

SCOTTISH BORDERS COUNCIL

PLANNING AND BUILDING STANDARDS COMMITTEE

1 MARCH 2021

APPLICATION FOR CONSENT UNDER S36 ELECTRICITY ACT 1989

ITEM: **REFERENCE NUMBER:** 19/00756/S36

OFFICER: Mr Scott Shearer
WARD: Hawick And Hermitage
PROPOSAL: Erection of 45 No wind turbines and associated access tracks, infrastructure including substation/control room buildings and compound, temporary construction compound, meteorological mast and temporary borrow pits

SITE: Land West Of Castleweary (Faw Side Community Wind Farm)
Fawside
Hawick

APPLICANT: Community Windpower Ltd
AGENT: N/A

1.0 CONSULTATION TIMESCALE

1.1 Approval has been granted by the ECU for SBC to issue their response to the proposed development by 3rd March 2021.

2.0 PURPOSE OF REPORT

2.1 To advise the Scottish Government of the response from Scottish Borders Council on an application which has been submitted under section 36 of The Electricity Act 1989 (as amended) to construct 45 wind turbines and associated infrastructure at the proposed Faw Side Community Wind Farm. The proposed development is hereinafter referred to as Faw Side.

3.0 PROCEDURE

3.1 Scottish Borders Council (SBC) is a consultee as a 'relevant planning authority'.

3.2 The views of SBC will be provided to the Energy Consents Unit at Scottish Government (ECU), the body responsible for processing onshore Section 36 planning applications. In this instance, the Faw Side proposal is required to be determined via Section 36 of the Electricity Act 2017 because the extended total capacity of the windfarm would be in excess of 50MW. The ECU advertises the application and carries out consultation with other interested bodies. There is, therefore, no need for Scottish Borders Council to undertake a tandem process although consultation has taken place with relevant specialists within the Council.

3.3 It should be noted that if permission is granted, the Council (rather than the ECU) would become a relevant enforcement authority responsible for monitoring compliance with the terms of an approval and any conditions imposed thereon.

- 3.4 The application site extends across Scottish Borders Council and Dumfries and Galloway Council administrative areas. The ECU has sought the views of D&G Council as part of their process of consideration.

4.0 SITE DESCRIPTION

- 4.1 The application site straddles the border of the Scottish Borders and Dumfries and Galloway occupying an extensive area of rolling hill landform within the Southern Uplands. The site lies directly to the south west of Teviothead and some 17.8km south west of Hawick. Langholm lies 6.7km to the south of the site. The A7 runs down the eastern side of the site with minor roads linked to an unclassified road at Teviothead running through and around the site. There are no rights of way or core paths within the site.
- 4.2 The topography of the site is undulating with hills separated by steep sided valleys. The land is predominately used for grazing with large areas of commercial forestry extending down the western flank of the site and on Merrypath Rig.
- 4.3 Tributaries to the River Teviot flow through the site. These water courses form part of the River Tweed Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI) which has been designated from protection under the habitats regulations.
- 4.4 A small number of residential properties are located are through the site (within SB) and around the edges of the site, those within the site include Giddeonscleugh, Merrylaw and Lymiescleugh.

5.0 PROPOSED DEVELOPMENT

- 5.1 The applicant is seeking consent to build and operate a new wind farm. The main components of the proposed development are;
- 45 wind turbines (T's) and their foundations
 - Crane hardstand areas
 - On site access tracks
 - Substation/control room buildings and compound
 - Underground electrical and fibre optic cabling
 - A 125m metrological mast
 - An energy storage facility and grid connections
- 5.2 During the construction phase the development borrow pits and temporary construction compounds will be required.
- 5.3 Each of the turbines will be three bladed and consist of the following specification;
- 40 turbines with a 200m tip height, comprising 125m hub and 150m blade diameter
 - 5 turbines with a 179.5m tip height, comprising 104.5m hub and 150m blade diameter
- 5.4 Of the 45T's, 13 are located within the Scottish Borders. Their turbine numbers are T1-11 and T18 and T19. All other turbines are located in Dumfries and Galloway. The site access will be taken from the A7 within the Scottish Borders.

5.5 The applicant is seeking consent for an operational period of 40 years. At the end of this period, unless 're-powered' or unless a new planning permission is granted that would extend the wind farm's life, it would be decommissioned and the site restored in agreement with a decommissioning method statement.

6.0 PLANNING HISTORY

6.1 Within SBC local authority area, other than application 20/01476/FUL which seeks permission for the erection of an 80m high metrological mast, there is no other planning history relevant to this proposed development.

7.0 APPLICANTS' SUPPORTING INFORMATION

7.1 The Section 36 planning application is supported by a full ES, which comprises the following documents

- Volume Ia EIA Report
- Volume Ib EIA Report
- Volume II LVIA Figures
- Volume IIIa - IIIc LVIA Visualisations
- Non-Technical Summary
- Planning Statement
- PAC Report

7.2 Additional Information (AI) was submitted to SBC on 20th June 2020. This included information relating;

- Ornithology
- Bats
- Cultural Heritage
- Peat Management and Peat Slide Risk
- Aviation and night-time lighting
- Landscape and Visual updates
- Outline CEMP and HMP

8.0 REPRESENTATION SUMMARY

8.1 Third party representations are submitted to the ECU and it is for that authority to take these in to consideration when assessing the proposed developments on behalf of the Scottish Ministers.

8.2 At the time of writing it is understood that 340 objections and 176 comments of support have been submitted to the ECU in response to this development

9.0 DEVELOPMENT PLAN POLICIES:

9.1 Local Development Plan 2016 (LDP):

Policy Reference	Policy Name
PMD1	Sustainability
PMD2	Quality Standards
ED9	Renewable Energy Development
HD3	Protection of Residential Amenity

EP1	International Nature Conservation Sites and Protected Species
EP2	National Nature Conservations Sites and Protected Species
EP3	Local Biodiversity
EP8	Archaeology
EP13	Trees Woodlands and Hedgerows
EP15	Development Affecting the Water Environment
IS2	Developer Contributions
IS5	Protection of Access Routes
IS8	Flooding
IS9	Waste Water Treatment Standards and Sustainable Urban Drainage

9.2 **SESplan Strategic Development Plan June 2013:**

Policy 1B The Spatial Strategy: Development Principles
Policy 10 Sustainable Energy Technologies

10.0 **OTHER PLANNING CONSIDERATIONS:**

10.1 **Adopted SBC Supplementary Guidance (SG) and other documents:**

- Renewable Energy (2018)
- Visibility Mapping for Windfarm Development (2003)
- Biodiversity (2005)
- Developer Contributions (2010)
- Ironside Farrar Study (2016) on Wind Energy Consultancy Landscape Capacity and Cumulative Impact
- Borders Landscape Assessment 1998 Ash Consulting Group

10.2 **Scottish Government Policy and Guidance:**

- Letter from Chief Planning Officer entitled 'Energy Targets and Scottish Planning Policy' (11 November 2015)
- The Climate Change (Scotland) Act 2009
- The Scottish Renewable Action Plan 2009
- 2020 Routemap for Renewable Energy in Scotland – Update 2015
- National Planning Framework for Scotland (3) June 2014
- Scottish Planning Policy (SPP) June 2014
- Scottish Planning Policy and Electricity Generation Policy Statement 2013
- Onshore Wind Turbines – Planning Advice 2014
- COP21 UN 2015 (following Heathrow Runway decision)
- Climate Change Plan 2018
- Onshore Wind Policy Statement 2017
- Scottish Energy Strategy 2017
- Climate Change (Emissions Reductions Targets) (Scotland) Bill 2019
- The Programme for Government 2019
- UN Gap Report 2019
- Committee on Climate Change (CCC) Report 2019 and annual report 2020
- UK Net Zero Target 2019

- Covid-19 Guidance including Chief Planner's letter, CCC advice and Advisory Group on economic recovery

10.3 **Scottish Government On-line Renewables Advice:**

- Circular 3/2011 Environmental Impact Assessment (S) Regulations 2011
- PAN 60 Planning for Natural Heritage 2008
- PAN 51 Planning, Environmental Protection and Regulation
- PAN 1/2011 Planning and Noise
- PAN 2/2011 Planning and Archaeology
- PAN 1/2013 Environmental Impact Assessment
- PAN 69 Flood Risk 2015
- PAN 75 Planning for Transport
- PAN 81 Community Engagement Planning with People
- Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Development 2016

10.4 **Historic Scotland Publications:**

- Scottish Historic Environment Policy (2011)

10.5 **SNH Publications:**

- Siting and Designing Windfarms in the Landscape Version 3 February 2017
- Visual Representation of Wind Farms Version 2.2 February 2017
- Assessing the Cumulative Impact of Onshore Wind Energy Developments 2012
- Spatial Planning for Onshore Wind Turbines – Natural Heritage Considerations 2015

10.6 **Other Publications:**

- ETSU-R-97 - The Assessment and Rating of Noise from Wind Farms
- CAA Policy and Guidelines on Wind Turbines 2016

10.7 Schedule 9 to the Electricity Act 1989

10.8 Scottish Natural Heritage background paper on – Aviation Lighting Visits

11.0 **CONSULTATION RESPONSES:**

11.1 The following consultation responses have been received by specialist officers at Scottish Borders Council. A summary of the consultation responses received to each is provided below.

11.2 **Access Officer:** No objection. There are no rights of way of core paths within the site. Opportunities exist to improve public access by designing and promoting suitable circular new path routes within the site for all users. Interpretation boards should be installed at places of public interest. Provision of parking at the main entrance would be beneficial for users of the route.

11.3 **Archaeology Officer:** 1st Response 28.10.2019. Object. Recommend that;

- There is evidence of direct impacts beyond those listed in the EIA. Further assessment is required which should utilise LiDAR information of the site.

- Archaeological potential has only been assessed up to 350m OD, there is archaeological potential on areas of flat ground above this elevation potentially at Pikethaw Cairn and Merrypath Rig.
- There will be setting impacts to Eweslees Scheduled Monument. Disagree with the ascription of the monument as a watchtower and would rather see this as a prehistoric barrow. This changes its setting, and the impacts are objectionable.
- There are potentially major setting impacts to a newly identified hilltop cairn on Pikethaw Hill. Further Environmental Information is required to fully explore the site and impacts.

11.4 2nd Response 05.02.2021. Object, recommending that the application is opposed on failure to provide sufficient information with following key points noted;

- The applicants have not considered all the information given to them with regard to the historic environment; the LiDAR information has not been assessed for additions to the HER coverage for archaeological sites impacted by the development.
- Direct impacts of associated infrastructure (i.e. access roads, borrow pits etc) has not been fully assessed
- Impacts upon the setting of archaeological monuments, in particular Ewes Doors and Pikethaw monuments – which remain significantly adverse.

11.5 **Flood Risk and Coastal Management** 1st Response 29.07.2019: SEPA mapping identifies that the site is at risk of flooding from a 1 in 200 year event. Due to minimal flood risk no major objection is raised. Recommend that;

- Hard surface, SUDS and other drainages provide attenuation to existing greenfield runoff rates
- Watercourse crossing do not reduce the flow of conveyance of any watercourse
- Details of silt traps and any other functions are agreed to minimise sediment entering the watercourse.

11.6 2nd Response 2.07.2020 No objection. Satisfied with the additional information provided for the single watercourse crossing and 50m watercourse buffer. Detailed comments provided in 1st response remain relevant.

11.7 **Ecology Officer** 1st response 10.10.2019: Requested further information to assess impacts the ornithological interest, notably hen harrier (qualifying interest of Langholm-Newcastleton moors SPA), ii) details of an Outline Construction Environmental Management Plan and iii) an Outline Habitat Management Plan iv) details on the proposals for Compensatory Replanting.

11.8 2nd Response 25.09.2020 No objection is raised. The following pertinent points noted;

- Further ornithological studies suggest that the development may have a significant effect on some Schedule 1 and 1A raptors during its lifetime. It would be reasonable to require a condition for monitoring and mitigation of raptor impacts as part of wider ecological monitoring.
- The outline Construction Environmental Management Plan (CEMP) is largely satisfactory. A detailed CEMP should clearly identify the relevant components of the CEMP that are in mitigation to safeguard the River Tweed SAC/SSSI.

- Proposed micro-siting allowance of 100m is concerning as significantly exceeds standard 50m. Further control may be required by planning condition to ensure construction works following micro-siting are adequately covered by a CEMP
- The blanket bog measures within the Habitat Management Plan (HMP) are insufficient. This is an irreplaceable habitat and further compensation is required for the loss of 40.79ha of blanket bog.
- A number of planning conditions are required to provide appropriate mitigation for the impact of the development on ecological assets, these include;
 - appointment of an Ecological Clerk of Works
 - a CEMP
 - a Species Protection Plan (SPP)
 - A HMP
 - A programme for ecological monitoring which includes Schedule 1 and 1A raptors
 - Compensatory woodland planting scheme
 - Decommissioning restoration and aftercare strategy

11.9 **Environmental Health:** No objection. The predicted noise generated by the proposed development is below the noise limits at the identified noise sensitive locations. Conditions are recommended to set maximum noise levels to protect the amenity of residential properties and ensure that the candidate turbine (and its final location) will comply with the specified noise limits.

11.10 Noise generated from construction operations is recommended to be controlled via an informative notes specifying the hours for undertaking noisy work and relevant legislation and practice measures which construction operations should adhere to.

11.11 A condition is recommended to ensure that the development does not adversely affect any private water supplies in the vicinity of the site.

11.12 **Forward Planning:** Recommend that further information is required. An overview is provided of relevant national and local planning policy and guidance on renewable energy is provided along with other relevant material considerations. Key points are;

- The proposal is for a community windfarm no confirmation is provided confirming that this development benefits from community ownership identified in a letter from the Chief Planner as a material consideration.
- Policy ED9 – Renewable Energy Development is the most relevant LDP 2016 policy for this application.
- The Council has produced SG on Renewable Energy which along with the related Ironside (IF) Farrar Landscape Capacity study 2016 have been cleared by the Scottish Ministers and form part of the Development Plan.
- IF Study recognises that there is low capacity for a minimal number turbines over 120m in height at this site.
- The 120m limited is the upper limit of the study which this development significantly exceeds.
- Recognise that as subsidies have diminished that turbines will become higher to make them more efficient. Economic benefits of larger turbines must be carefully balanced against landscape and visual impacts.
- The turbines will be required to be lit. Proposal will introduce artificial lighting into a dark rural area and it is absolutely vital this matter is fully

scrutinised. Without absolute certainty as to what the visual impacts of the lighting will be it would be wrong to determine this proposal without this being clarified.

- The Council remains proactive in supporting wind turbines in appropriate locations and is aware of the economic benefits these larger turbines can provide, the considerable height of these turbines, along with any lighting, and their impacts on the landscape and a number of receptors must be scrutinised extremely carefully. A poor decision on this proposal would have detrimental impacts on the landscape and environment on this part of the Scottish Borders.

11.13 **Landscape Architect:** 1st response 4.10.2020. Objected and requested further information, to address undernoted concerns;

- Size of turbines diminish the grandeur of hills
- Introduction of a large windfarm into an area previously free of windfarm development, when seen from viewpoints in SB and from A7, especially VPs 3, 10, 12, 19 and 20 and to a lesser, but unmeasured extent, VPs 23 and 24.
- Detract from the distinctive setting of a number of cone shape hills which appear distinctive in rolling southern uplands
- Significant extent of ancillary infrastructure (access roads, borrow pits etc) will materially alter the character of the rural landscape.
- Introduction of aviation turbine lighting may be visible from near and far and will impact the rural landscape, sense of remoteness and appreciation of the night sky.

11.14 2nd Response 22.12.2020. Maintain objection. The additional information has not addressed landscape and visual concerns that the proposal is out of scale with the receiving landscape and will have an unacceptable impact on landscape character and the detriment impacts of aviation lighting remains unresolved.

11.15 **Roads Planning Service (RPS):** No objection. A larger part of the access to the site is provided by the A7 Trunk Road, suitability of this rests with Traffic Scotland. There is no definitive route for the abnormal loads. The agreement of a Traffic Management Plan (TMP) is recommended to ensure that the preferred access route has the capacity to accommodate traffic movements and/or any upgrades to the public road network to facilitate the access are suitably agreed and any damage to the route is rectified.

12.0 **OTHER IMPORTANT CONSULTATION RESPONSES (SUBMITTED TO SCOTTISH GOVERNMENT):**

12.1 As members are aware, the Council is a consultee in the Section 36 application process and does not undertake any outside consultation itself. Nevertheless, some of the responses received by the ECU have been made known to the Department and Members may be interested in the more significant responses which are detailed below.

12.2 **Historic Environment Scotland (HES)** – Object. Development would have a detrimental impact on the integrity of the setting of Eweslees Watch Tower (SM12750) which represents an issue of national interest. Impacts could be mitigated by deletion of turbines 6 and 7.

- 12.3 **Ministry of Defence (MoD)** – Object on grounds that the development would have a significant and detrimental impact on;
1. the operation and capability of the Eskdalemuir Seismic Recording Station
 2. the effective operation of threat radar at sites that support the RAF Spadeadam Electronic Warfare Tactics Facility
- 12.4 **NatureScot (SNH)** – Additional information was provided which enabled on the value of the blanket bog habitat which enabled SNH to remove their objection on the developments impact on this resource. An HMP is required to mitigate loss of peat and peatland habitat.
- 12.5 Detailed landscape and visual impact advice was provided on 18.05.2020. SNH have not objected on landscape and visual grounds however following concerns relevant to SBC were;
- Significant adverse landscape effect on a number of LCTs.
 - Adverse effects occur from A7 where very larger turbines form a dominant feature which affect the appreciation of rugged and open back drop of hills.
 - Views from Upper Teviot Valley would be significantly affected.
 - Lighting of all turbines will also extend significant adverse effects into dusk and night-time because of the low light levels prevalent in the area.
 - Wind farm is poorly designed with very large turbines on pronounced scenic 'edge' hills
 - Too many turbines causes a congested appearance in end-on views from the north
- 12.6 **Scottish Environmental Protection Agency (SEPA)** – Do not object provided conditions endorsed by SEPA are attached to any consent to control Micrositing, peat management, forestry management and a CEMP.
- 12.7 **Transport Scotland:** Access details provided within AI confirm that the access provided sufficient visibility and traffic entering the site will not impede road traffic. Extent of tarmac apron may need to be extended however this can be addressed at detailed design. Transportation of 75m long blades through known pinch points in Hawick (i.e. B6399/ A7 junction) could be problematic. Acknowledge that use Blade Lift Adapter vehicles are proposed to navigate these pinch points however further information is required to demonstrate that the technology can technically work and does not represent risk to the safe and efficient operation of the trunk road network.
- 12.8 No objection to the proposed development in terms of environmental impact on the trunk road network is raised however conditions covering the following matters are recommended; abnormal road traffic management plan, signage, construction stage traffic management plan, means of access to trunk road, provision and maintenance of visibility splays, wheel washing.

13.0 KEY PLANNING ISSUES:

- 13.1 Bearing in mind that SBC is a consultee rather than the determining authority, the following are the key issues to be reported in the following Assessment:
- land use planning policy principle
 - economic benefits attributable to the scheme
 - benefits arising in terms of renewable energy provision
 - landscape and visual impacts including turbine lighting
 - residential amenity visual impacts, arising from turbines and infrastructure

- cumulative landscape and visual impacts with other wind energy developments
- physical and setting impacts on cultural heritage assets
- noise impacts
- ecological, ornithological and habitat effects
- impact on road safety and the road network
- impacts on the public path network and public access on accessible land

14.0 ASSESSMENT OF APPLICATION:

Planning Policy

- 14.1 Scottish Government policy, regional strategic policy and local planning policy and guidance all support renewable energy, including wind farms, provided that there are no unacceptable and significantly adverse environmental impacts.
- 14.2 Scottish Planning Policy (SPP) sets out a Spatial Framework for determining appropriate sites for wind farms. The SPP states three classifications. Group 1 where wind farms are not acceptable in principle i.e. within National Scenic Areas and National Parks. Group 2 which reflects areas of significant protection including national and international environmental designations, nationally important environmental interests and community separation to settlements of less than 2km. Group 3 recognises areas which are removed from the sensitivities identified in group 1 and 2 and are most likely to be acceptable for wind farm development, subject to detailed consideration.
- 14.3 The site does not fall within Group 1. There are residential properties within 2km of the site however these properties do not form part of a settlement which is identified in the Local Development Plan 2016 (LDP). These properties do not benefit from the 2km community separation in SPPs Spatial Framework. The application site does contain the River Tweed SSSI which is an international environmental designation and areas of carbon rich soils, deep peat and priority peatland habitats which are nationally important mapped environmental interest. The site therefore falls within Group 2 which suggest that *“...in these areas wind farms may be appropriate in some circumstances. Further consideration will be required to demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation.”*
- 14.4 SESplan policy 10 requires Local Development Plans to set a framework for the encouragement of renewable energy proposals that aims to contribute towards achieving national electricity and heat targets and taking into account economic, environmental and transport considerations.
- 14.5 Similarly, the Scottish Energy Strategy is also a material consideration, setting out ambitious new energy targets of 50% of the energy for Scotland’s heat, transport and electricity consumption to be from renewable sources by 2030 and an increase of 30% in the productivity of energy use across the Scottish economy. The Climate Change Bill has also been approved by the Scottish Government aiming to cut emissions by 75% by 2030.
- 14.6 Nevertheless, all Policies and Guidance still require development to be assessed on a case by case basis and only development in the right places will be supported. Para 163 of SPP confirms the spatial framework is

complemented by a more detailed and exacting development management process where the merits of an individual proposal will be carefully considered against the full range of environmental, community and cumulative impacts. The location of the proposal within an area with some potential for wind farm development does not in itself mean that the proposal will be acceptable.

- 14.7 All planning and related applications must principally be determined in accordance with the Development Plan unless other material considerations indicate otherwise. The proposal has to, be assessed against a number of LDP policies. Policy ED9 is the principal Policy dealing with renewable energy development and supports commercial wind farms where they can be accommodated without unacceptable significant adverse impacts or effects, giving due regard to relevant environmental, community and cumulative impact considerations. Proposals will be approved provided that there are no significant effects that cannot be satisfactorily mitigated. Where mitigation is not possible, the development will only be approved if the Council is satisfied that the wider economic, environmental and other benefits outweigh the potential damage arising from it. The policy contains a number of criteria by which to assess the proposal.
- 14.8 Policy ED9 also embodies the Council's Renewable Energy Supplementary Guidance (SG) 2018 which has been approved by the Scottish Government. This contains the Spatial Framework which demonstrates that the site lies within an "area with potential for wind farm development". However, informed by the more specific locational Landscape Capacity and Cumulative Impact Study produced by Ironside Farrar in 2016 and included within the SG, the site does lie within an area of underlying landscape capacity that could accommodate turbines with a tip height of over 120m, when taking into account the constraints identified in the Study. The precise impacts of the proposal must, of course, be assessed in detail against the relevant LDP policies to establish whether the proposal is acceptable.

Design Iteration

- 14.9 Section 3 of the EIA explains the evolution of the proposed development. The pre-scoping exercise in 2017 detailed the development of 62 turbines with a 160m tip height. Following detailed site investigation and subsequent changes within the Onshore Wind sector the number of turbines was reduced to 49 but their tip height was increased to 200m. A revised 29 turbine layout (layout C) was provided after scoping responses from stakeholders. The final layout removed 4 turbines to address landscape and visual impacts and other environmental impacts. The final proposals detail a 45 turbine scheme with 40 turbines at 200m and 5 at 179.9m to address impacts on visual receptors.
- 14.10 The submitted AI has not amended the design or layout of the proposals.

Landscape and Visual Impacts

- 14.11 Policy ED9 requires consideration of the landscape and visual impacts, including the effects on wild land and cumulative impact. Account must be taken of the Renewable Energy SG and the Ironside Farrar Landscape Capacity and Cumulative Impact Study. The latter was updated in 2016 to:
- take cognisance of turbine approvals since 2013 to build a clearer picture of landscape capacity

- adopt new turbine typologies with the upper scale of turbines heights extended from 100m+ to 120m+ to reflect industry changes where there is a greater demand for larger turbines

14.12 Assessment of the landscape and visual impacts should also take into account the relevant guidance from SNH.

Landscape Character

14.13 The site within Scottish Borders lies within Landscape Character Type (LCT) 93 Southern Uplands with Scattered Forest : Cauldcleuch Head Group and within LCT 96 Southern Uplands with Forest: Craik as defined in the recently published in National Landscape Character Assessment Map (SNH). These LCT's are "Upland Types" which are characterised by their large scale, rolling landform where both have higher dome or cone-shaped summits. In the Cauldcleuch Head Group LCT hill peaks range between 300 – 600m. In the Craik LCT these summits are lower between 200 – 500m with its forest cover dominating views from other LCTs including the Cauldcleuch head LCT. The character of these areas are influenced by a sense of enclosure, tranquillity and quietness.

14.14 Upland types are generally perceived to be more suitable for wind farm development due to the grandeur of their scale, however the scale of turbines proposed is larger than any other which has been previously been consented in the Scottish Borders and may pose significant impacts on the key characteristics of the host LCTs. This is recognised in the LVIA which notes at sections 6.7.88 and 6.7.144 that where there is visibility of the development up to 8.5km away, that the development is likely to have significant effects on the character of the site. These impacts will require careful assessment.

14.15 The site is not one of the nationally designated areas of Wild Land. The Cauldcleuch Head Group is noted to display remote qualities with Craik LCT displaying quietness and tranquillity. The introduction of thirteen 200m high turbines across these LCTs, as part of a 45 T development that straddles the border with Dumfries and Galloway, will impact on these landscape characteristics by introducing large scale infrastructure which is of an industrial nature.

14.16 The site is distant from Special Landscape Areas (SLAs) within the Borders with the Teviot Valleys SLA lying some 20km from the development. At this distance, the proposal may not have a detrimental impact on the setting of the SLA during hours of day light, however the introduction of turbine lighting will increase visibility of the development during hours of darkness from this distance and from parts of the SLA. These impacts will be examined within the turbine lighting section of this report.

Landscape Capacity

14.17 The Ironside Farrar Landscape Capacity and Cumulative Impact (IF) Study, updated in 2016 is referred to within policy ED9 and the 2016 version is a material consideration in respect of this application. The IF Study uses the Borders Landscape Assessment to assess the capacity of each landscape type for differing turbine typologies. It is also incorporated within the Renewable Energy SG, which also advises other guidance to be considered. LDP Policy, SG and relevant guidance notes must all be used to assess the landscape

impact and visual effects of the development. The Council Landscape Officer's consultation replies are included in full on the Public Access website and use the Policy and guidance in assessing the landscape impact of the proposal.

- 14.18 The purpose of the IF Study is *"....to determine the landscape capacity of (the) Scottish Borders to accommodate wind energy development and to determine the levels of cumulative development that would be acceptable across the local authority area."*
- 14.19 The IF Study identifies that within the Scottish Borders the site extends across the following two Landscape Character Areas (LCA);
- Southern Uplands with Scattered Forest – Cauldcleuch Head Group (LCA No 4iii). This includes the eastern part of the site. 8 Turbines are located in this area (Turbine No's 1, 3, 4, 6, 7, 8, 18 and 19).
 - Southern Uplands with Forest Covered – Craik LCA No 5(i). This includes the western edge of the development. 5 Turbines are located in this area (Turbine No's 2, 5, 9, 10 and 11).
- 14.20 The Landscape Analysis for the LCA observes that both areas consist of extensive rolling hill landforms with steep sided valleys. There is more commercial forestry within Craik LCA 5(i). Both areas have low internal visibility however 4(iii) has extensive visibility from neighbouring LCAs with the edges of 5(i) visible from surrounding hill areas.
- 14.21 The IF Study recommends that larger turbines, i.e. turbines over 120m have the potential to be accommodated within elevated upland areas of these LCAs which take advantage of topographical containment. Within 4(iii) steep landform gradient may reduce capacity and in 5(i) turbines may be able to be screened by trees.
- 14.22 This analysis is further interpreted in Figure 6.1e which identifies shaded areas to represent the underlying landscape capacity for this LCA on a sliding scale from high to no capacity. The shaded area is meant to *"...show an indicative level of capacity and the extent within and across different landscape character areas. These areas should not be interpreted as a hard boundary and reference should be made to the detailed capacity assessment and locational guidance given in Table 6.1"*.
- 14.23 There is a shaded area which extends across the two LCAs. This area is based on the advice within Table 6.1 which seeks to keep turbines within the elevated upland parts of the LCAs. The application site is located within this area, however this area is only perceived to have a low capacity for turbines over 120m. The eastern part of the site is close to the edge of the shaded area where a valley landform has no capacity for turbines over 120m.
- 14.24 Figure 3.2 of the IF Study illustrates the topography across the Scottish Borders. Figure 2.1 Site Layout of the ES suggest that the 13 turbines within the Scottish Borders occupy the following approximate AOD levels;
- T1 - 290AOD
 - T2 - 370AOD
 - T3 - 320AOD
 - T4 - 325AOD
 - T5 - 415AOD
 - T6 - 370AOD

- T7 - 440AOD
- T8 - 460AOD
- T9 - 480AOD
- T10 - 430AOD
- T11 - 460AOD
- T18 - 490AOD
- T19 - 530AOD

- 14.25 Within the 2nd consultation response our Landscape Architect does identify that T1, 3, 4 and 6 are located within lower parts of 4(iii) and that T2 and 5 occupy lower elevations in 5(i). This is corroborated by their AOD levels noted above. While the IF Study does recognise that there is capacity for turbines over 120m in these parts of the LCAs, the location of some of the turbines appear to extend out with the more elevated parts of the LCAs which were perceived to be the most appropriate location for tall turbines in the spatial study. Furthermore, although the IF Study identifies a capacity for turbines over 120m, this is only a low capacity and this proposal is seeking consent for a number of turbines with a 200m tip height. The scale of the proposed turbines is beyond the upper limits of the IF study, primarily because there was no precedent for such large turbines at the time the report was produced when the tallest turbines being proposed in the Scottish Borders were generally restricted to 145m.
- 14.26 The location of some 200m high towards the outer edges of an area perceived only to have low capacity for 120+ turbines does not wholly comply with the Development Capacity recommendation in Table 6.1 of the IF Study for the affected host LCAs. This failure is a factor of material significance in assessing the landscape acceptability of a wind farm on the application site.

Theoretical Visibility

- 14.27 The Zone of Theoretical Visibility (ZTV) illustrates the potential visibility of the turbines to hub height and blade tip height within 20 and 45km zones and the extent of landform containments (refer to Figures 6.9a – 6.9d). There are also a series of ZTVs showing cumulative impacts (Figures 6.15b – 6.15x) and of lighting (Figures 6.9e and 6.9f).
- 14.28 Examination of Figure 6.8c demonstrates that within the Scottish Borders there are views of the development from elevated locations around the site to the north. Intermittent visibility extends from Teviothead in a north easterly direction along the A7 towards Hawick. Visibility extends around the northern edges of Hawick and towards Ancrum on higher ground on the northern side of the River Teviot. A swathe of visibility also extends from Craik to Borthwickshiels and picks up parts of Robertson. There are intermittent views of the development from hills to the east of the site. To the west there are limited receptors of the development within the Scottish Borders. From the South there are long areas of visibility of the development from the A7 on approach to the Scottish Borders.
- 14.29 The Council's Landscape Architect acknowledges that there is a good degree of landform containment of the development from the Scottish Borders including inhabited areas and parts of roads along valley floors to the north and north east. The theoretical visibility suggests that the development benefits from a reasonable level of containment from parts of the Scottish Borders, nevertheless there remains visibility from key receptors and the extent of these landscape and visual impacts are discussed below.

Landscape Impact

- 14.30 The acceptability of landscape impacts depends on the level of change of the existing character 'pre-development' weighed against the 'post-development' impacts of the proposals. The proposal will introduce a very large commercial windfarm in to an area which was previously free from windfarm development, posing potentially very significant consequences for the receiving landscape. The landscape impact of the development is discussed in the assessment of selected viewpoints below and all are within the Scottish Borders;

Viewpoint 10 – Hizzy Cairn

- 14.31 This Viewpoint (VP) is from the side of the Lymiescleugh Burn looking towards the elevated Southern Uplands and is approx. 3.8km away from the nearest turbine. The turbines appear very prominent, spreading across the southern skyline. Within the centre of the array the turbines appear congested with the grouping towards the west. This gives rise to stacking with multiple blade overlaps which could appear untidy against the simple rolling skyline. Towards the east T20 appears as an outlier. From this VP it is evident that T1, T3, T4 and T6 occupy lower AOD levels as they noticeably step down from the elevated upland platform towards the incised valley. Their excessive scale appears significantly out of keeping with the smaller scale valley which they intrude. Further west, T2 and T5 are also seen to have a disproportionate impact on the smaller valley landscape they are positioned towards. The siting of each of these 200m high turbines out with more elevated parts of the Southern Uplands conflicts with guidance within the IF Study and results in causing adverse landscape effects within the Scottish Borders. The scale and positioning of the turbines is judged to significantly dominate the landscape which has a harmful effect on its simple character and sense of remoteness.

Viewpoint 11 – Right of Way East of Teviothead

- 14.32 It is conceded that this path does not appear to be used frequently, however the Landscape Architect observed that it is characteristic of views from the neighbouring Pastoral Upland Fringe: Upper Teviot LCA. The turbines are visible within the upland landscape. The scale of the turbines are considered to potentially diminish the grandeur of the hills in this view.

Viewpoint 19 – Penchrist Pen

- 14.33 This is an elevated panoramic viewpoint overlooking the Southern Uplands. Up to 35 turbines are visible from this location. Within the central foreground of the array is Skelfhill Pen. The base line image for the photomontage has been taken when the land has been snow covered which reduces the prominence of the hill. Fortunately the landform can be better interpreted by the wireline in Figure 6.35b where Skelfhill Pen appears as a distinctive cone shaped hill. The turbines appear to crowd around the hill and their vertical scale affords some tips to extend above Skelfhill Pen. The scale and siting of the turbines undermines the prominence of Skelfhill Pen in the skyline as a distinctive cone shaped hill which contributes to the character of the host landscape.

Viewpoint 20 – Greatmoor Hill

- 14.34 From this hill summit, the extent of the largescale simple landform of the upland landscape is evident. At this 11km distance the windfarm does appear dominant with a number of the 36 visible turbines all seen from their hubs. The tip heights extend above the skyline and hill summits diminishing their grandeur.

Viewpoint 24 – Rubers Law

- 14.35 No photomontage information was provided in the original LVIA. Figure 2a in the FEI provided the required photography. It is accepted that this is a distant VP which is 25km away from the nearest turbine therefore the development forms a small portion of the view. Nevertheless the location of the turbines on the skyline does increase their prominence and the Landscape Architect identifies that the turbines' detrimental relationship with Skelfhill Pen may be evident.

- 14.36 In summary, the receiving landscapes may have the potential to accept a wind energy development of very large turbines (120m+) and this is reinforced by the guidance of the IF Study. Notwithstanding this, the excessive scale of the proposed turbines means that they often appear dominant within the host LCA's. From VP10 it is clear that T's1 – 6 which are located within the Scottish Borders step down from the elevated upland part of the LCA where the IF Study appraises that there would be low capacity for wind turbines over 120m. These turbines do not benefit from the topographical containment of the upland area and their scale results in the development appearing to dominate the landscape, particularly the valley above which they are positioned. The excessive scale of the development is considered to have a detrimental impact on the underlying qualities of grandeur and tranquillity within the uplands. The proposals also diminish the drama of Skelfhill Pen – a distinctive cone shaped hill – which contributes to the character of the landscape.

- 14.37 The AI provided no details to respond to the concerns originally raised by the Landscape Architect. The scale of the proposed development is considered to give rise to unacceptable and adverse impacts on landscape character when it is visible from the north and east which is contrary to LDP Policy ED9, the Renewable Energy SG and Ironside Farrar Landscape Capacity and Cumulative Impact Study.

Visual Impacts – Roads and Paths

- 14.38 The submitted ZTV plans confirm the extent of theoretical visibility from the impacted road and path networks within the surrounding environment. Viewpoints which affect movements associated with the Scottish Borders are discussed below;

Viewpoint 10 – Hizzy Cairn

- 14.39 This viewpoint has been used to assess landscape impacts however it is also relevant to note the impacts for users of this route. This is a minor road to Commonbrae which provides access for residents with the roadside cairn in memory to motorcyclist Steven Hislop attracting visitors to this route as a destination. The Landscape Architect agrees with the ES that this VP has a medium – high sensitivity for visual receptors. Users of this route will be

subjected to the disproportionate prominence of the proposed development within the landscape as noted in the Landscape Impact section above. The road and its setting has a quaint rural charm and benefits from a sense of enclosure. Visibility of 28 turbines up to 200m in scale significantly intrudes on the rural character of this route. This detrimental impact will be experienced regularly by local residents and also the visitors who are attracted to use the route and stop at the Hizzy Cairn.

Viewpoint 12 – Minor Road to Hermitage at Carewood Rig

- 14.40 This VP is within Dumfries and Galloway, however it is close to the local authority boundary with the Scottish Borders, approx. 1.5km to the east. While this route is a minor road it is signed with brown tourist signs at both ends to Hermitage Castle and also from Hermitage as the Reiver Trail, and takes in panoramic views travelling from Hermitage and the Hermitage Water valley to the A7. This route has a high scenic quality. The viewer is looking westward into hills and valleys at the most northerly extent of Dumfries and Galloway. The upper parts of T19 together with a blade clip of T18 are the only turbines in the Scottish Borders which are visible, however the number and extent of turbines seen from this location has a dramatic negative visual impact on this view with westbound road users subjected to a view where turbines dominate the skyline having just left the Scottish Borders.

Viewpoints 2, 3, 4 and FEI Viewpoint 1 – A7

- 14.41 The A7 is an important trunk road which connects the Scottish Borders with North West England and Edinburgh and as the Borders Historic Route, is recognised as a major tourist route through the Scottish Borders. It passes east of the development within a deeply incised narrow valley between Teviothead and Langholm which does result in there being parts of no visibility of the development, however there are also areas of visibility. It is worth noting that the A7 also forms part of the Borders Historic Route.
- 14.42 VP2 is located in Dumfries and Galloway, just south of the local authority boundary. Blade tip of T6 would be the only turbine in the Scottish Borders that would be partly visible. Some other blades of turbines within Dumfries and Galloway would be visible however these views are not considered in this report.
- 14.43 VP3 is located beside Ewes Hall in Dumfries and Galloway. The VP is provided off the trunk road, however the ES notes that a similar view is gained from the Trunk Road. Members should be aware that the view is across Dumfries and Galloway and no turbines within the Scottish Borders are visible. The Landscape Architect observes that the scale of some turbines is similar to the size of the hills above the valley floor they are positioned on. This catches the eye of the receptor and would be representative of views of the wind farm where it is visible along this section of the trunk road.
- 14.44 VP4 is further south on the A7. This VP shows the extent of the development which would be visible where it ranges across the skyline on this part of the trunk road. Again the host landscape is Dumfries and Galloway and only a blade of 1 turbine in the Scottish Borders is visible.
- 14.45 The LVIA did not originally provide a VP from the A7 within the Scottish Borders, but this was remedied in the AI with an additional VP (FEI 1), to the

south of Teviothead. T3 and T2 and to a lesser extent T5 do appear to step down in to the valley. This does not appear as dramatic as from VP10 because at FEI VP 1 it is seen within a larger valley landscape where the hills at either side help to conceal the development. The Landscape Architect does consider the impacts from this VP and considers *“the photomontage does demonstrate the magnitude of change to this valley, how visible the turbines will be and that the turbines will dominate the valley and the hills they are located on, as well as being out of scale with the other vertical features within the landscape, including trees and the pylons that are already a visible feature in the valley landscape.”*

- 14.46 From analysis of the affected routes, it would appear that other than VP10, the selected viewpoints may not necessarily reveal significantly adverse impacts on views from the Scottish Borders or of Scottish Borders landscapes. Nevertheless, the development does appear to be visible from routes which connect to the Scottish Borders with receptors travelling to and from the region subjected to such impacts. In particular these impacts are experienced from the A7 which is a primary route into and out of the Scottish Borders which experiences high traffic volumes. This road is also a promoted tourist route therefore receptors using the road for this purpose will be more sensitive to the landscape. The development is considered to appear prominent from parts of the A7. This view is shared by SNH in their landscape and visual impact advice dated 18th May 2020 to the ECU who considered the impact of the proposal on the trunk road and recommended; *“...very large turbines are sited on top of eye-catching ridgelines and pronounced peaks increasing their visual impact and incongruity.”*
- 14.47 While views of the development from the A7 may indeed be intermittent they do result in a cumulative sequential visual impact along the well-used A7 which will have an adverse visual effect for the experience of residents, commuters and tourists travelling to and from the Scottish Borders. It is therefore concluded that the development will have unacceptable and significant adverse visual impacts from roads which is contrary to LDP Policy ED9, the Renewable Energy SG and the Landscape Capacity Study.

Visual Impacts – Residential Amenity

- 14.48 SPP advocates the identification in Local Development Plans of an area not exceeding 2km around settlements (that have settlement boundaries within Local Development Plans) as a community separation for consideration of visual impacts. This separation distance was not specifically referred to individual properties but it is regularly used as a threshold by Reporters in decisions and it is generally recognised that most overbearing and unacceptable impacts on residential amenity would tend to occur within that distance rather than between 2 and 5km distance. The Council’s Renewable Energy SG also clarifies that individual properties within 2km should be considered. There is also a growing opinion that with heights of turbines now greatly in excess of heights commonplace at the time of SPP 2014, the 2km study area should often be extended to 2.5-3km.
- 14.49 Visual impacts on residential amenity, whether from settlements or individual properties, tend to use a type of methodology that has become known as the “Lavender Test”. The “Test” is an assessment approach that has been taken in a number of appeal cases to assess impacts, even though it is not universally applied nor is there any agreement or Scottish Government guidance

recommending its usage. The “Lavender Test” not only refers to the impact on houses but also their gardens. It sets quite a severe threshold of whether a wind farm would be so overbearing and dominant on a property that it would make it an unattractive place to live. Much would contribute to that assessment including proximity, elevation, main outlook from windows, interruption by screening or buildings, location of garden ground, approach roads and tracks etc. These matters are considered and advised in the Renewable Energy SG.

- 14.50 Whilst all matters must be considered in the overall assessment, the greatest weight simply has to be given to direct and unavoidable impacts from inside dwellinghouses and, in particular, main habitable room windows. There is also evidence that decisions are taken on the number and proportion of properties within an area that may experience such impacts. The fewer the properties impacted, the less weight that would hold in the overall planning balance.
- 14.51 The ES identifies that there are 5 residential properties within 2km of the development which are located within the Scottish Borders. These properties and their distance to the nearest turbine are noted below;
1. Gideonscleuch – 0.79km
 2. Merrylaw – 1.02km
 3. Riverside Lodge – 1.32km
 4. Commonbrae – 1.35km
 5. Blackcleugh – 1.94
- 14.52 Gideonscleuch and Merrylaw are both determined to experience a high magnitude of change and significant visual effects as a result of the development, however both of these properties are financially involved therefore the detrimental impact they would experience is discounted.
- 14.53 Riverside Lodge and Commonbare are located next to each other to the north of the development. There is theoretical visibility of up to 22 turbines to blade tip from these dwellings. The main outlooks from Commonbrae is towards the east and west meaning that the property is angled away from the development. There is a small window on the gable of the house which does face towards the development but this is not perceived to be the dwellings main outlook and it is likely that intervening vegetation would screen the development from this opening. Riverside Lodge is angled more towards the development however this bungalow does occupy a lower ground level than its neighbour which will enable roadside vegetation to screen the development from potential views from principle rooms. There is potential that gardens of both properties will be affected, however the presence of vegetation is again, likely to help screen views of the turbines.
- 14.54 Blackcleugh is located within a valley to the north of the development. Similar to Commonbrae its main outlook is towards the east allowing the property to be angled away from the wind farm. The long access road to the property and the properties garden are open and likely to suffer high visibility of the proposed wind turbines. This is an unfortunate impact, however it is not an impact on habitable rooms. The Lavender Test seeks to avoid development impacting on the main views of a garden. The orientation of the dwelling and presence of the river directly to the west of the property suggest that this is the main view of the garden. While you would be aware of the development to the south when looking towards the river within the garden, importantly this westward view from the curtilage space would not be significantly affected by the development. Where there are views from the garden and also from the access road, these

views would be interrupted by landform and planting belts which will help to soften the impact of the turbines.

- 14.55 Overall, only the amenity of a low number of properties are affected within the Scottish Borders. Adverse impacts are limited to residential accesses and some garden ground spaces. While each of these effects are not to be overlooked the impact of the development on residential receptors within the Scottish Borders are not judged to be significantly adverse to object on residential amenity grounds.

Cumulative Landscape and Visual Impacts

- 14.56 Policy ED9 requires all cumulative landscape and visual impacts to be considered and recognises that in some areas the cumulative impact of existing and consented development may limit the capacity for further development. The Renewable Energy SG contains advice on cumulative impact as does the IF Study. Both the Policy and the Guidance advise that there will be a presumption against development where cumulative impacts are expected to be significant, adverse and unacceptable.
- 14.57 Within the Scottish Borders, the cumulative impacts of the proposed development judged to be restricted to;
- Langhope Rig 20km to north
 - Barrel Law 17km to N
 - Pines Burn 17km to NE
 - Windy Edge 10km to E
- 14.58 The development is located away from other wind farms within the Scottish Borders. It is not observed to cause any cumulative impacts to any of the wind farms located to the N or NE of the site.
- 14.59 VP20 to the east of the development is close to Windy Edge. With only 1 or 2 blade tips visible at Windy Edge, Faw Side does not pose any detrimental cumulative impacts in association with Windy Edge. When viewing south west from VP20, there are already an array of windfarms within Dumfries and Galloway. Faw Side will be positioned in front of these wind farms which increases the perception of windfarms from this direction. The windfarms in Dumfries and Galloway are in excess of 22km away which leaves clear space between the proposal and these sites. The addition of Faw Side is judged to result in a medium magnitude of change and a resultant significant cumulative effect from this VP. Despite this concern, the proposal is not considered to pose any significantly detrimental cumulative impacts which result in a high magnitude of change. The cumulative impacts of the development are judged to be acceptable against Policy ED9 and associated guidance.

Visual Impact – Associated Infrastructure

- 14.60 The development involves the construction of close to 40km of new tracks across the whole development. Elsewhere within the Scottish Borders part of the site, the following associated works and infrastructure are proposed;
- 5 borrow pits
 - 2 construction and storage compounds
 - 1 substation and control room
 - 1 substation and control room construction compound

- 14.61 Some of these associated pieces of infrastructure will only be required during the construction phase. Concerns have been raised by the Council's Landscape Architect about the physical and visual impact of the access tracks. The value of the rough grassland/moorland affected by the development is judged by the Landscape Architect to represent medium-high landscape and visual values. Within the second consultation response following further details in the AI regarding the impact of the works it was observed by the Landscape Architect that the works were "*...not insignificant and will alter the character of the area they traverse both physically and visually.*"
- 14.62 These impacts will be noticeable from VP10 where they would begin to appear as scars across the valley. The tracks would be viewed in association with a very large commercial wind farm. Their presence would add to the development impacts on the rural landscape.
- 14.63 If considered in isolation, the visual and physical impacts of the tracks would unlikely tip the planning balance against this development. Nevertheless when considered in association with the significantly adverse and unacceptable landscape and visual impacts of the turbines they do exacerbate those impacts on the character of the rural landscape.

Aviation Lighting

- 14.64 All of the proposed turbines are over 150m tall. Under Civil Aviation Authority (CAA) regulations it is a legal requirement for all structures over 150m to be fitted with a visible red aviation warning light. The light is required to be a 2000candela (cd), omni directional light which has to be fitted as close as practicable to the top of a fixed structure. For wind turbines the lights are fitted to its nacelle (hub). Additionally, 3no. low-intensity 32cd steady lights are required to be fitted around their towers. Members will be aware that lights are often fitted to wind turbines to aid the navigation of Ministry of Defence aircraft the difference being that the MOD lighting requirements are for the use of infra-red lighting which is not noticeable to the naked eye.
- 14.65 The aviation lights fitted to this development will be required to meet the same regulatory requirements as those which were proposed to be fitted to the turbines at Crystal Rig IV (application ref; 18/00768/S36). On considering the impacts of aviation lighting for that development. Members will recall they agreed with the recommendation of Officers that lighting would detract from the visual amenity of the rural environment and the night time character of the Lammermuir Hills SLA. The Council have appeared at a Public Local Inquiry (PLI) to defend the decision to oppose Crystal Rig IV due to the visual and landscape impacts caused by aviation lighting and a decision is awaited from the Scottish Ministers. Since the Council's decision to oppose Crystal Rig IV, there have been no wind turbines consented within the Scottish Borders with aviation lights. Furthermore it is understood that there are currently no wind turbines within Dumfries and Galloway which are fitted with visible aviation lighting.
- 14.66 Included in the original LVIA, the applicants provided night time visualisations from three VPs, turbine lighting ZTVs and a written assessment. None of the VPs have been taken from locations within the Scottish Borders, however the information provided does help to assess the effects of the proposed lighting.

- 14.67 The EIAR at paragraph 6.9.11 proposes that aviation lighting would include 'dimming' mitigation which is permitted by CAA Policy to allow the intensity of the lights to be reduced to 10% of their capable illumination. Sensors would be fitted to turbines to measure atmospheric conditions and when conditions enable visibility around the site in excess of 5km (i.e. in the absence of low cloud cover, rain, mist, haze or fog) the intensity of the light would be reduced from 2000cd to 200cd. The photomontages seek to illustrate the difference between the intensity of 2000 and 200 cd lights.
- 14.68 Paragraphs 6.9.14 – 6.9.14 explain that CAA Policy does also not require aviation lighting to be visible at angles below -1 degree because aviation lighting is not required to project downwards to lower elevations. The EIAR informs that consideration is being given to the potential for 'shielding' mitigation to prevent light penetrating to lower elevations by means of mitigation either built into the internal light casing or an external device to restrict the spread of the light beam. This would remove lights being visible from areas coloured; blue, green, orange and yellow on the Lighting Intensity ZTV, Figure 6.9f.
- 14.69 Paragraph 6.9.20 suggested that an aviation lighting detecting system may be used to limit when turbine lights were switched on to times when air traffic approached the development. It is understood that this has been discounted as they are not approved in UK airspace.
- 14.70 The consideration of the effects of lighting remains a complex matter to assess. In the absence of wind turbines with CAA lighting in the Scottish Borders, Members are reminded of other infrastructure which are fitted with civil aviation warning lights which include;
- the Selkirk and Ashkirk transmitters
 - cranes at the St James Centre redevelopment in Edinburgh
 - the Queensferry crossing
 - offshore wind turbine at Methil in Fife
- 14.71 The lights on each of these pieces of infrastructure may operate at a different intensity than the lighting proposed at Faw Side. Some of these lights may also be angled differently than those fitted to a wind turbine where they face towards the viewer and increase the intensity. Nevertheless, some of these lights have been observed to be visible across long distances up to 30 – 40km and potentially more depending on light conditions.
- 14.72 The proposed mitigation suggests that aviation lighting would only be visible at elevations of -1 degree and above. These areas are coloured lilac and purple on the Figure 6.9f. It is understood that the highest intensity of the lighting will only be visible from areas coloured purple on Figure 6.9f during periods of poor visibility. Figure 6.9f suggests that there would only be potential for 2000cd visibility from Dollar Law to Meggethead in Tweeddale which are areas where there would appear to be limited receptors. There would remain visibility of the lighting in the areas coloured lilac on Figure 6.9f which would affect large areas to the north and north east within the Scottish Borders.
- 14.73 Members are directed to document SNH – Aviation Lighting Visits on Public Access. These images were captured by SNH staff of turbines with aviation lighting in Scotland, with the document provided by East Lothian Council as part of the appeal documentation for the Crystal Rig IV PLI. Image 3 shows

Middleton Wind Farm which is located to the south west of Glasgow. Lights were required at this wind farm due to its proximity to Glasgow Airport. The image is taken from Kelvingrove Park viewing across the city towards the wind farm at a range of approx. 15km. Both 2000 and 200cd lights are installed at this wind farm and these are identified in the image. It is clear that the 2000cd is brighter, however the 200cd light is still noticeable within a lit urban environment.

- 14.74 Image 4 shows a wind farm on the Hill of Glaschyle in Moray. The MOD requested that this particular development was lit with visible red aviation lights. The installed lights only operated at a 64cd intensity. A planning application to seek to replace the visible red aviation lights with infrared lights was approved following public concerns about the visual impact of the installed aviation lighting.
- 14.75 The Council's SG on Renewable Energy quotes paragraph 2.13 of SNH's Siting and Designing Wind Farms in the Landscape 2017 which states that the effects of aviation lighting is; *"likely to be more significant in areas with less artificial lighting, including remoter rural locations, Wild Land Areas and dark sky sites where the absence of artificial lighting contributes to the feeling of remoteness or the direct appreciation of the night sky. Lit turbines may lessen the contrast between developed and undeveloped areas, e.g. when viewed from nearby settlements. Whilst it may be possible to mitigate these effects, they should still be considered in the assessment. Effects at dawn and dusk should also be considered where these could be significant"*
- 14.76 SNH's Landscape Character Assessment's notes that some of the key characteristics for the host landscapes are their degree of remoteness and sense of quietness and tranquillity. During hours of darkness, it is accepted that the visual perception of landscape features such as the large rolling landform or striking cone shaped summits will diminish. The limited habitation in these areas means that light pollution is minimised. Despite the environment being dark, they are considered to retain their remote and tranquil qualities. The key landscape characteristics of the site confirm that the development is located within an environment which is sensitive to proposals which seek to introduce aviation lighting and where the impact of the introduction of aviation lighting may be significant.
- 14.77 The proposed mitigation does limit both where lights are seen from and depending on atmospheric conditions how visible they will be. Despite these reductions, the purpose of the aviation lighting is to be seen and draw attention to the turbines. The benefits of the proposed mitigation are acknowledged however this remains a developing sector and no compelling evidence has been provided which demonstrates the proposed mitigation being put in to practice successfully elsewhere. A cautious approach remains necessary when considering the suitability of the mitigation.
- 14.78 Figure 6.9f suggests that mitigation will mean that the proposed lighting is not necessarily visible from densely populated parts of the Scottish Borders, certainly not within 20km of the site (areas coloured purple and lilac on Figure 6.9f). Rural parts of the Scottish Borders to the north within the Ettrick Valley are suggested to have visibility of the development at a range of approx. 17km. There is theoretical visibility towards the north of Hawick at 22km on the A7 and at greater distances towards the central Borders towards the west of

Jedburgh which includes parts of the Teviot Valleys SLA and parts of the A68 adjacent to Ancrum.

- 14.79 During hours of daylight the impact of the development from these areas are likely to be limited. SNH guidance on Siting and Designing Wind Farms in the Landscape notes that offshore wind turbines are clearly visible at 20 miles or more. The images of Middleton wind farm confirms that a 200cd light is visible at 15km within in lit environment. This intensity of light would likely appear more noticeable than is shown in this image within a dark rural environment which is the environment which receptors of this development would be looking towards. Lighting at Glaschyle demonstrates that even lighting of a lower intensity at 64cd can appear bright in an environment with low levels of artificial lighting with the accompanying written text informing that these lights were visible at greater distances of c18km.
- 14.80 This information suggests that the lilac coloured areas on the ZTV which have visibility of the development from the locations noted above are at ranges where they will be able to view the aviation lighting at Faw Side. From the affected locations the ZTV information does not determine precisely how many lights will be visible from each of these routes and which lit turbines will be seen. The precise arrangement of the lights in the sky is not known. Nevertheless the colouring of the number of turbines visible from these locations on Figure 6.9e, suggests that a number of lit turbines will be seen from these locations which may include up to 27 lit turbines (NB the colour contrast on this ZTV has not aided this assessment) with locations within the Ettrick Valley having some potential visibility of up to 45 lit turbines. From the affected routes receptors will likely see a cluster of red coloured lights which will appear incongruous with the otherwise dark rural environment when travelling on affected roads within the Scottish Borders. This has a character changing impact. The installed lighting will not only be visible during hours of darkness but also in periods of low light (similar to the levels shown on the photomontages), at dawn and dusk and potentially periods of fog and mist which will draw extra attention to the development.
- 14.81 In the event that the proposed mitigation is not successful a far greater area of the Scottish Borders (coloured blue, green, orange and yellow on Figure 6.9f) would be subjected to lighting impacts. These locations would include northern parts of Hawick, the long stretches of the A7, Teviothead and residential receptors close to the site. Such widespread impacts would significantly increase the number of people within southern parts of the Scottish Borders who would be subjected to potentially prominent red coloured aviation lighting within part of the sky which is generally dark.
- 14.82 Within the AI, the applicants have advised that they are seeking to progress an Aeronautical Study with the CAA to establish if the number of turbines require to be lit can be reduced in consultation with various air space users. Members are advised that the findings of an Aeronautical Study at Crystal Rig IV enabled the number of lit turbines to be reduced from 7 to 4 turbines with all 32cd lights from the towers removed as well.
- 14.83 The applicant's perusal of a reduced lighting scheme is welcomed however it would be important to consider which turbines are still required to be lit, where they may be visible from and what the lighting of the array would look like within the surrounding environment. These findings would represent material considerations for this proposal which should be assessed as part of the

environmental impacts of this wind farm. An Aeronautical Study and any relevant supporting information has not yet been submitted as part of this development for the consideration of SBC.

- 14.84 From the information provided, it is considered that the Southern Uplands is a dark rural environment with low levels of artificial lighting. The introduction of aviation lighting would;
- extend the visual effects of this wind farm into hours of darkness;
 - the presence of red lighting would urbanise the rural landscape during hours of darkness and detract from the sense of remoteness and tranquillity of the host environment;
 - result in the development being visible from more locations than it is during the day; and
 - draw greater attention to the development and increase the prominence of the windfarm at dawn and dusk and periods of low visibility.
- 14.85 Provided the proposed mitigation is successful, the visual impacts of aviation lighting may not affect many populated areas. However it will affect many people when they are travelling around southern and central parts of the Scottish Borders during hours of darkness and at dawn and dusk when the attention would be drawn to a number of elevated red lights within an otherwise area of low background lighting. The red coloured lighting will appear urban in character and would detract from the character of the dark rural environment including the night time character of the host environment and some potential views from the Teviot Valley SLA. The proposed mitigation appears to be unproven and untested. The impact of turbines lighting are judged to be significant and approving this development based on the evidence provided would be a risk which could significantly harm the visual amenity of the Scottish Borders.

Turbine Micro-siting

- 14.86 The original submission requested a micro-siting allowance of 200m and SEPA did object to this request. The AI has proposed to reduce the micro-siting tolerance down to 100m with a commitment that this will be managed onsite by an Ecological Clerk of Works.
- 14.87 The principle of allowing flexibility provided by micro-siting is acceptable to allow for further investigation into ground conditions and other environmental effects which include visual effects. In an updated response SEPA recommended that their preference remains for a 50m micro-siting allowance with a condition to provide a 50m buffer to watercourses, and prohibit micro-siting where there are known areas of deep peat, GWDTEs and private water supplies. It is accepted that that a 50m distance provides much greater environmental control, and from a visual perspective, the ability to move so many 200m high turbines up to 100m could significantly alter the appearance of the development. Should Members be minded to support this development, it is recommended that Micrositing be limited to 50m. This condition should account for SEPAs recommendations and ensure that no Micrositing takes place closer to non-financially involved residential properties. Also if Micrositing involves increases in ground level height above AOD, wireframes should be provided to illustrate that each turbine's revised position can be tolerated in the landscape without increased adverse visual impacts.

Economic and Socio-Economic Benefits

- 14.88 Wind energy developments can make an important contribution to the UK economy. Net economic impact is a material planning consideration and local and community socio-economic benefits include employment, associated business and supply chain opportunities.
- 14.89 SPP states that where a proposal is acceptable in land use planning terms, and consent is being granted, local authorities may wish to engage in negotiations to secure community benefit. The Scottish Government's Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments advises that where local benefits are proposed through a shared ownership opportunity and there is an intention to secure a partner organisation, this may be taken into account in determining a planning application. While this proposal is for a community windfarm, no evidence has been presented which confirms any community ownership of the development.
- 14.90 The ES outlines the socio-economic benefits of the development and these include:
- Over 200 staff supported in the construction and supply industry during the construction phase
 - Operation of the development would create 6 jobs.
 - Annual economic investment worth £22.4million which includes approximately £3.93 million split between SBC and D&GC per annum would be contributed through business rates
 - Community benefits and funding for community projects will be provided during the operation of the development.
- 14.91 It is accepted that jobs would be created during construction and should the developer use local firms and businesses there is potential for employees to use local facilities and services, such as accommodation and shops. Following the construction phase the development would sustain a low number of jobs although this would increase during decommissioning.
- 14.92 The ES examines the impact of the wind farm on tourism and recreation. This is of particular relevance given the visibility of the wind farm from the A7 which is a promoted tourist route. Tourism is a well-established and valuable contributor to the Borders economy based on the scenery and the natural and cultural environment.
- 14.93 Policy ED9 and the approved Renewable Energy SG seek an impact statement on tourism and recreation to be submitted with any application for renewable energy development. The ES considers the findings of a study by BiGGAR Economics in 2017 into the impact of the development of on shore windfarms on the Scottish Tourism. The research found that as the number of turbines increased in the period 2009 – 2015 in the Scottish Borders, sustainable tourism employment also increased during the same period. The ES asserts that this demonstrates that both the wind and tourism industries can co-exist. Whether a wind farm development would deter visitors from the area is difficult to quantify. Mitigation in the form of a suitable wind farm design and layout is recommended to ensure that the development would not have a detrimental impact on tourism and recreation. It would appear difficult to oppose this development on grounds that its design and layout would have a direct impact on the Scottish Borders tourist industry. Nevertheless, the proposals have been

found to pose negative impacts on the experience of users of the A7 trunk road which is a promoted tourist route. These particular impacts were assessed above.

- 14.94 The socio-economic benefits of the proposed wind farm development can be taken into account as a material consideration in assessing the application, although the potential for Community Benefit cannot.
- 14.95 The potential for such benefits in the consideration of energy proposals must be balanced against any potential adverse environmental impacts that are likely to occur. In this case, it is considered that there are unacceptable significant adverse impacts on landscape and visual amenity, turbine lighting and cultural heritage that outweigh the claimed socio-economic benefits within the overall planning balance.

Renewable Energy Benefits

- 14.96 The Planning Statement which accompanies the ES sets the national background to renewable energy progress and targets. NPF3 is clear that the planning system must facilitate the transition to a low carbon economy and facilitate the development of technologies that will help to reduce greenhouse gas emissions from the energy sector. SPP provides energy targets including deriving 30% of overall energy demand from renewable sources by 2020, 11% of heat demand from renewable sources by 2020, and the equivalent of 100% of electricity demand from renewable sources by 2020 (para 154 of SPP). There is no cap on these targets and it is recognised that the production of on-shore wind energy is vital in reducing greenhouse gas emissions.
- 14.97 The Scottish Energy Strategy: The Future of Energy in Scotland Dec 2017 includes two further targets by 2030 as follows:
- The equivalent of 50% of the energy for Scotland's heat, transport and electricity consumption to be supplied from renewable resources
 - An increase by 30% in the productivity of energy use across the Scottish economy
- 14.98 Para 12.11 of the applicants Planning Statement predicts that the development; *"...would typically generate 315MW of clean electricity and could power the equivalent of 328,400 homes a year"*. This would result in a displacement of approx. 571,000 tonnes of carbon dioxide each year.
- 14.99 ED9 does state that there should be consideration in any proposed renewable energy development of both greenhouse emissions and the scale of contribution to renewable energy targets. This is a large development which would make a sizeable contribution to meeting renewable energy targets set by the Scottish Government. Nevertheless the developments contribution to national energy targets must be balanced against other impacts including the planning balance test outlined in Government advice such as SPP, ensuring that the right development is in the right place. This development would certainly make a positive contributions towards renewable energy targets and effect of greenhouse emissions however given the degree of significant and unacceptable adverse effects on the environment, the development's contribution to these targets is not considered sufficient to outweigh those effects.

Residential Amenity

14.100 Policy ED9 requires the impacts on communities and individual dwellings (including visual impact, residential amenity, noise and shadow flicker) to be considered. Policy HD3 states that development that is judged to have an adverse impact on the amenity of residential areas will not be permitted. Members will note that visual impacts have been considered earlier in the report.

Noise

14.101 A noise assessment has been provided which has been assessed by an acoustic consultant on behalf of SBC. Cumulative noise impacts arising from other wind farms within 10km of the site have also been assessed. The consultant is satisfied that the noise report has been completed in accordance with current best practice methods. The predicted noise levels, including cumulative noise have been modelled and are judged to be correct. There are five affected noise sensitive properties within the Scottish Borders. Only two are financially involved, not five as suggested in the response of Environmental Health. The financially involved properties are Giddeonscleugh and Merrylaw. Financially involved properties are afforded higher noise limits with the consultant mistakenly attributing a higher noise limit to; Riverside Lodge, Cannonbrae and Blackcleuch. Despite this error, the noise consultant was satisfied that the predicted operational noise from the development was indeed below relevant noise limits at all noise sensitive locations which were correctly identified within the Section 11 of the ES.

14.102 It is recommended that there are no noise-related reasons to consider that the scheme could not be in compliance with LDP Policies and Supplementary Guidance. If Members were minded to support this application, planning conditions could be recommended to the ECU to set appropriate noise levels. In event of any noise complaints, the Council as 'relevant enforcement authority' could seek suitable investigation and resolution of any noise nuisance caused by the development.

Shadow Flicker

14.103 Policy ED9 and the Renewable Energy SG require assessment of residential amenity to include the impacts caused by shadow flicker. This assessment is provided in Section 14 and illustrated in Figure 14.1. Figure 14.1 show the identified study area edged in blue. In total 12 properties were identified within the study area. In terms of established maximum shadow flicker effects that are considered to be acceptable, there are no statutory UK figures although best practice suggests a worst case scenario of 30 hours per year or 30 minutes on the most affected day.

14.104 The results demonstrate that there is no significant shadow flicker effect. The greatest impact on a property in the Scottish Borders would be expected at Giddeonscleugh (House 3) where in the worst case scenario, the property would be exposed to 26 hours of shadow flicker per annum. This is below the established maximum expected shadow flicker affects which in the case of this development would be experienced at a financially involved property. The worst affected non-financially involved property in the Scottish Borders is Riverside Lodge (House 2) which is predicted to experience just over 2 hours of shadow flicker per year.

14.105 The development is not found to cause excessive levels of shadow flicker which would pose significantly adverse impacts of the residential amenity of the affected properties. The proposals are not contrary to this element of Policy ED9 and the SG.

Traffic Management, Road Safety and Access

14.106 Policy ED9 of the LDP requires impacts of the construction of wind farms on public and trunk roads to be considered, the approved Renewable Energy SG also requiring full consideration of the impacts including the structural and physical ability of the network to accommodate the traffic and impacts on local communities.

14.107 Access to the development is provided to the north of the site from land within the SB. A new access will be formed directly onto the A7 trunk road with large parts of the access route to the site provided by the trunk road network. Originally the applicants provided 3 potential points of access however within the Figure 2.1a of the AI, the preferred point of access has been confirmed, but appears to be slightly different from the 3 options originally proposed. The new site access only impacts on a trunk road. Members will be aware that trunk road impacts are matters for Transport Scotland to return observations to the ECU on. Ultimately these matters are not the responsibility of SBC however, following the submission of additional information, TS have not raised any significant concerns over the impact of the new access on the safety of the trunk road.

14.108 No other new accesses are proposed concluding that the means of site access do no impact on the surrounding local road network with the RPS raising no objection to the principle of the development of a wind farm in this location.

14.109 The ES states that construction traffic which includes abnormal loads are likely to approach from the north, utilising the following roads within the Scottish Borders A68, A698 and then the A7 (see Fig 12.1 Proposed Access Route). The longest single component requiring transportation over this suggested route would be the 75m long turbine blades, the tower sections and nacelles are shorter but can be wider. Again, impacts of abnormal loads on the trunk road network (A7 and A68) will primarily be a matter for TS. However there are clear impacts on the local road network (A698) and also local roads which adjoin the identified trunk roads, particularly the section of the A7 which passes through Hawick which is a known pinch point. To navigate the urbanised area, the applicants are proposed to use Blade Lift Adapter vehicles. Both TS and the Councils RPS agree that further information is required to ensure that the delivery route is suitable. This matter can however be addressed via a planning condition which seeks to agree a Traffic Management Plan which would require a detailed survey of the proposed route and agreement of works required to facilitate the successful movement of abnormal loads with the developers required to remedy any damage caused by their traffic movements.

14.110 The proposed development does not impact on any core paths or rights of way within the Scottish Borders. The proposal does not therefore impact on any recognised public access routes.

Cultural Heritage

- 14.111 The application has to be assessed against Policy ED9 in respect of impacts on the historic environment and principally Policies EP7 and EP8 which seek to protect the appearance, fabric or setting of Listed Buildings and Scheduled Monuments or other national, regional or local assets. Development proposals that adversely affect such assets would only be permitted if it is demonstrated that the benefits of the proposal clearly outweigh the heritage value of the asset and there are no reasonable alternative means of meeting the development need. The supporting text of Policy EP8 establishes the aim of the policy is to give Scheduled Ancient Monuments and any other archaeological or historic asset or landscapes strong protection from any potentially damaging development.
- 14.112 The Council's Renewable Energy SG contains advice on assessing the impacts of wind energy developments on the historic environment, both direct and indirect impacts. It augments the aforementioned Policies and also provides information on how setting of historic structures and places are assessed, including the use of guidance from Historic Environment Scotland – Managing Change in the Historic Environment: Setting.
- 14.113 In response to the original archaeological assessment within the ES, the Council's archaeologist advised that further information was required to fully assess the direct impacts of the development works on buried archaeology and indirect impacts on the setting of archaeological assets within the surrounding environment. The AI provided an updated chapter on Cultural Heritage and accompanying wirelines to respond to these concerns. The impact of the development on both direct and indirect archaeological impacts are considered below.

Direct Impacts

- 14.114 The Council's Archaeologist reviewed the original archaeological assessment against SBCs Historic Environment Records (HER), historic maps, aerial photos and LiDAR survey information and concluded that a number of possible archaeological features had been missed. Insufficient site surveys were undertaken with a two day walk over of a site of this size unlikely to provide sufficient detailed assessment and it was suggested that a re-survey of all designed infrastructure would be required.
- 14.115 The archaeological assessment was 'cut off' at 350m OD and did not investigate archaeological potential above this level. Our Archaeologist recognised that; *"While this might be seen as a 'rule of thumb' it cannot be used as a basis for determining mitigation"*. However there are potential interests above this level, which include; Pikethaw Cairn (564m OD) and nearby Whisp Cairn (594m OD). The potential for buried archaeology is heightened around known monuments and further assessment to complete this picture was sought. Lastly due to the underestimation of known assets which would be impacted by this development the proposed mitigation measures outlined in the EIA were insufficient. It was observed by our archaeologist that; *"The EIA states that there will be no monuments within 1km of a turbine in the Scottish Borders. This is clearly incorrect. A number of assets such as the drove roads are within metres of turbines, and will certainly be crossed by infrastructure as the EIA states."* A new assessment of impacts was requested to better inform a mitigation strategy.

14.116 The AI provided a further assessment of the impact of the development on known heritage within the Inner Study Area. This assessment used LiDAR and SBC HER records and revealed a further 13 new heritage assets which were omitted from the original assessment. 12 of the 13 features have been identified as being common features which are of low importance. The other asset being Pikethaw Hill Cairn which is of high importance however the development is not observed to cause any direct impacts on this asset. Having reviewed the AI, an updated response has been provided by our archaeologist which recommends that; *“whilst LiDAR information was made available to the applicant’s team, this appears not to have been further and fully assessed for what additional archaeological sites are present and would be impacted by the development of the site and its associated infrastructure, such as power lines.”* Concerns remain that the potential direct impacts of the development have not been fully investigated to provide a complete picture of the likely impacts of the development.

Indirect Impacts

14.117 Paragraph 1.7 of EP8 states that *“Setting is considered to be important to the way in which historic structures or places are understood, appreciated and experienced”*.

14.118 The proposed development has been identified to impact on the setting of Eweslees, watch tower 1980m NW, which is a Scheduled Monument (SM) of high importance (ref SM12750). The site is partly within the Scottish Borders although the majority of the SM is within Dumfries and Galloway and to the east of T7 as identified on Figure 9.4. The monument has been classified as a Roman watch tower. HES has objected to the proposal due to the development having a detrimental impact on the integrity of the SM12750 which represents an issue of national interest. These impacts were recommended to be mitigated by deletion of T6 and T7.

14.119 The SM was visited by SBCs archaeologist as part of the original assessment of this application. The valley location and setting of the monument were thoroughly examined by the Council’s archaeologist and there is no evidence to suggest a Roman road, camp fort or any other watchtowers/signal station for the tower to monitor. It is accepted that there is a monument in this location, however the site was judged to appear to resemble a Bronze Age feature. The Archaeologist observes that; *“both in terms of landscape, morphology and association with other features I feel the monument is best classified as a prehistoric funerary monument, perhaps a round barrow or enclosed cremation cemetery, until excavation can prove one way or the other.”* The Council’s archaeologist has a different interpretation of SM12750 than HES, however it is advised that; *“This does not change its significance in national terms.”* As a funerary monument its setting is recommended to be more intimate and restricted to the valley. T6 and T7 have not been removed and at the time of writing a further response to the AI from HES has not been provided. These turbines would have a negative impact on the setting of a funerary monument in this location, illustrated by the wirelines from this monument in Figure 14. However it was observed by SBC archaeologist that this impact is *moderate* instead of *major adverse* as assessed by HES. Against the tests of Policy EP8, the archaeology officer’s judgement that the development would have a moderate impact on the setting of SM12850 concludes that it is not objectionable against policy provision.

- 14.120 Pikethaw Hill Cairn lies directly to the north east of T19 and is partly within the Scottish Borders. The original ES did not identify this feature as a potential archaeological asset however following a site visit by the Council's archaeologist and assessment it was recognised as a cairn of Neolithic or Bronze Age date. Currently this is an undesignated asset, however it is recommended that; *"...the cairn is of national significance and is therefore Schedulable per HES's 2019 Historic Environment Policy Statement and the related document Designation Policy and Selection Guidance. Our intent is to recommend the site for Scheduling to HES and Scottish Ministers."* Because the cairn falls within a live application, this process cannot commence until the application is determined. It was judged that the proposal could have a potentially major significant impact on the setting of this hilltop cairn.
- 14.121 Within the AI the applicants provided an assessment on the impact of the development on Pikethaw Hill Cairn which has been accompanied by submitted wirelines (dated 10 Aug 2020) providing a 360 degree panorama on outward views from the cairn. Owing to SBCs assessment the applicants attributed the cairn to be of high importance. The AI observes that its setting are views from and to the NE towards a cairn on Wisp Hill and across Eweslees valley and to the SW down to Meikledale Burn. The AI concedes that T18, T19 and T23 will be prominent in views to the SW, but that views to the NE are not obstructed by turbines. At 9.6.16 of the AI it is recommended that; *"It will remain possible to appreciate and understand the contribution made by to the cairn's cultural significance, but some key views will feature turbines at fairly close proximity. It is considered that operational impacts upon Pikethaw Cairn will be low in magnitude, resulting in an adverse operational effect of minor significance."*
- 14.122 The 'Wireline West', demonstrates the proximity and clear visibility of T19 which appears to encroach on the cairn. The updated assessment of the archaeologist advises that T19 remains too prominent and voices concerns about the impact of T8 which is positioned behind T19 when viewing W. The development may not impact on the cairn's possible links to the NE, its setting down towards Meikledale Burn is noted in the AI. SBC's Archaeology Officer assesses that the positioning of T19 and T8 both of which are located within the Scottish Borders appears to be visually prominent. The scale and positioning of these turbines is considered to detract from the relationship of the cairn with Meikledale Burn which resulting in having a harmful impact on the setting of this a potentially nationally significant hilltop cairn.
- 14.123 In conclusion it remains the opinion of SBCs Archaeology Officer that insufficient information has been provided to provide clear clarification of the potential direct physical impact of the development and specifically its associated infrastructure on sites of potentially national, regional or local significance within the site. The Council are not able to consider if the likely direct impacts on the development are acceptable or can be appropriately mitigated in accordance with an approved strategy of works noted in paragraph 1.4 in Policy EP8. Furthermore, the impact of T19 and T8 is recommended to have a significantly adverse impact on the setting of Pikethaw cairn, a site of national importance. This explicitly conflicts with item (A) of Policy EP8. The development has not sought to mitigate its impact on the cairn and the identified turbines are not judged to offer economic or social benefits which outweigh their impact and the need for wind energy harnessed by this development is met elsewhere in this site.

Other Cultural Heritage Impacts

- 14.124 The development does not detrimentally affect the setting of any listed buildings or Conservation Areas which are located within the Scottish Borders.

Natural Heritage

Ecology, Habitats, Protected Species and Ornithology

- 14.126 The proposal has to be assessed against policies EP1, EP2 and EP3, which seek to protect international and national nature conservation sites, protected species and habitats from development. Policy ED9 requires consideration of the impacts on natural heritage, hydrology and the water environment, augmented by the Renewable Energy SG.
- 14.127 Giddens Cleuch and Wrangeway burns run through the site within the Scottish Borders. These watercourses are tributaries to the River Teviot which connects to the River Tweed SAC/SSSI. The presence of these international designations within the site is part of the reason why the site falls under Group 2 of the spatial framework for wind farm development laid down by SPP. SNH confirm that the River Tweed SAC is *“notified for ‘Rivers with floating vegetation often dominated by water-crowfoot’, salmon, river lamprey, sea lamprey, brook lamprey and otter, all of which are sensitive to changes to water quality.”*
- 14.128 This development could impact on its water quality and must demonstrate that it would not have an adverse impact on the qualifying interest of the SAC/SSSI to ensure that it can take place in a sensitive manner. Under the Conservation (Natural Habitats, &c.) Regulations 1994 as amended, an appropriate assessment is required to be carried out by the competent authority to determine the suitability of the development impacts. As this development is a Section 36 application, this assessment falls to be carried out by the Scottish Ministers. It is SNH’s opinion that the proposal will not adversely affect the integrity of the SAC, provided it is undertaken in accordance with a detailed site specific Environmental Management Plan (EMP) and Construction Method Statements (CMS) to be agreed with the Planning Authority and SEPA prior to work commencing. These matters are the responsibility of the ECU.
- 14.129 The development will result in the loss of up to 189.26ha of habitats across the whole development site. Habitats in the Scottish Borders are a mixture of coniferous plantations, wet modified bog, acid grass land, marshy grass land and blanket bog. An outline Habitat Management Plan (HMP) was provided as part of the AI, however it is the opinion of SBC’s Ecologist that the blanket bog measures are insufficient. A detailed HMP is still requested to set out proportionate compensation for the lost habitats and measures for enhancement where necessary which includes blanket bog.
- 14.130 In terms of protected species, a range of species may be impacted by this development. These species include; bats, badgers, otters, red squirrel, pine marten, reptiles, salmon and lamprey. The ES detailed mitigation to address the impacts of the development on each of these species, where relevant. Further bat surveys were also provided, however these surveys did not find any further interests in the Scottish Borders. The Ecologist is content that a Species Protection Plan (SPP) can seeking to ensure that appropriate mitigation is

agreed before development commences to safeguard protected species. The mitigation should be overseen by an Ecological Clerk of Works.

14.131 Turning to ornithology, there is potential connectivity with Langholm-Newcastleton Hills Special Protection Area (SPA) which is noted for its provision of hen harrier. The SBC Ecologist observed that the original ES was incomplete as insufficient ornithology survey information was provided. The AI provided the further required data. SNH have observed that the predicted collision risk is sufficiently low that the proposal will not affect the integrity of the SPA. The location of the development is predicted to impact on the South of Scotland Golden Eagle re-introduction project which are Schedule 1A raptors. SBCs Ecologist advises that this project is at an early stage but there remains a possibility the territories could become established in the local area during the lifetime of the development therefore post-construction monitoring of these raptors is recommended on a precautionary basis. The development would also impact on goshawks which are a Schedule 1 species. SBC Ecologist is concerned about the potential loss of goshawk that the development may cause at a regional level. Nevertheless these impacts are similar to those which were predicted at Pines Burn wind farm which was consented at appeal subject to a condition for goshawk monitoring and mitigation. It is recommended that similar mitigation would be necessary at Faw Side.

14.132 In conclusion, the Council's Ecologist has identified that the development has the potential to impact on the River Tweed SAC, a range of habitats, protected species and raptors. These impacts are however judged to be adequately mitigated through the suite of conditions recommended by the Ecologist which include; the appointment of an Ecological Clerk of Works, a CEMP, a SPP, HMP, a programme for ecological monitoring which includes Schedule 1 and 1A raptors, a compensatory woodland planting scheme and a decommissioning restoration and aftercare strategy. These conditions have been accepted by the applicants.

14.133 Subject to the aforementioned conditions, there are not judged to be any ecological reasons why the proposed development would otherwise be considered not to be in compliance with relevant LDP policy provision on Ecology.

Hydrology

14.134 In terms of flood risk, the Councils Flood Risk and Coastal Management Officer (FRO) did identify that while the site was located within an area which may be at risk of flooding from a 1 in 200 year flood event, due to the minimal flood risk at the site no significant flood risk concerns were raised. Members should be aware that SEPA originally objected on grounds of flood risk, however this was removed following confirmation that all turbines are at least 50m away from watercourses and that no Micrositing will take place which moves turbines closer than 50m to a watercourse.

14.135 The development includes one water course crossing which is to be a Bottomless Box Culvert. In principle this specification is deemed to be suitable by the Councils FRO and provided its soffit is set at a suitable level it will ensure that the flow of the watercourse is not restricted or reduced. Surface water will be generated from the development. To mitigate this surface water discharge causing any flooding elsewhere it was recommended that all hard surfaces

(including SUDS drainage) should be attenuated to existing greenfield runoff rates. Additionally, all silt traps and any other functions proposed to prevent sediment entering the water course should be agreed. Each of the aforementioned matters are detailed design points which could be adequately addressed by planning conditions if Members were minded to support this development and ensure that the development complies with LDP Policy provision covering flooding.

14.136 In terms of private water supplies, the development may potentially impact on groundwater springs which serve Merrylaw and Lymiecleuch. A private water supplies risk assessment has been carried out as part of the EIA which concludes that the risk to the supplies is low. A planning condition can be used to ensure that water supplies are not affected by the construction, operation and decommissioning of the development and that the mitigation recommended in Table 10.5 of the Private Water Supply Risk Assessment is implemented.

Carbon Rich Soils, Deep Peat and Priority Peatland Habitat

14.137 The site includes areas of Class 1 carbon rich soil, deep peat and peatland habitat as identified on Figures 10.5 in the ES. These areas include parts of the site which is located within the Scottish Borders. Policy ED9 and the Renewable Energy SG require consideration of the impact of the development on carbon rich soils.

14.138 Carbon rich soils, deep peat and priority peatland habitat are recognised as being nationally important environmental interest which provide significant national carbon store. The location of the development in these areas is part of the reason why the site falls under Group 2 under the spatial framework for wind farm development laid down by SPP.

14.139 SNH and SEPA provide specialist advice on the impact of the development on these sensitivities. SNH originally objected to the ECU on grounds that further information was required to demonstrate how the siting and design of the wind farm has minimised the impacts on carbon rich solid, deep peat and priority peatland habitat. Additional Information revealed that a number of turbines were located in areas of deep peat and bog habitats. Some further information was provided to SNH and they also conducted a site visit which revealed that whilst the bog habitat is of value it does not meet the National Interests to trigger an objection. The value of peat on the site was identified to require an improved form of mitigation which can be mitigated by a planning condition. Similarly SEPA require the development to mitigate its impacts on peat via a peat management plan as a condition of any consent.

14.140 SBC Officers do not have any further observations on the impact of the development on carbon rich soils, deep peat and peatland habitat. The comments received from SNH and SEPA on these matters are for the ECU to consider.

Aviation Defence and Seismological Recording

14.141 Policy ED9 of the LDP requires that proposals will be assessed against “...aviation and defence interests and seismological recording”. This is supported by the Renewable Energy SG advising that schemes will be

supported unless there is significantly detrimental effects on such aviation interests.

14.142 The proposed development is located approximately 12.8km from the seismological recording station at Eskdalemuir and falls within its statutory safeguarded area which is recognised within Scottish Governments Wind Policy Statement Dec 2017. Scientific research has established that wind turbines of the proposed design generate noise emissions which cause vibrations which effect the operation of the array. The application site also lies close to sites used by the RAF Spadeadam Electronic Warfare Tactics Facility which is a specialist aircraft tactical training facility.

14.143 The consideration of aviation defence interests and seismological recording are matters which the MoD provide specialist advice on. Unlike Planning Applications, the MoD return their observations to the ECU as part of the Section 36 process and not to Planning Authorities. In a further response dated 28th August 2020, the MoD maintained previous objections and advised the ECU that the development would;

1. have a significant and detrimental impact on the operation and capability of the Eskdalemuir Seismic Recording Station; and
2. have a significant and detrimental impact upon the effective operation of threat radar at sites that support the RAF Spadeadam Electronic Warfare Tactics Facility.

14.144 SBC are a separate consultee for this proposed development and we do not have the remit to provide any specialist advice on these matters. The concerns raised by the MoD are recognised and suggest that the proposal would not align with policy provision covering aviation defence and seismological recording. Members are however advised that these concerns are for the ECU and fall out with the scope of SBC's consideration for a Section 36 application.

15.0 CONCLUSION

15.1 Scottish Borders Council remains positive towards the principle of wind energy development, as reflected in its policies and guidance. As required by policy considerations, the benefits of energy production, and the disbenefits of environmental impact must be weighed carefully against one another. This is made clear in the 2014 SPP and reflected within the primary LDP Policy consideration for this development, Policy ED9. This application has been carefully considered against current Policies and Guidance, including new Government publications, the Council's approved "Renewable Energy" SG and the Ironside Farrar Landscape Capacity Guidance and requirements of Schedule 9 of the Electricity Act.

15.2 Several key issues stand out in this report. The development of a new large commercial wind farm at Faw Side would result in a significant displacement in carbon dioxide and make a large contribution towards the Scottish Government targets from renewable energy production. The development would provide inward investment into the Scottish Borders and create jobs. However, these benefits have to be finely balanced against the environmental impacts of the development.

15.3 The height of the proposed turbines would be the tallest wind turbines within the Scottish Borders and some of the tallest onshore turbines anywhere in

Scotland. The development is located within part of the Southern Uplands which has been largely untouched by wind energy development. The large scale upland landscape setting has been identified to have a low capacity for wind energy development for wind turbines of 120m+. The turbines which are located within the Scottish Borders have a 200m tip height, this being well beyond the upper limit of turbine typologies within the Ironside Farrar Landscape and Capacity Guidance. Such tall turbines fail to benefit from the topographical containment provided by the Cauldcleuch Head and Craik LCA with some turbines intruding on lower elevations of the upland area. The excessive scale of the proposals means that the turbines appear dominant within the Southern Uplands and have a detrimental impact on the underlying qualities of grandeur and tranquillity of the host LCAs. The proposals also diminish the drama of Skelfhill Pen which is a distinctive cone shaped hill, which contributes to the character of the landscape when viewed from hill summits to the east.

- 15.4 The excessive scale and layout of the proposed turbines and their access tracks will result in an unacceptable, significant and adverse visual impact which will harm the rural character of the minor road to Commonbrae, used regularly by local residents and tourists using the road to visit Hizzy Cairn. The development will also affect users of the A7 and while these views may be intermittent, they will still have an unacceptable and significant adverse visual effect for the experience of residents, commuters and tourists travelling to and from the Scottish Borders, including sequential cumulative impacts.
- 15.5 The scale of the turbines require the installation of aviation lighting. Turbine lighting has the potential to affect the experience of a number of people travelling on roads and paths within southern and central parts of the Scottish Borders when a cluster of industrial red lights would appear in elevated positions which would detract from the visual amenities of the otherwise dark rural setting including its sense of remoteness and tranquillity. The proposal does include mitigation which can be applied to the turbine lighting, however insufficient evidence has been provided to demonstrate that the impact of turbine lighting can be reduced to a tolerable level.
- 15.6 In terms of archaeology, the extent of direct impacts as a result of the development are not considered to have been fully assessed and turbines 19 and 8 are considered to have a significantly adverse impact on the setting of Pikethaw cairn which is judged to be a site of potential national importance.
- 15.7 Other aspects of the development could be mitigated and controlled through conditions and various reports and mitigation strategies required. This will include cultural heritage, ecology, noise, road and traffic impacts.
- 15.8 The merits of the application have been considered against relevant provisions of the development plan. The degree of demonstrable harm caused by significant and unacceptable adverse effects on the environment, including the introduction of aviation lighting conclude that while the socio-economic impacts and renewable energy contribution of this scheme are recognised to be positive they are not considered sufficient to outweigh the adverse environmental impacts of the development.
- 15.9 The application will be assessed by the ECU against the requirements of Schedule 9 of the Electricity Act 1989. This states that any developer must:

1. have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and
2. do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

The ECU, and any subsequent Reporter, must consider the desirability of those matters in 1, and the extent to which the applicant has complied with mitigation in 2. For the reasons mentioned in para 15.8, it is not considered that Schedule 9 has been complied with as there are significant and unacceptable environmental effects, unable to be adequately addressed through the mitigation proposed.

16.0 RECOMMENDATION BY CHIEF PLANNING AND HOUSING OFFICER:

16.1 That the Council indicate to the Energy Consents Unit that it **objects** to the proposed development for the following reasons;

16.2 Reason for Objection 1: Impact on Landscape Character

The proposed development would be contrary to Local Development Plan Policy ED9 the Renewable Energy Supplementary Guidance and the Landscape Capacity and Cumulative Impact Study, in that the scale, form, layout and location of the development would represent a significant and unacceptable adverse change to the existing landscape character of the area, particularly impacting on the scale, appreciation and character of the Cauldcleuch Head and Craik Landscape Character Areas.

16.3 Reason for Objection 2: Visual Impact

The proposed development would be contrary to Local Development Plan Policy ED9 the Renewable Energy Supplementary Guidance and the Landscape Capacity and Cumulative Impact Study, in that the excessive scale and layout of the proposed development will result in significant and unacceptable adverse visual impacts to sensitive receptors using the minor road to Commonbrae and travelling to and from the Scottish Borders on the A7.

16.4 Reason for Objection 3: Aviation Lighting

The proposed development would be contrary to Local Development Plan Policy ED9 and the Renewable Energy Supplementary Guidance in that the visual impact of red aviation lights on the wind turbines, will create significant and unacceptable adverse visual effects, incongruous and visible over considerable distance. This will introduce urban characteristics into a dark rural environment largely unaffected by artificial light experienced by receptors travelling on public roads and paths within the area and would also detract from the sense of remoteness and tranquillity of the Cauldcleuch Head and Craik Landscape Character Areas.

16.5 Reason for Objection 4: Archaeology Impacts

The proposed development would be contrary to Local Development Plan Policies ED9, EP8 and the Renewable Energy Supplementary Guidance in that the applicant has failed to demonstrate that the direct physical impacts of the development would not be significant and unacceptable on sites of national, regional and local archaeological significance within the site. Furthermore, the size and location of turbines 8 and 19 would have an unacceptable and significantly adverse impact on the setting of Pikethaw Cairn, without adequate mitigation or demonstration that the benefits of the scheme outweigh such impact.

16.6 Should the development be considered for approval, then conditions and a Legal Agreement have been identified covering a range of different aspects including, Micrositing, noise limits, roads matters, flooding, ecology, site restoration and decommissioning.

17.0 Drawing Numbers

Figure 2.1	Site Layout
Figure 2.3a	Typical Turbine Specification 200m to Tip
Figure 2.3b	Typical Turbine Specification 179.5m to Tip
Figure 2.4	Typical Foundation & Crane Design
Figure 2.5	Typical Self Supporting Metrological Mast
Figure 2.6	Proposed Access Route
Figure 2.7a	Typical Access Track and Culvert Design
Figure 2.7b	Typical Access Track and Culvert Design
Figure 2.8a	Proposed Borrow Pit Locations
Figure 2.8c	Typical Borrow Pit Restoration Profile
Figure 2.9	Typical Temporary Construction Compound Layout
Figure 2.10	Typical Energy Storage Facility and Compound

Approved by

Name	Designation	Signature
Ian Aikman	Chief Planning and Housing Officer	

The original version of this report has been signed by the Chief Planning and Housing Officer and the signed copy has been retained by the Council.

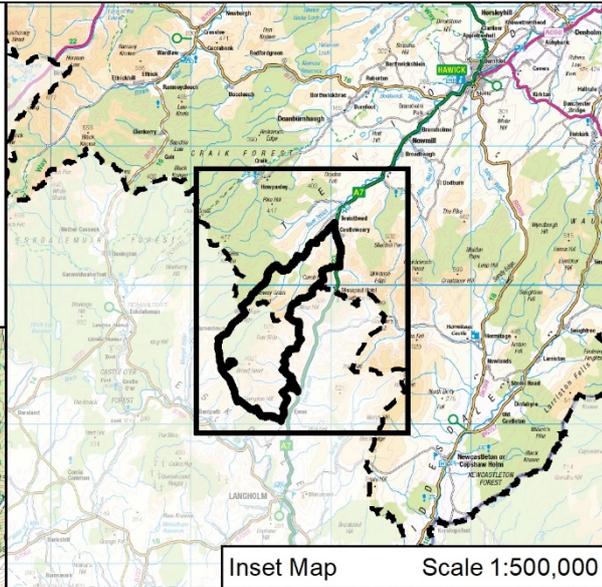
Author(s)

Name	Designation
Scott Shearer	Peripatetic Planning Officer



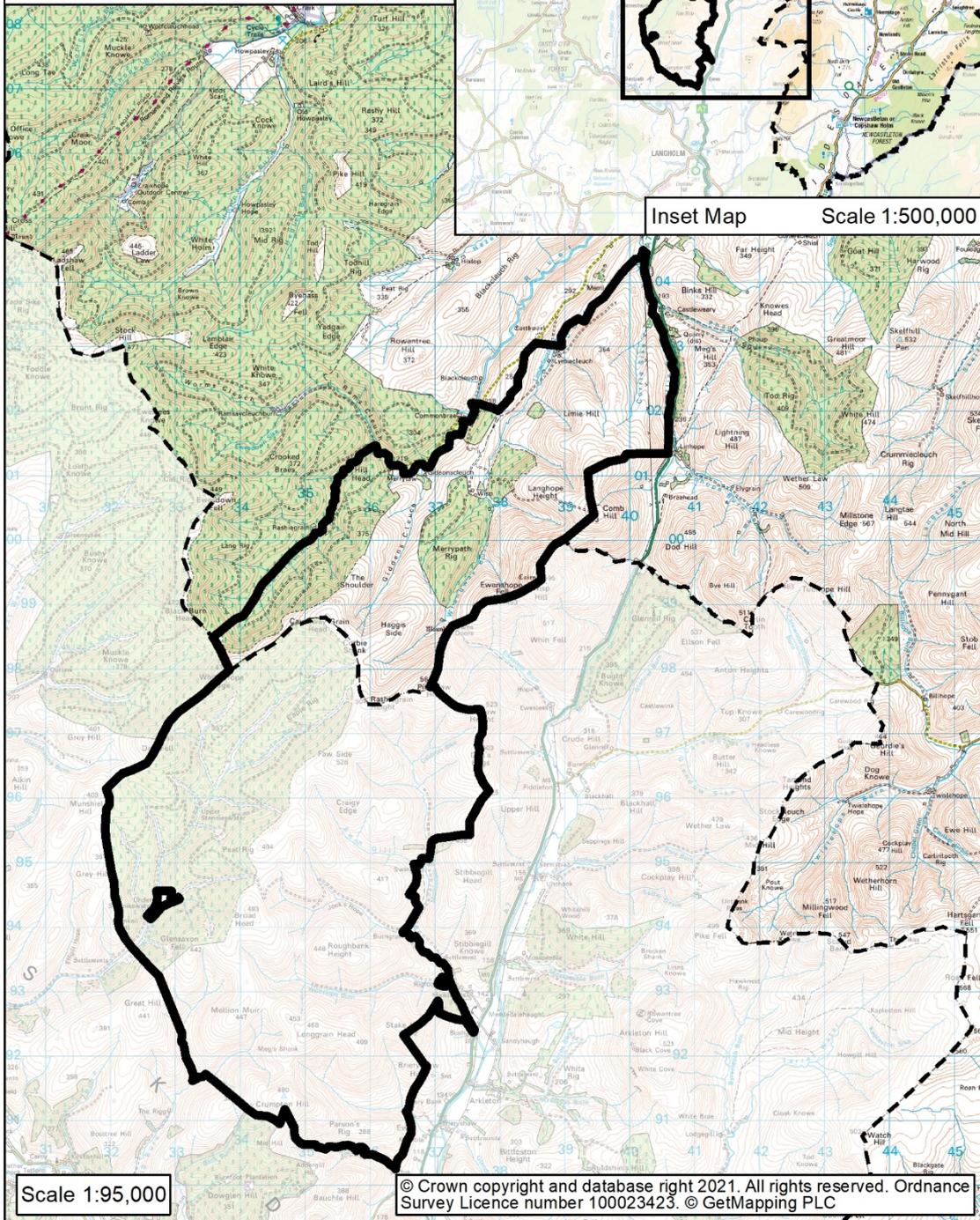
19/00756/S36

Land West Of Castleweary
(Faw Side Community Wind Farm)
Fawside
Hawick



Inset Map

Scale 1:500,000



Scale 1:95,000

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