at a local level, it is considered that as a result of the habitat enhancement proposed as part of this EIAR, including support for existing third party conservation initiatives for capercaillie elsewhere in the region, there are expected to be overall benefits for this species above the current baseline.

7.1.5. It is proposed that, as far as is practical, the planning conditions that applied to the Rothes II Wind Farm consent in 2010 (see Appendix 1.3 in Volume 4 of the EIAR) should also be applied to the proposed development (Rothes I Wind Farm conditions are less relevant to this application now as this is the older set of conditions – consented in 2003). This will ensure that there is, in general, duplicate sets of similar conditions applying to Rothes II and Rothes III Wind Farm's, with the new set recognising the use of shared infrastructure for the lifetime of the new phase of development.

7.1.6. Subject to suggested mitigation measures and considerations summarised in Table 17.1 and 17.2 (in Chapter 17 of the EIAR), the EIAR did not identify any other potentially significant residual effects (in terms of the EIA Regulations) on any other environmental or human receptors during the preparation, construction, operation and decommissioning of the proposed Rothes III Wind Farm development and as such the overall impact of the proposed development is considered not significant in EIA terms.



Project:

Rothes III Wind Farm, Moray

Title:

NTS Figure 1.1: Regional Context

Key

Proposed Rothes III turbines

- 149.9 m to tip
- 200 m to tip
- 225 m to tip
- Indicative micropath (6)
- Indicative TV transmitter link (6)
- Electricity power line
- Long distance footpath (1)
- National Cycle Network (5)
- RSPB Important Bird Area (4)
- RSPB reserve (4)
- Scottish Wildlife Trust reserve (9)
- RAMSAR (1)
- National Nature Reserve (1)
- Local Nature Reserve (1)
- Bathing waters (8)
- Coastal Protection Zone (2)
- Cairngorm National Park (1)
- Scheduled Ancient Monument (3)
- Area of Great Landscape Value (2)
- Special Landscape Area (2)
- Special Protection Area (1)
- Special Area of Conservation (1)
- SSSI (1)
- Historic Gardens & Designed Landscapes (3)
- Plantation on Ancient Woodlands Sites (1)
- Semi-natural Ancient Woodlands (1)
- Battlefield (3)
- Geological Conservation Review site (1)
- 74 km buffer from ASACS radar (7)
- 30 km buffer from MOD radar (7)
- County boundary
- Preferred search area (2)

Other wind farm developments

- Operational
- Construction
- Approved
- Submitted
- Scoping
- Pre-Scoping
- Refused
- Withdrawn

Notes:

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Scale @ A3: 1:250,000

Coordinate System: British National Grid

0 2.5 5 10 km

N

Date: 29-01-19	Prepared by: IW	Checked by: KL
Ref: GB200356_M_841_A	Layout: 60_050418_29t_A	

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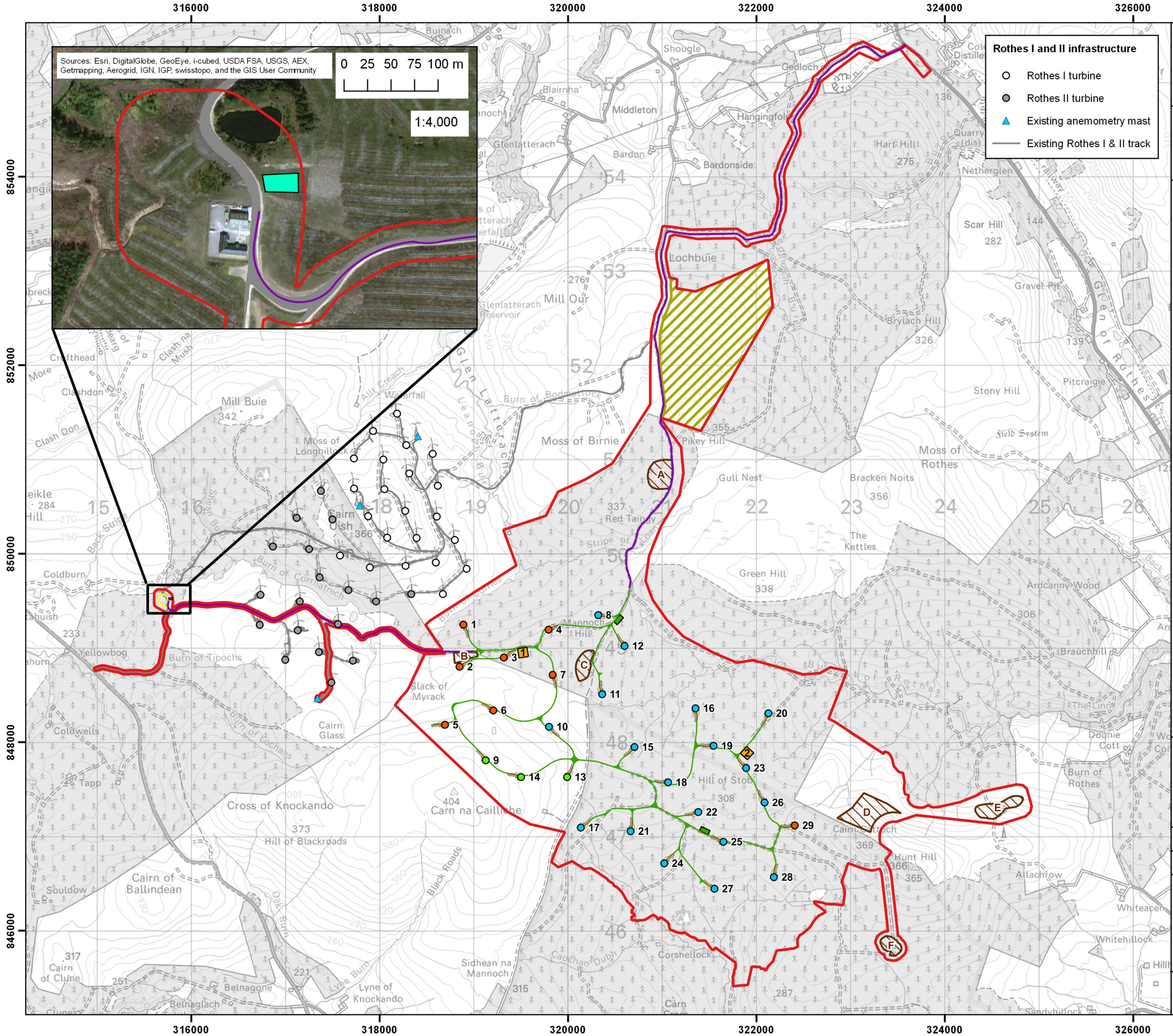

Project:

Rothes III Wind Farm, Moray

Title:

NTS Figure 1.2: Proposed Development Area

Key

- Proposed Rothes III development area

Proposed Rothes III turbine

- 149.9 m to tip
- 200 m to tip
- 225 m to tip
- Proposed Rothes III crane pad
- Proposed Rothes III additional crane pad area
- Proposed Rothes III blade laydown area
- Proposed Rothes III track
- Existing track to be upgraded
- Proposed Rothes III substation
- Proposed Rothes III construction compound
- Proposed Rothes III borrow pit search area
- Operations centre
- Area to include proposed storage shed
- Compensatory planting search area

Notes:

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Scale @ A3: 1:40 000

Coordinate System: British National Grid

0 0.5 1 1.5 2 km

N

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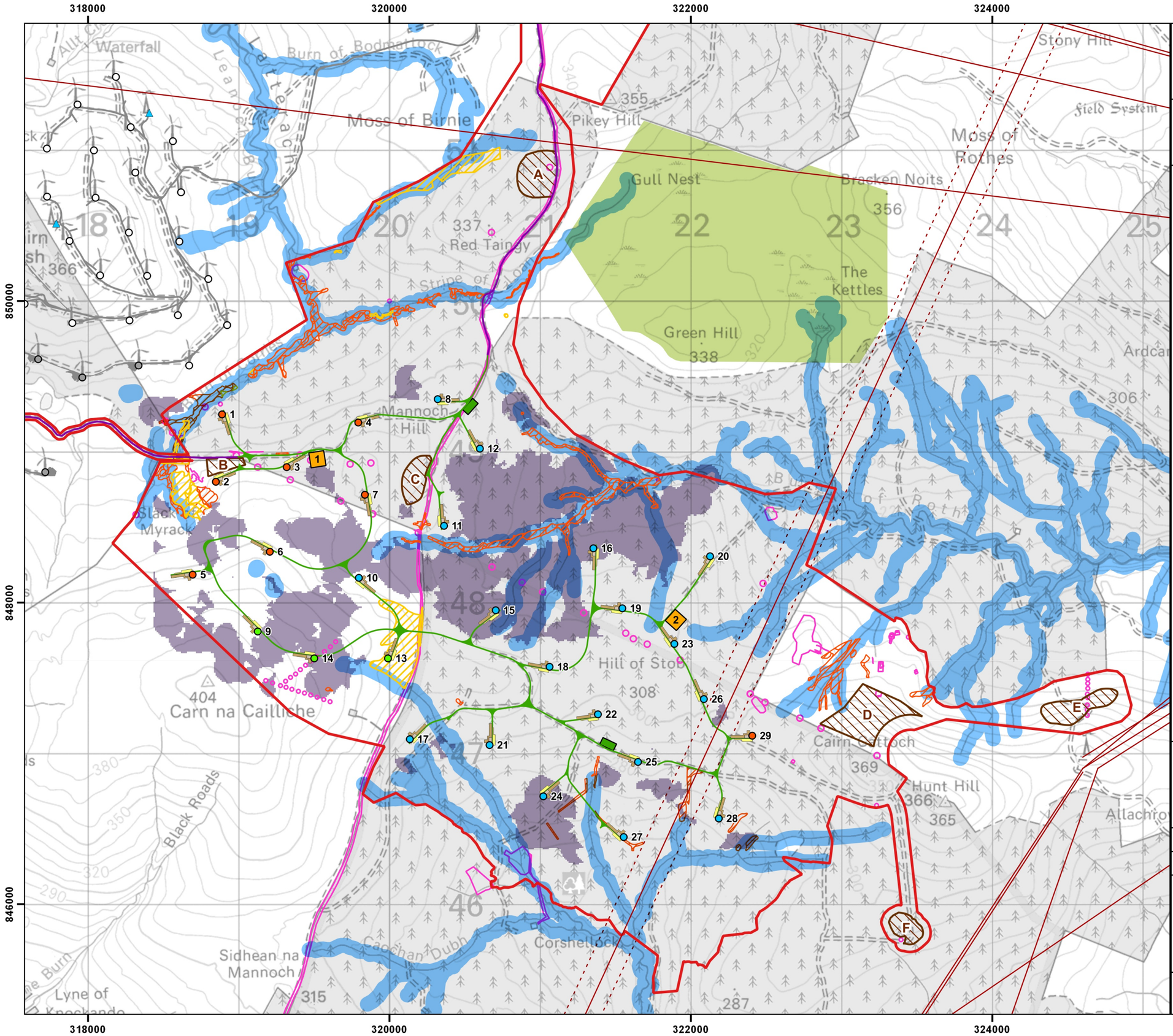

Project:

Rothes III Wind Farm, Moray

Title:

NTS Figure 1.3: Constraints to Site Design

Key

- Proposed Rothes III development area

Proposed Rothes III turbine

- 149.9 m to tip
- 200 m to tip
- 225 m to tip
- Proposed Rothes III crane pad
- Proposed Rothes III additional crane pad area
- Proposed Rothes III blade laydown area
- Proposed Rothes III track
- Existing track to be upgraded
- Proposed Rothes III substation
- Proposed Rothes III construction compound
- Proposed Rothes III borrow pit search area
- Rothes I turbine
- Rothes II turbine
- Existing anemometry mast
- Existing Rothes I & II track
- Cultural Heritage feature (2)
- 50 m buffer from water courses & bodies
- Peat depth > 1.5 m
- Site of Special Scientific Interest (1)
- GWDTE - High
- GWDTE - Moderate
- Micropath (with 100 m buffer) (3)

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(1) Scottish Natural Heritage (2) CFA Archaeology (3) Ofcom

Notes:

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Scale @ A3: 1:25 000

Coordinate System: British National Grid

0 0.25 0.5 0.75 1 km

N

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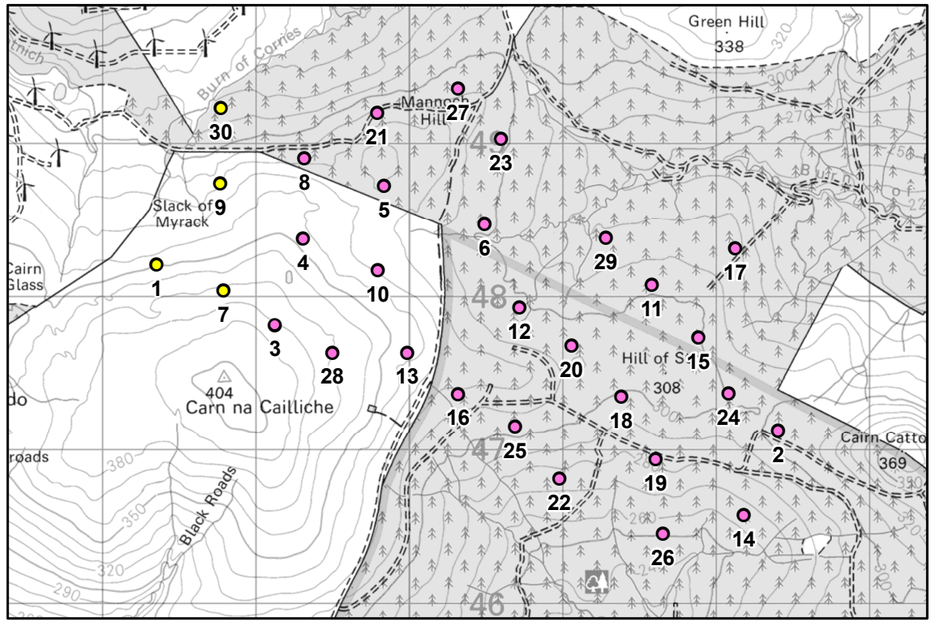
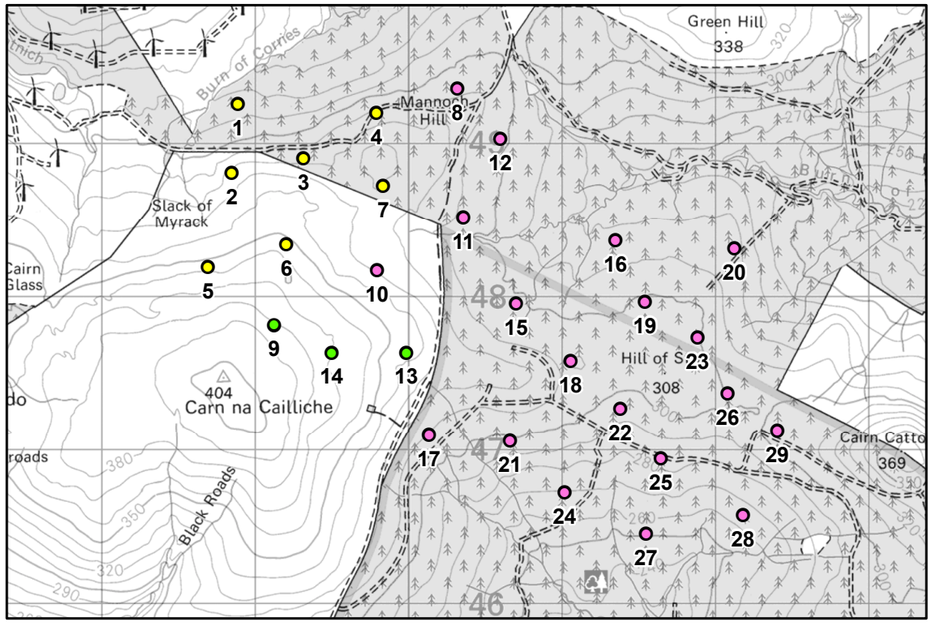
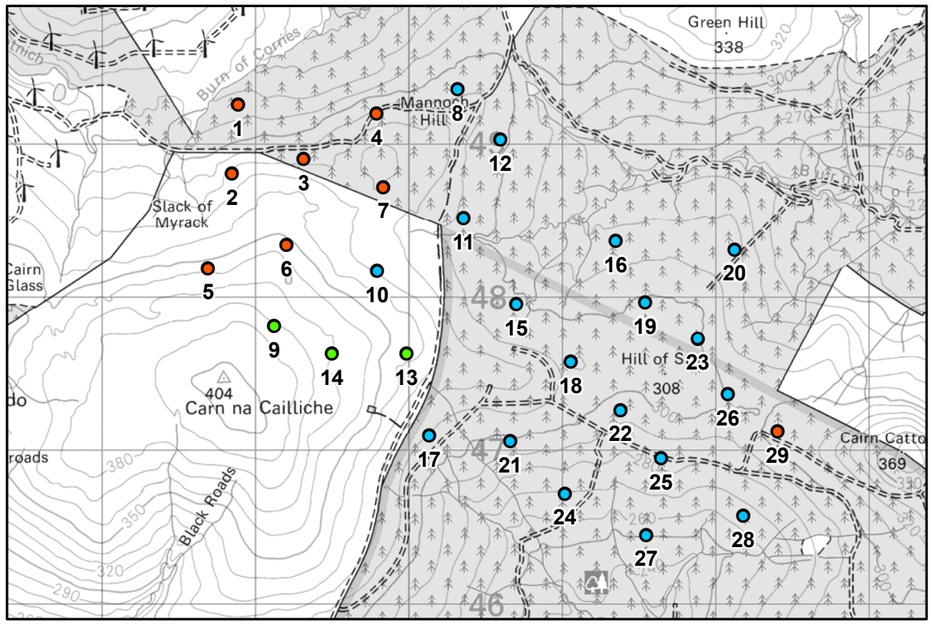


Option A - 30 turbines



Option B - 29 turbines



Option C - 29 turbines

Project:

Rothes III Wind Farm, Moray

Title:

NTS Figure 1.4 Evolution of Turbine Layout Design

Key

Proposed Rothes III turbine

- Tip height 149.9 m, hub height 84.9 m
- Tip height 200 m, hub height 125 m
- Tip height 200 m, hub height 135 m
- Tip height 225 m, hub height 150 m
- Tip height 225 m, hub height 160 m

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Scale @ A3: 1:40,000

Coordinate System: British National Grid

0 0.5 1 2 km

N

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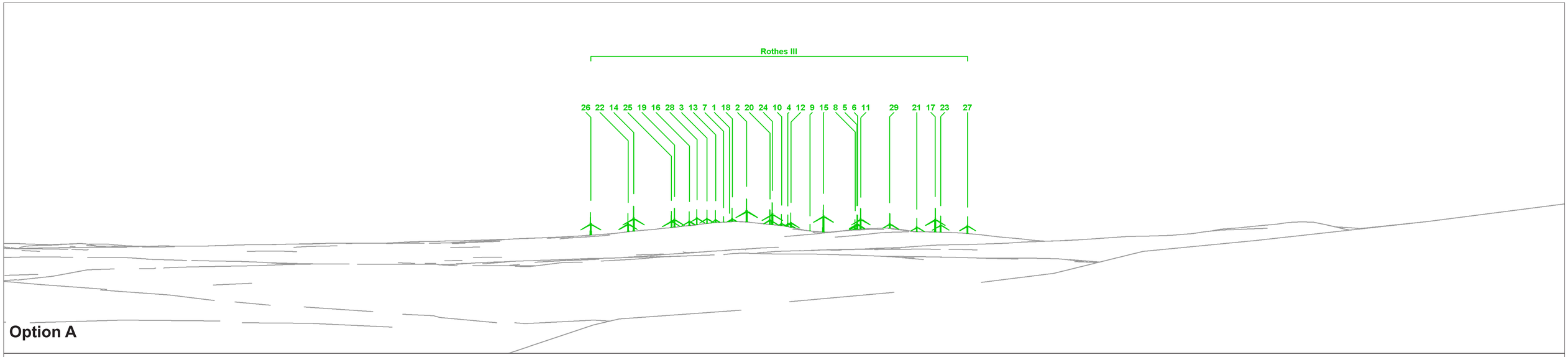

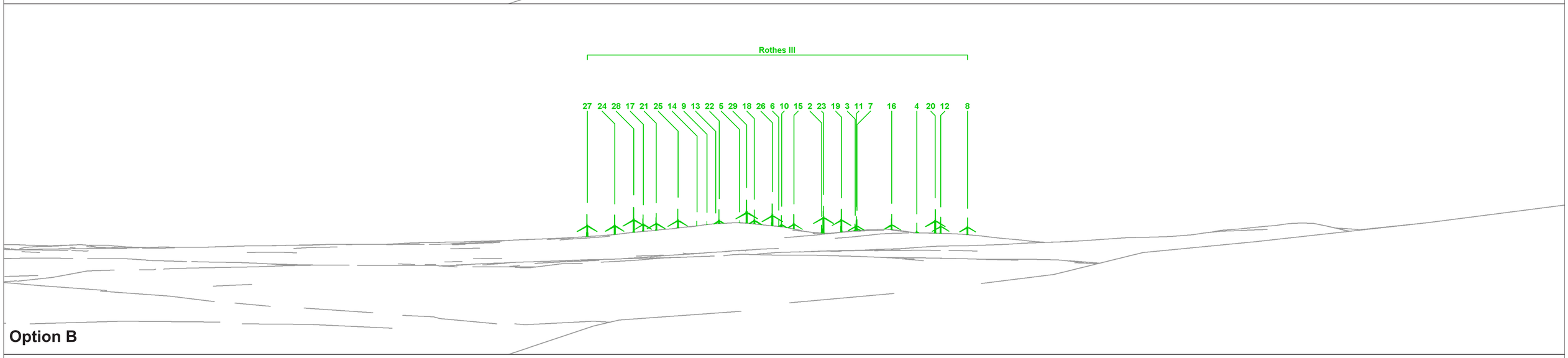

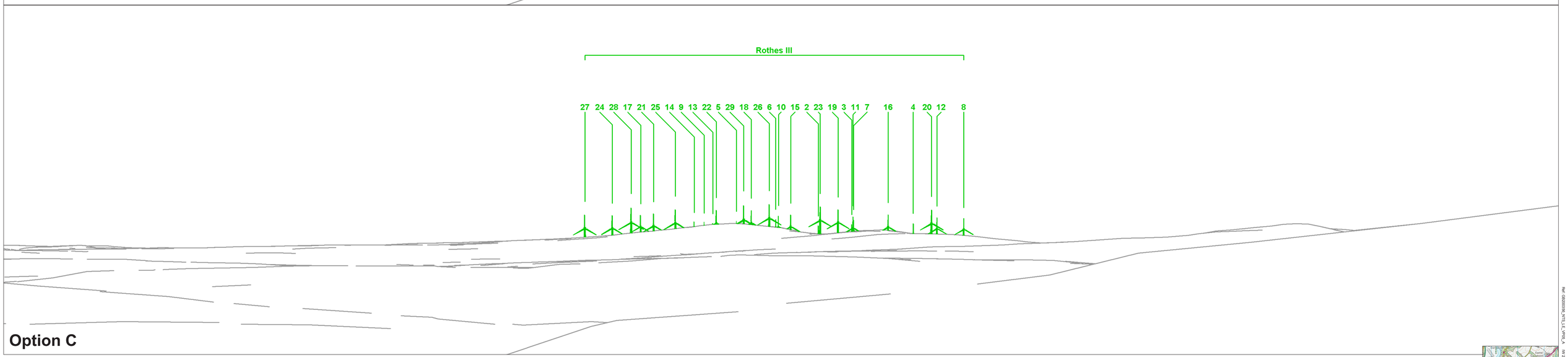

Rothes III Wind Farm, Moray

NTS Figure 1.5: Turbine Layout Design Options: Viewpoint 5 - A95, East of Craigellachie

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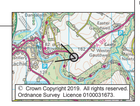
OS reference:	330115 E 844778 N	Horizontal field of view:	53.5° (planar projection)
Eye level:	149 m AOD	Vertical field of view:	12°
Direction of view:	288°	Paper size:	841 x 594 mm (A1)
Principal distance:	812.5 mm		



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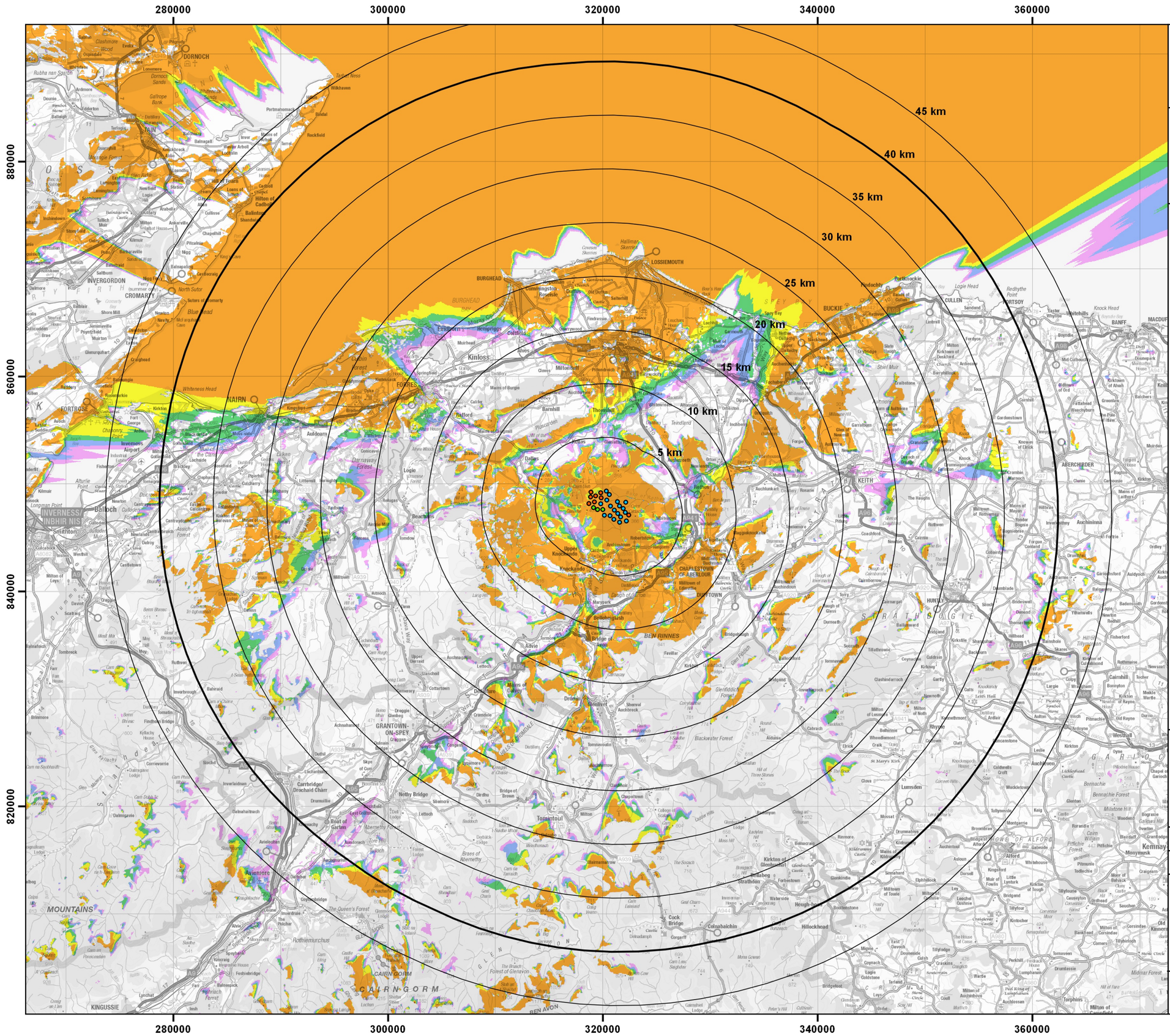

Project:

Rothes III Wind Farm, Moray

Title:

NTS Figure 1.6: Zone of Theoretical Visibility to Blade Tip Height - Study Area (40 km)

Key

Proposed Rothes III turbine

- 149.9 m to tip
- 200 m to tip
- 225 m to tip

Number of turbines visible to tip height:

- 1 - 5
- 6 - 11
- 12 - 17
- 18 - 23
- 24 - 29

ZTV Notes:

* Visibility takes earth curvature and atmospheric refraction into account, but not buildings, trees or other surface obstacles.
* ZTV produced for 29 turbines, of which 18 are 225 m to tip, 8 are 200 m to tip and 3 are 149.9 m to tip.
* Viewpoint height set to 2 m AGL.

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Scale @ A3: 1:350 000

Coordinate System: British National Grid

0 5 10 15 20 km

N

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